zencontrol

Modern lighting control

zencontrol.com

2025-Q1

International commitment

Involved locally and globally

Our engineers are located in Australia and provide localized knowledge and support. We have a World Class engineering team boasting one of the largest DALI based teams in the world, considered both to be a world leader in DALI multi-master technology and in Emergency driver technology.

zencontrol is dedicated to moving the lighting and control industry forward and that means investing in DALI, DALI-2 and DALI+. To do so zencontrol is a regular member of the DiiA (Digital Illumination Interface Alliance). We are hoping that our continual presence will boost the work done to develop the DALI-2 standard faster into the future.

As part of this tradition of pushing innovation worldwide, zencontrol engineers also represent the Australian lighting control industry in discussions at the International Electrotechnical Commission TC-34 Working Group 11. Notably WG-11 is responsible for the IEC 62386 Digital Addressable Lighting Interface standards commonly known as DALI.

zencontrol engineers sit on the IEC TC-34 WG 11 DALI standards group as well as contributing weekly efforts in DiiA to help shape the future of DALI

DALI Alliance

Bluetooth®

Lighting Council AUSTRALIA MEMBER

THREAD MEMBER

Content

Controllers 03
zc-controller 04
zc-controller-pro-3 05
zc-iot-fc 06

Dail psu 07
zc-psu-70 07
zc-psu 08

Switches 09
zc-pbs-2020 09
zc-pbs-2550-wh 10
zc-rotary 11
zc-rotary-2550 12
zc-scene-a4 13
zc-scene-c-a4 14
zc-scene-a6 15
zc-scene-c-a6 16
zc-ss-8sw-be 17
zc-ss-1sw-eu 18
zc-ss-1sw 19
zc-ss-2sw-eu 20
zc-ss-2sw 21
zc-ss-3sw-eu 22
zc-ss-3sw 23
zc-ss-6sw-eu 24
zc-ss-6sw 25
zc-ss-rot 26
zc-sst-6sw 27
zc-ssd 28

Input modules 29
zc-iot-bridge 29
zc-switch 31
zc-switch-6 32
zc-switch-6-be 33
zc-sens-adpt 34

Sensors(PIR) 35
zc-pir-nano+ 35
zc-pir-5m-bp 36
zc-pir-8m-bp 36
zc-pir-5m-p 38
zc-pir-8m-p 38
zc-pir-wp-8m 39
zc-mw-p 40
zc-pir-st-1sw-r 41
zc-pir-da 42
zc-pir-iot-da 43
zc-pms-iot-2sw-r 45

Sensors(MW) 47
zc-mw-iot-da 47
zc-z10-mw 49
zc-z10-mw-rtc-ulr 50

Driver 51
zc-smart-driver 51

Relays 52
zc-relay-4 52
zc-relay-4-pro 53
zc-smart-relay 54
zc-smart-relay-vf 55
zc-smart-relay-3-vf 56
zc-smart-blind 57
zc-smart-fan 58

Inverters 59
zc-em-smart-50 59
zc-em-core-50 61

PWM 63
zc-pwm-iot-4ch-6a 63
zc-iot-pwm-4ch-10a 64

0-10V 65
zc-io-8 65
zc-io-6 66

LED Range 67

Battery 70
1A2-AEA 71
1A2-AEB 71

Accessory range 72
zc-fm-kit 72
zc-pir-rs-kit 72
zc-pir-rs-kit-sp 73
zc-pir-sm-kit 73
zc-pir-cd-kit 74
zc-smart-wall-kit 74
zc-smart-sm-kit 75
zc-rodmount-whi 75
zc-plug-male-d5w 76
zc-ss-xsw-blk-button 77

Software Introduction 78
Software Introduction 78

Applications 83
System overview: modes 83

Notes 86

Last updated 2025_01

Product range

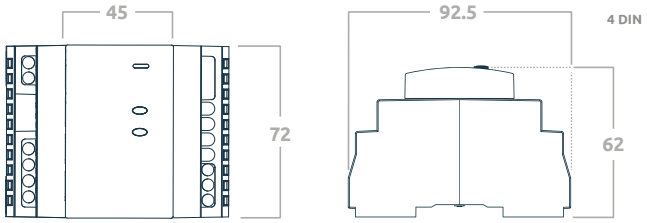
Order code	Description
zc-controller	DALI-2 Application controller and Ethernet DALI gateway

Features

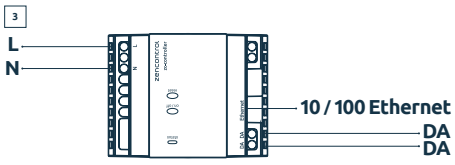
- Compatible with DALI devices
- Compliant to IEC 62386-103 Ed 2.0
- DALI compliant application controller
- Protected against DALI over voltage
- LED indicators for system status
- Suitable for one line of up to 12 RS-485 motors per controller
- Suitable for distribution board mounting on standard DIN rail
- Reinforced insulation between DALI, mains supply and Ethernet
- Suitable for 1 DALI line of up to 64 devices and 63 control devices
- 10/100 TCP/IP Ethernet compatible w. standard IT switches and equipment

Dimensions

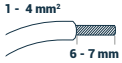
Width	Height	Length
92.5 mm	62 mm	72 mm



Wiring diagram



Wire preparation



Specifications

Supply voltage	230 V ~ 50 Hz
Control system	DALI-2
DALI line current	2 mA
Ethernet	10/100 TCP/IP Ethernet
Wiring	1 - 4 mm² Strip 6 - 7 mm
Operating temperature	0 to 45°C
Material	PC
Classification	Class II
Mounting	DIN rail (35 mm)
Ingress protection	IP20
Compliance standards	IEC 61347-2-11 IEC 60950-1 CISPR 15 CISPR 22 EN 55015 EN 55022 IEC 62386-103 Ed 2.0 EMC-2004/108/EC LVD-2006/95/EC

Accessories range

Order code	Description
zc-psu	DALI-2 power supply
zc-psu-70	70mA DALI-2 Power supply

Notice

- Requires external DALI power supply such as *zc-psu & zc-psu-70*
- Each motor consumes an additional DALI address i.e. with 12 blind motors connected only 52 ECGs can be connected.
- A termination resister needs to be placed at each end of the RS-485 line for reliable operation. The resistor should be matched to the impedance of the cable, typically 120 Ohm.
- Blind motors appear on controller as DALI devices and can be configured in the same manner.

System modes

	Yes ✓ No ✕
Standard 101	✓
Standard 104	✕
Standard 101+104	✕
Standalone no System	✕
Standalone 101 no Configuration	✕
Standalone 101 App Configure	✕
Standalone 104 App Configure	✕
Standalone 101+104 App Configure	✕
Standalone Direct Control	✕

More information on page 80

Last updated 2025_01

zencontrol 3-line DALI application controller pro **datasheet**

Product range

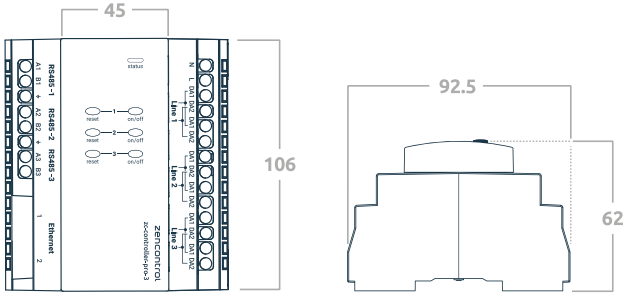
Order code	Description
zc-controller-pro-3	DALI application controller and Ethernet DALI gateway, 6DIN, with 3 DALI lines

Features

- Suitable for 3 DALI lines of up to 64 devices, and 63 control devices each
- Pro application controller which supports additional instances and bigger sequences
- Reinforced insulation between DALI, mains supply and Ethernet
- 2x 10/100 TCP/IP Ethernet port switch compatible with standard IT switches and equipment (upgradeable)
- Suitable for distribution board mounting on standard DIN rail
- DALI compliant application controller
- Compliant to IEC62386-103 Ed 2.0
- Compatible with DALI devices
- Protected against DALI over-voltage
- LED indicators for system status
- Optional DMX (upgradeable)

Dimensions

Mounting options	DIN rail (35 mm)
Dimensions	92.5 / 106 / 62 mm



System modes

	Yes ✓ No ✕
Standard 101	✓
Standard 104	✕
Standard 101+104	✕
Standalone no System	✕
Standalone 101 no Configuration	✕
Standalone 101 App Configure	✕
Standalone 104 App Configure	✕
Standalone 101+104 App Configure	✕
Standalone Direct Control	✕

More information on page 80

Notice

Requires 3x external DALI power supply such as *zc-psu & zc-psu-70*

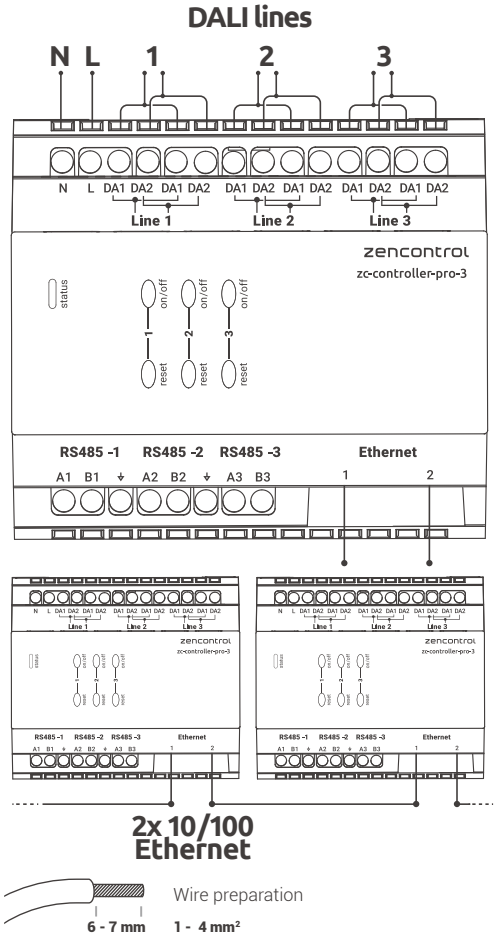
Specifications

Supply voltage	230 V ~ 50 Hz	
Control system	DALI-2	
DALI line current	2 mA /channel	
Ethernet	2x 10/100 Ethernet port switch	
RS-485 network type	3x Half duplex	
Wiring	1 - 4 mm² Strip 6 - 7 mm	
Operating temperature	0 to 55°C	
Material	PC	
Classification	Class II	
Mounting	DIN rail (35 mm)	
Ingress protection	IP20	
Compliance standards	IEC 61347-2-11 IEC 60950-1 CISPR 15 CISPR 22 EN 55015	EN 55022 IEC 62386-103 Ed 2.0 EMC-2004/108/EC LVD-2006/95/EC

Accessories range

Order code	Description
zc-psu	DALI power supply
zc-psu-70	70mA DALI-2 Power supply

Wiring diagram



Last updated 2025_01

Product range

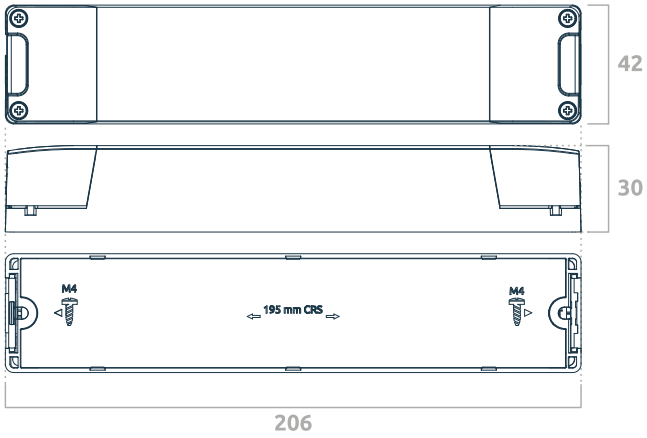
Order code	Description
zc-iot-fc	Wireless field mounted application controller

Features

- Wireless application controller
- DALI + Controller
- Suitable for one wireless network with up to 64 ECGs and 63 ECDs
- 10 / 100 Ethernet gateway to connect to Cloud and extended system
- Works with compliant ECGs and ECDs supporting IEC 62386-104 over Thread
- Automatic commissioning of standard features
- Suitable for field mounting in ceiling

Dimensions (mm)

Fixing centres 195 mm **Dimensions** 206 / 42 / 30 mm



System modes

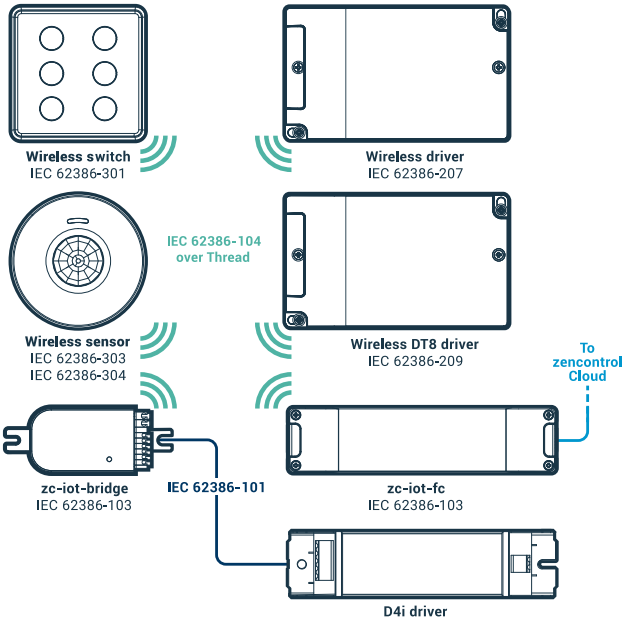
	Yes ✓ No ✕
Standard 101	✕
Standard 104	✓
Standard 101+104	✕
Standalone no System	✕
Standalone 101 no Configuration	✕
Standalone 101 App Configure	✕
Standalone 104 App Configure	✕
Standalone 101+104 App Configure	✕
Standalone Direct Control	✕

More information on page 80

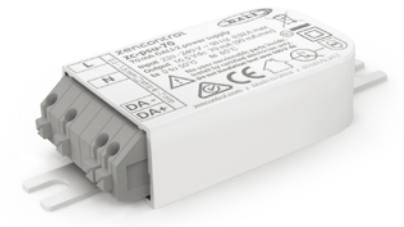
Specifications

Supply voltage	220 - 240 V ~ 50 Hz	
Control system	IEC62386-104 over Thread	
Ethernet	10/100 TCP/IP Ethernet	
Radio support	IEEE 802.15.4	
Frequency band	2.4 GHz	
Max radio tx power	+8 dBm	
Wiring	1 - 4 mm² Strip 6 - 7 mm	
Operating temperature	0 to 55°C	
Material	PC	
Classification	Class II	
Mounting	Field mount	
Ingress protection	IP20	
Compliance standards	IEC 61347-2-11 IEC 60950-1 EN 55015 EN 55022	IEC 62386-104 IEC 62386-103 EMC-2004/108/EC LVD-2006/95/EC

Wireless system overview



Last updated 2025_Q1



Product range

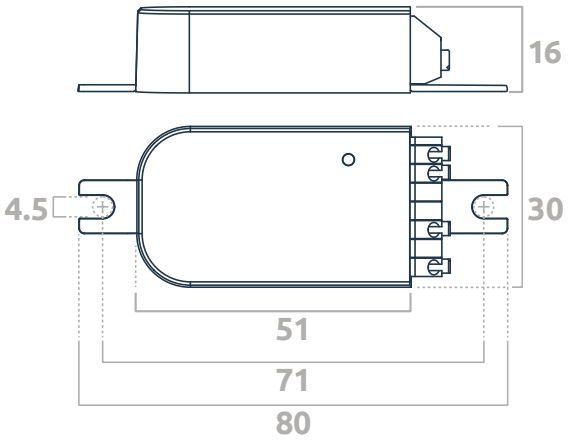
Order code	Description
zc-psu-70	70 mA DALI-2 Power supply

Features

- Suitable for one DALI line
- DALI-2 compliant power supply
- Compatible with DALI and DALI-2 systems
- Designed for compliance to IEC 62386-101, Ed. 2.0
- Protected against short circuit and DALI over-voltage
- Connect two units together for more DALI line current
- Not to have more than 3 of these units on a line.
- Installer to ensure there are no other devices that c/w built in PSU.

Dimensions

All dimensions in mm



Wiring

Specifications

Supply voltage	220 - 240 V ~ 50 Hz
Control system	DALI-2 / DALI
DALI guaranteed output current	70 mA
DALI maximum output current	90 mA
DALI typical output voltage	16.5 V
Wiring	0.5 - 1.5 mm² Strip 6 - 7 mm
Operating temperature	0 to 50°C
Material	PC
Classification	Class II
Mounting	Inbuilt
Ingress protection	IP20
Compliance standards	IEC 61558-2-16 IEC 62386-101 Ed 2.0 CISPR 15 EN 55015

System modes

	Yes ✓ No ✕
Standard 101	✓
Standard 104	✕
Standard 101+104	✕
Standalone no System	✕
Standalone 101 no Configuration	✕
Standalone 101 App Configure	✕
Standalone 104 App Configure	✕
Standalone 101+104 App Configure	✕
Standalone Direct Control	✕

More information on page 80

Last updated 2025_Q1

Product range

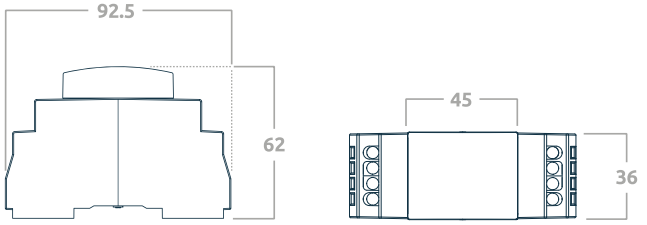
Order code	Description
zc-psu	DALI -2 power supply, DIN mount

Features

- Suitable for one DALI line
- 235 mA DALI line current
- Compatible with DALI systems
- DALI-2 compliant power supply
- Protected against short circuit and DALI over-voltage
- Tested and compliant to IEC 62386-101 Ed 2.0
- Advanced bus power supply, as defined by IEC 62386-101 Ed 2.0
- Suitable for distribution board mounting on standard 35 mm DIN rail

Dimensions

92.5 / 62 / 36 mm



Specifications

Supply voltage	230 V ~ 50 Hz
Control system	DALI-2
Guaranteed supply current	235 mA
Maximum supply current	250 mA
DALI voltage	16.5 V nominal line voltage
Wiring	1 - 4 mm^2 Strip 6 - 7 mm
Operating temperature	0 to 45°C
Material	PC
Classification	Class II
Mounting	DIN rail (35 mm)
Ingress protection	IP20
Compliance standards	IEC 61347-2-11 IEC 62386-101 Ed 2.0 CISPR 15 EN 55015 EMC-2004/108/EC LVD-2006/95/EC

System modes

	Yes ✓	No ✕
Standard 101	✓	
Standard 104		✕
Standard 101+104		✕
Standalone no System		✕
Standalone 101 no Configuration		✕
Standalone 101 App Configure		✕
Standalone 104 App Configure		✕
Standalone 101+104 App Configure		✕
Standalone Direct Control		✕

More information on page 80

Last updated 2025_01

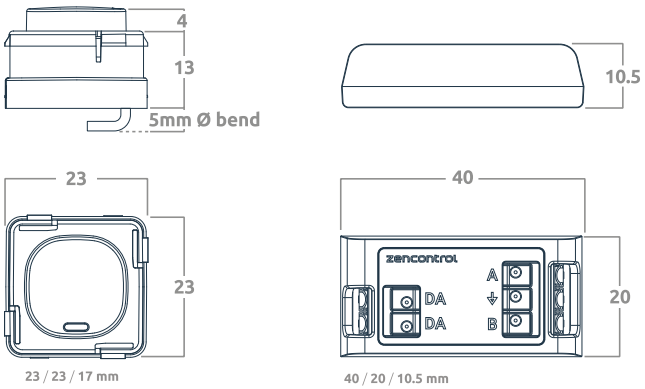
Product range

Order code	Description
zc-pbs-2020	Illuminated pushbutton switch 20 x 20 mm
zc-pbs-2020-bl	Illuminated pushbutton switch 20 x 20 mm, black

Features

- DALI bus powered
- Configurable LED indicator
- Compliant to IEC 62386-301
- Supplied with 100 mm pre wired cable
- For use with DALI-2 compliant application controller
- Supplied with zc-switch for direct connection to DALI line
- Suitable for one DALI line of up to 32 devices per DALI line
- Control scenes / groups / actions / events with a zencontrol control system

Dimensions



Specifications

Supply	DALI
Control system	DALI-2
LED indicator colour	Royal blue
DALI line current	5 mA
Wiring	0.5 - 0.75 mm^2 Strip 6 - 7 mm
Operating temperature	0 to 45°C
Material	PC
Ingress protection	IP20
Compliance standards	IEC 61347-2-11 CISPR 15 IEC 62386-301 EMC-2004/108/EC LVD-2006/95/EC

Notice

- The switch must not be connected to any mains. It is powered directly from the DALI line.
- The DALI line is not SELV. It must be treated like LV mains and treated with the same precautions and wiring regulations.

System modes

	Yes ✓ No ✕
Standard 101	✓
Standard 104	✕
Standard 101+104	✕
Standalone no System	✕
Standalone 101 no Configuration	✓
Standalone 101 App Configure	✕
Standalone 104 App Configure	✕
Standalone 101+104 App Configure	✕
Standalone Direct Control	✕

More information on page 80

Last updated 2025_01

zencontrol Illuminated pushbutton switch **datasheet**

Product range

Order code	Description
zc-pbs-2550-wh	Illuminated pushbutton switch 25 x 50 mm, white
zc-pbs-2550-st	Illuminated pushbutton switch 25 x 50 mm, stainless brushed

Features

- DALI bus powered
- Configurable LED indicator
- Compliant to IEC 62386-301
- Supplied with 100 mm pre wired cable
- For use with DALI-2 compliant application controller
- Supplied with zc-switch for direct connection to DALI line
- Suitable for one DALI line of up to 32 devices per DALI line
- Control scenes / groups / actions / events with a zencontrol control system

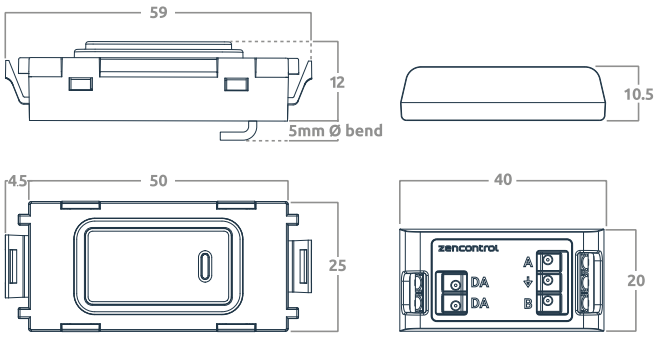
Specifications

Supply	DALI
Control system	DALI-2
LED indicator colour	Royal blue
DALI line current	5 mA
Wiring	0.5 - 0.75 mm^2 Strip 6 - 7 mm
Operating temperature	0 to 45°C
Material	PC
Ingress protection	IP20
Compliance standards	IEC 61347-2-11 CISPR 15 IEC 62386-301 EMC-2004/108/EC LVD-2006/95/EC

Notice

- The switch must not be connected to any mains. It is powered directly from the DALI line.
- The DALI line is not SELV. It must be treated like LV mains and treated with the same precautions and wiring regulations.

Dimensions



System modes

System modes	Yes ✓	No ✕
Standard 101	✓	
Standard 104		✕
Standard 101+104		✕
Standalone no System		✕
Standalone 101 no Configuration	✓	
Standalone 101 App Configure		✕
Standalone 104 App Configure		✕
Standalone 101+104 App Configure		✕
Standalone Direct Control		✕

More information on page 80

Last updated 2025_Q1

zencontrol

DALI rotary switch **datasheet**

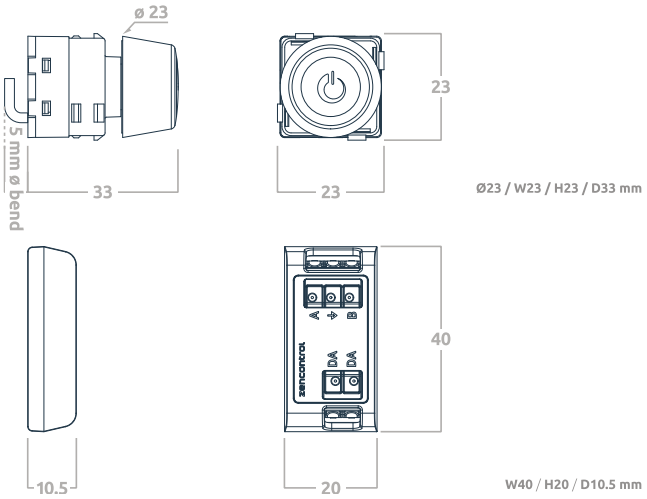
Product range

Order code	Description
zc-rotary	DALI rotary switch 20 x 20 mm

Features

- Rotary and pushbutton interface
- Supplied with 100 mm pre wired cable
- Compatible with standard switch-plates
- Designed for compliance to IEC 62386-301
- Suitable for one DALI line of up to 32 devices
- For use with DALI-2 compliant application controller
- Control scenes / groups / actions / events with a zencontrol control system

Dimensions



Notice

- The switch must not be connected to any mains. It is powered directly from the DALI line.
- The DALI line is not SELV. It must be treated like LV mains and treated with the same precautions and wiring regulations.

Specifications

Supply	DALI
Control system	DALI-2
DALI line current	5 mA
Wiring	0.5 - 0.75 mm^2 Strip 6 - 7 mm (supplied with 100 mm flylead)
Operating temperature	0 to 45°C
Material	PC
Ingress protection	IP20
Compliance standards	IEC 61347-2-11 CISPR 15 IEC 62386-301 EMC-2004/108/EC LVD-2006/95/EC

Configuration

By default the zc-rotary is configured to have 3 control device instances corresponding to rotate clockwise, rotate counter clockwise and push. Actual function is dependant on the configuration of DALI-2 application controllers connected to the DALI line.

System modes	Yes ✓	No ✕
Standard 101	✓	
Standard 104		✕
Standard 101+104		✕
Standalone no System		✕
Standalone 101 no Configuration	✓	
Standalone 101 App Configure		✕
Standalone 104 App Configure		✕
Standalone 101+104 App Configure		✕
Standalone Direct Control		✕

More information on page 80

Last updated 2025_Q1

zencontrol

DALI rotary switch **datasheet**

Product range

Order code	Description
zc-rotary-2550	DALI rotary switch 25 x 50 mm
zc-rotary-2550-b	Black DALI rotary switch 25 x 50 mm

Features

- Rotary and pushbutton interface
- Supplied with 100 mm pre wired cable
- Compatible with standard switch-plates
- Designed for compliance to IEC 62386-301
- Suitable for one DALI line of up to 32 devices
- For use with DALI-2 compliant application controller
- Control scenes / groups / actions / events with a zencontrol control system

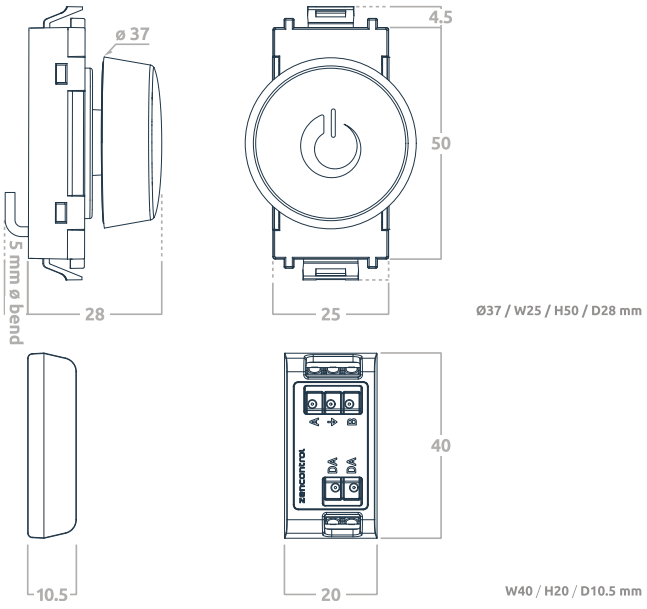
Specifications

Supply	DALI
Control system	DALI-2
DALI line current	5 mA
Wiring	0.5 - 0.75 mm² Strip 6 - 7 mm (supplied with 100 mm flylead)
Operating temperature	0 to 45°C
Material	PC
Ingress protection	IP20
Compliance standards	IEC 61347-2-11 CISPR 15 IEC 62386-301 EMC-2004/108/EC LVD-2006/95/EC

Notice

- The switch must not be connected to any mains. It is powered directly from the DALI line.
- The DALI line is not SELV. It must be treated like LV mains and treated with the same precautions and wiring regulations.

Dimensions



Configuration

By default the zc-rotary is configured to have 3 control device instances corresponding to rotate clockwise, rotate counter clockwise and push. Actual function is dependant on the configuration of DALI-2 application controllers connected to the DALI line.

System modes	Yes ✓	No ✕
Standard 101	✓	
Standard 104		✕
Standard 101+104		✕
Standalone no System		✕
Standalone 101 no Configuration	✓	
Standalone 101 App Configure		✕
Standalone 104 App Configure		✕
Standalone 101+104 App Configure		✕
Standalone Direct Control		✕

More information on page 80

Last updated 2025_Q1

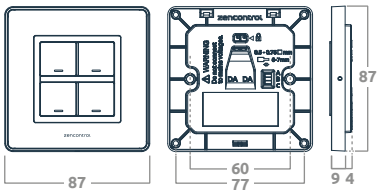
Product range

Order code	Description
zc-scene-a4	Standard Scenepanel to suit 60 mm wall mount

Features

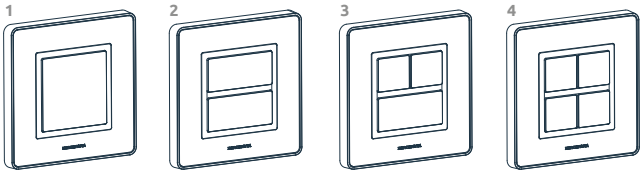
- 15 mA DALI line current
- Multiple finishes available
- Up to 10 units per DALI line
- Multiple control devices per line
- Accessories for 1 - 4 buttons per plate
- Designed for compliance to IEC 62386-301*
- Customisable labels available for specific projects
- For use with DALI-2 compliant application controller
- Control scenes / groups / actions / events with a zencontrol control system

Dimensions



zc-scene-a4
Dimensions **87 / 87 / 13 mm**
Mounting centres **64 mm**

Common configurations



Notice

- The switch must not be connected to any mains.
  It is powered directly from the DALI line.
- The DALI line is not SELV. It must be treated like LV mains and treated with the same precautions and wiring regulations.

Specifications

Supply	DALI
Control system	DALI-2
DALI line current	15 mA
Wiring	0.5 - 0.75 mm² Strip 6 - 7 mm
Operating temperature	0 to 45°C
Material	PC UV stabilised, ABS, 316 stainless
Ingress protection	IP20
Compliance standards	IEC 61347-2-11 CISPR 15 IEC 62386-301 EMC-2004/108/EC LVD-2006/95/EC

Kit content

zc-scene-a4	
zc-scene-btn-2	2 x blank quarter button
zc-scene-frm-mult	2 – 4 button frame to suit square base
zc-scene-fp-st	Brushed stainless faceplate for standard model

Accessory range

Order code	Description
zc-scene-btn-1	Blank single button (note requires zc-scene-frm-s/-c)
zc-scene-btn-2	Blank half button
zc-scene-btn-4	Blank quarter button
zc-scene-frm-s	Single button frame to suit square base
zc-scene-frm-mult	2 - 4 button frame to suit square base
zc-scene-fp-st	Brushed stainless faceplate for standard model
zc-scene-fp-gld	Brushed Gold faceplate for Standard model
zc-scene-fp-rgld	Brushed Rose Gold faceplate for Standard model
zc-scene-fp-blk	Brushed Black faceplate for Standard model
zc-scene-fp-gl-blk	Black Glass faceplate for Standard model
zc-scene-fp-gl-wht	White Glass faceplate for Standard model

System modes	Yes ✓ No ✕
Standard 101	✓
Standard 104	✕
Standard 101+104	✕
Standalone no System	✕
Standalone 101 no Configuration	✓
Standalone 101 App Configure	✕
Standalone 104 App Configure	✕
Standalone 101+104 App Configure	✕
Standalone Direct Control	✕

More information on page 80

Last updated 2025_Q1

zencontrol

Scenepanel **datasheet**

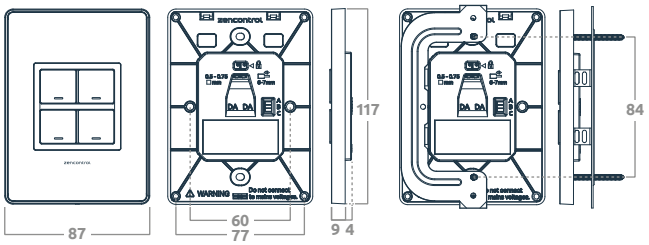
Product range

Order code	Description
zc-scene-c-a4	C-clip compatible Scenepanel to suit 84 mm wall mount

Features

- 15 mA DALI line current
- Multiple finishes available
- Up to 10 units per DALI line
- Multiple control devices per line
- Accessories for 1 - 4 buttons per plate
- Designed for compliance to IEC 62386-301
- Customisable labels available for specific projects
- For use with DALI-2 compliant application controller
- Control scenes / groups / actions / events with a zencontrol control system

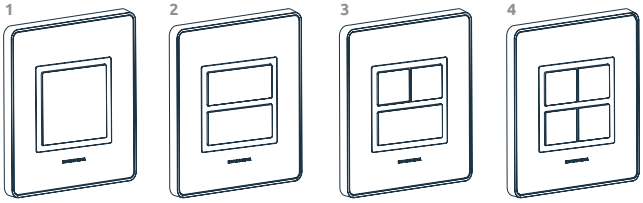
Dimensions



zc-scene-c-a4
Dimensions **87 / 117 / 13 mm**
Mounting centres **80 mm**

With c-clip

Common configurations



Notice

- The switch must not be connected to any mains.
  It is powered directly from the DALI line.
- The DALI line is not SELV. It must be treated like LV mains and treated with the same precautions and wiring regulations.

Specifications

Supply	DALI
Control system	DALI-2
DALI line current	15 mA
Wiring	0.5 - 0.75 mm² Strip 6 - 7 mm
Operating temperature	0 to 45°C
Material	PC UV stabilised, ABS, 316 stainless
Ingress protection	IP20
Compliance standards	IEC 61347-2-11 CISPR 15 IEC 62386-301 EMC-2004/108/EC LVD-2006/95/EC

Kit content

zc-scene-c-a4	
zc-scene-btn-4	2 x blank quarter button
zc-scene-frm-ult-c	2 – 4 button frame to suit c-clip base
zc-scene-fp-st-c	Brushed stainless faceplate for c-clip model
****Not included**	C-clip

Accessory range

zc-scene-frm-c	Single button frame to suit c-clip base
zc-scene-frm-mult-c	2 - 4 button frame to suit c-clip base
zc-scene-fp-st-c	Brushed stainless faceplate for c-clip model
zc-scene-fp-gld-c	Brushed Gold faceplate for C-clip model
zc-scene-fp-rgld-c	Brushed Rose Gold faceplate for C-clip model
zc-scnset-fp-blk-c	Brushed Black faceplate for C-clip model
zc-scene-fp-gl-blk-c	Black Glass faceplate for C-clip model
zc-scene-fp-gl-wht-c	White Glass faceplate for C-clip model

System modes

	Yes ✓ No ✕
Standard 101	✓
Standard 104	✕
Standard 101+104	✕
Standalone no System	✕
Standalone 101 no Configuration	✓
Standalone 101 App Configure	✕
Standalone 104 App Configure	✕
Standalone 101+104 App Configure	✕
Standalone Direct Control	✕

More information on page 80

Last updated 2025_Q1

Product range

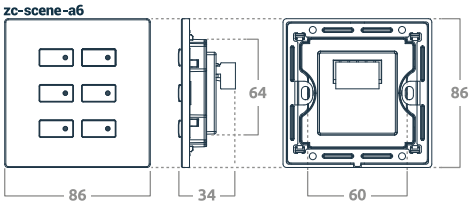
Order code	Description
zc-scene-a6-blk	Six button, scenepanel switch to suit 60 mm wall mount, black finish
zc-scene-a6-gr	Six button, scenepanel switch to suit 60 mm wall mount, grey finish
zc-scene-a6-chp	Six button, scenepanel switch to suit 86 mm wall mount, champagne finish
zc-scene-a6-rgld	Six button, scenepanel switch to suit 86 mm wall mount,rose gold finish

Features

- 15 mA DALI line current
- Multiple finishes available
- Up to 10 units per DALI line
- Multiple control devices per line
- Designed for compliance to IEC 62386-301
- Customisable labels available for specific projects
- For use with DALI-2 compliant application controller
- Control scenes / groups / actions / events with a zencontrol control system

Dimensions

Order code	Dimensions	Mounting centres
zc-scene-b6	W86 / H117 / D34 mm	106 / 60 mm
zc-scene-a6	W86 / H86 / D34 mm	60 mm



Notice

- The switch must not be connected to any mains. It is powered directly from the DALI line.
- The DALI line is not SELV. It must be treated like LV mains and treated with the same precautions and wiring regulations.

Specifications

Supply	DALI
Control system	DALI-2
DALI line current	15 mA
Wiring	0.5 - 0.75 mm^2 Strip 6 - 7 mm
Operating temperature	0 to 45°C
Material	PC UV stabilised, ABS, 316 stainless
Ingress protection	IP20
Compliance standards	IEC 61347-2-11 CISPR 15 IEC 62386-301 EMC-2004/108/EC LVD-2006/95/EC

System modes

System modes	Yes ✓ No ✕
Standard 101	✓
Standard 104	✕
Standard 101+104	✕
Standalone no System	✕
Standalone 101 no Configuration	✓
Standalone 101 App Configure	✕
Standalone 104 App Configure	✕
Standalone 101+104 App Configure	✕
Standalone Direct Control	✕

More information on page 80

Last updated 2025_Q1

zencontrol

Six button scene **datasheet**

Product range

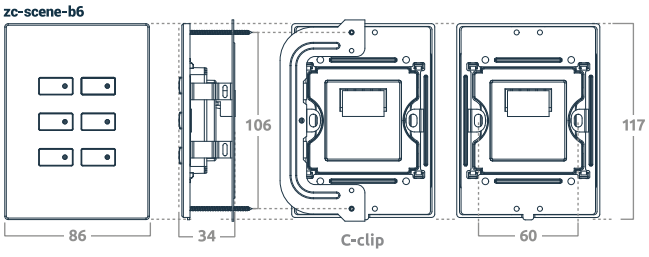
Order code	Description
zc-scene-c-a6-blk	Six button,standard scenepanel switch to suit 60 mm wall mount C-clip compatible, black finish
zc-scene-c-a6-gr	Six button,standard scenepanel switch to suit 60 mm wall mount, C-clip compatible, grey finish

Features

- 15 mA DALI line current
- Multiple finishes available
- Up to 10 units per DALI line
- Multiple control devices per line
- Designed for compliance to IEC 62386-301
- Customisable labels available for specific projects
- For use with DALI-2 compliant application controller
- Control scenes / groups / actions / events with a zencontrol control system

Dimensions

Order code	Dimensions	Mounting centres
zc-scene-b6	W86 / H117 / D34 mm	106 / 60 mm
zc-scene-a6	W86 / H86 / D34 mm	60 mm



Notice

- The switch must not be connected to any mains. It is powered directly from the DALI line.
- The DALI line is not SELV. It must be treated like LV mains and treated with the same precautions and wiring regulations.

Specifications

Supply	DALI
Control system	DALI-2
DALI line current	15 mA
Wiring	0.5 - 0.75 mm^2 Strip 6 - 7 mm
Operating temperature	0 to 45°C
Material	PC UV stabilised, ABS, 316 stainless
Ingress protection	IP20
Compliance standards	IEC 61347-2-11 CISPR 15 IEC 62386-301 EMC-2004/108/EC LVD-2006/95/EC

System modes

	Yes ✓ No ✕
Standard 101	✓
Standard 104	✕
Standard 101+104	✕
Standalone no System	✕
Standalone 101 no Configuration	✓
Standalone 101 App Configure	✕
Standalone 104 App Configure	✕
Standalone 101+104 App Configure	✕
Standalone Direct Control	✕

More information on page 80

Last updated 2025_Q1

zencontrol

Eight-button smart switch **datasheet**

Product range

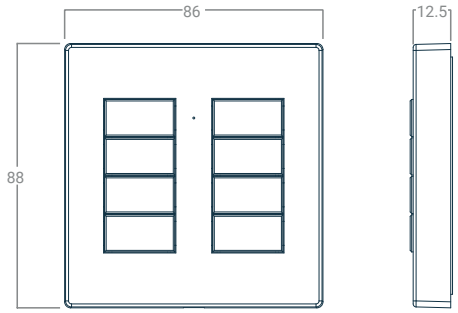
Order code	Description
zc-ss-8sw-be	Smart switch with 8 buttons to suit 84 mm wall mount

Features

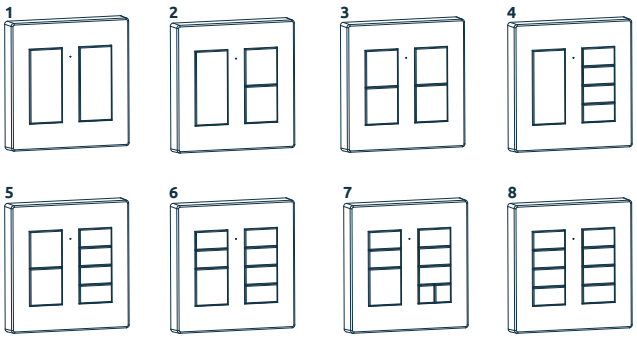
- 15mA DALI line current
- Up to 63 units per DALI line
- Black and white finishes available
- Tactile buttons for user accessibility
- Replaceable buttons with customisable printing
- Used on wired and wireless DALI networks
- Selectable button actions on DALI-2 application controller

Dimensions (mm)

Dimensions W86/ H88 / D12.5mm



Common configurations



Ecd Receiver Specifications

Supply	9.5 - 22.5 Vdc	
Class	III	
Control system	**Wired** DALI-2	
Radio support	IEEE 802.15.4	
Frequency band	2.4 GHz	
Max radio tx power	+8 dBm	
DALI line current	15 mA	
Wiring	0.5 - 2.5 mm^2	Strip 7 mm
Operating temperature	0 to 55°C	
Material	PC	
Ingress protection	IP20	
Compliance standards	IEC 60669-2-1 CISPR 15 IEC 62386-301	EMC-2004/108/EC LVD-2006/95/EC IEC 62386-104

Switch Specifications

Supply	2x CR2032 battery

Notice

- The switch must not be connected to any mains. It is powered directly from the DALI line.
- The DALI line is not SELV. It must be treated like LV mains and treated with the same precautions and wiring regulations.

System modes

	Yes ✓	No ✕
Standard 101	✓	
Standard 104		✕
Standard 101+104		✕
Standalone no System		✕
Standalone 101 no Configuration		✕
Standalone 101 App Configure	✓	
Standalone 104 App Configure		✕
Standalone 101+104 App Configure		✕
Standalone Direct Control		✕

More information on page 80

Last updated 2025_Q1

Product range

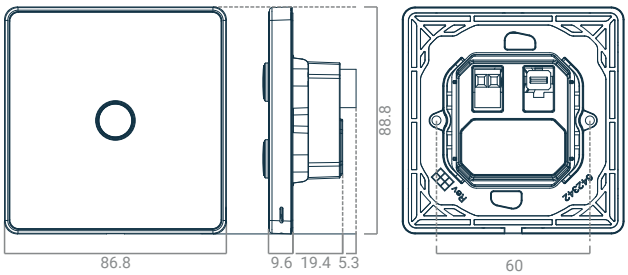
Order code	Description
zc-ss-1sw-eu-blk	Smart switch with 1 button to suit 84 mm wall mount, black
zc-ss-1sw-eu-wht	Smart switch with 1 button to suit 84 mm wall mount, white

Features

- 2 mA DALI line current
- Up to 63 units per DALI line
- Black and white finishes available
- Tactile buttons for user accessibility
- Replaceable buttons with customisable printing
- Used on wired and wireless DALI networks
- Selectable button actions on DALI-2 application controller

Dimensions (mm)

Fixing centres 60mm **Dimensions** W86.8 / H88.8 / D34.3mm



Notice

- The DALI line is not SELV. It must be treated like LV mains and treated with the same precautions and wiring regulations.
- This product is not bus powered and requires the LV mains supply to be connected

Specifications

Supply	220 - 240 V~ 50Hz	
Class	II	
Control system	**Wired** DALI-2	**Wireless** IEC62386-104 over Thread
Radio support	IEEE 802.15.4	
Frequency band	2.4 GHz	
Max radio tx power	+8 dBm	
DALI line current	2 mA	
Wiring	0.5 - 2.5 mm^2	Strip 7 mm
Operating temperature	0 to 55°C	
Material	PC UV stabilised, toughened glass, aluminium	
Ingress protection	IP20	
Compliance standards	IEC 60669-2-1 CISPR 15 IEC 62386-301	EMC-2004/108/EC LVD-2006/95/EC IEC 62386-104

System modes

	Yes ✓ No ✕
Standard 101	✓
Standard 104	✓
Standard 101+104	✓
Standalone no System	✕
Standalone 101 no Configuration	✕
Standalone 101 App Configure	✓
Standalone 104 App Configure	✓
Standalone 101+104 App Configure	✓
Standalone Direct Control	✕

More information on page 80

Last updated 2025_Q1

zencontrol One-button smart switch **datasheet**

Product range

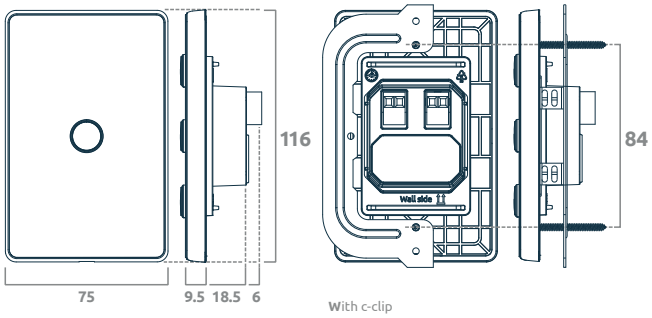
Order code	Description
zc-ss-1sw-blk	Smart switch with 1 button to suit 84 mm wall mount, black
zc-ss-1sw-wht	Smart switch with 1 button to suit 84 mm wall mount, white

Features

- 2 mA DALI line current
- Up to 63 units per DALI line
- Black and white finishes available
- Tactile buttons for user accessibility
- Replaceable buttons with customisable printing
- Used on wired and wireless DALI networks
- Selectable button actions on DALI-2 application controller

Dimensions (mm)

Fixing centres 84 mm **Dimensions** W75 / H117 / D34 mm



Notice

- The DALI line is not SELV. It must be treated like LV mains and treated with the same precautions and wiring regulations.
- This product is not bus powered and requires the LV mains supply to be connected.

Specifications

Supply	220 - 240 V~ 50Hz	
Class	II	
Control system	**Wired** DALI-2	**Wireless** IEC62386-104 over Thread
Radio support	IEEE 802.15.4	
Frequency band	2.4 GHz	
Max radio tx power	+8 dBm	
DALI line current	2 mA	
Wiring	0.5 - 2.5 mm^2	Strip 7 mm
Operating temperature	0 to 55°C	
Material	PC UV stabilised, toughened glass, aluminium	
Ingress protection	IP20	
Compliance standards	IEC 60669-2-1 CISPR 15 IEC 62386-301	EMC-2004/108/EC LVD-2006/95/EC IEC 62386-104

System modes

	Yes ✓	No ✗
Standard 101	✓	
Standard 104	✓	
Standard 101+104	✓	
Standalone no System		✗
Standalone 101 no Configuration		✗
Standalone 101 App Configure	✓	
Standalone 104 App Configure	✓	
Standalone 101+104 App Configure	✓	
Standalone Direct Control		✗

More information on page 80

Last updated 2025_Q1

Product range

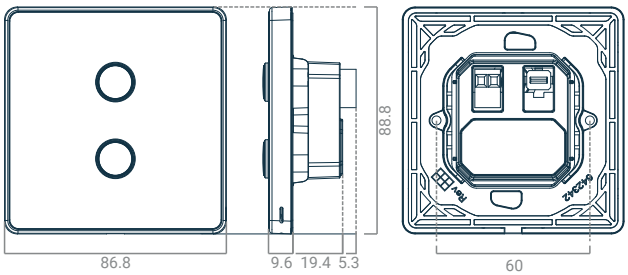
Order code	Description
zc-ss-2sw-eu-blk	Smart switch with 2 buttons to suit 84 mm wall mount, black
zc-ss-2sw-eu-wht	Smart switch with 2 buttons to suit 84 mm wall mount, white

Features

- 2 mA DALI line current
- Up to 63 units per DALI line
- Black and white finishes available
- Tactile buttons for user accessibility
- Replaceable buttons with customisable printing
- Used on wired and wireless DALI networks
- Selectable button actions on DALI-2 application controller

Dimensions (mm)

Fixing centres 60mm **Dimensions** W86.8 / H88.8 / D34.3mm



Notice

- The DALI line is not SELV. It must be treated like LV mains and treated with the same precautions and wiring regulations.
- This product is not bus powered and requires the LV mains supply to be connected.

Specifications

Supply	220 - 240 V~ 50Hz	
Class	II	
Control system	**Wired** DALI-2	**Wireless** IEC62386-104 over Thread
Radio support	IEEE 802.15.4	
Frequency band	2.4 GHz	
Max radio tx power	+8 dBm	
DALI line current	2 mA	
Wiring	0.5 - 2.5 mm^2	Strip 7 mm
Operating temperature	0 to 55°C	
Material	PC UV stabilised, toughened glass, aluminium	
Ingress protection	IP20	
Compliance standards	IEC 60669-2-1 CISPR 15 IEC 62386-301	EMC-2004/108/EC LVD-2006/95/EC IEC 62386-104

System modes

	Yes ✓	No ✕
Standard 101	✓	
Standard 104	✓	
Standard 101+104	✓	
Standalone no System		✕
Standalone 101 no Configuration		✕
Standalone 101 App Configure	✓	
Standalone 104 App Configure	✓	
Standalone 101+104 App Configure	✓	
Standalone Direct Control		✕

More information on page 80

Last updated: 2025.01

Product range

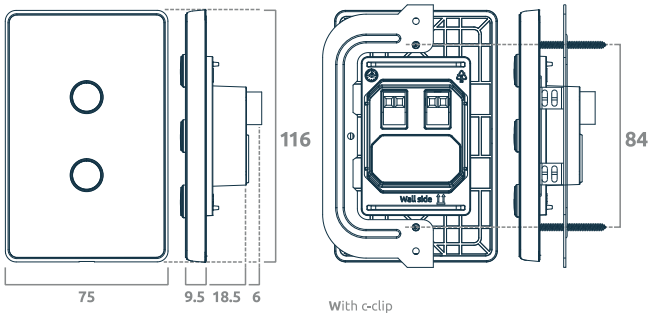
Order code	Description
zc-ss-2sw-blk	Smart switch with 2 buttons to suit 84 mm wall mount, black
zc-ss-2sw-wht	Smart switch with 2 buttons to suit 84 mm wall mount, white

Features

- 2 mA DALI line current
- Up to 63 units per DALI line
- Black and white finishes available
- Tactile buttons for user accessibility
- Replaceable buttons with customisable printing
- Used on wired and wireless DALI networks
- Selectable button actions on DALI-2 application controller

Dimensions (mm)

Fixing centres 84 mm **Dimensions** W75 / H117 / D34 mm



Notice

- The DALI line is not SELV. It must be treated like LV mains and treated with the same precautions and wiring regulations.
- This product is not bus powered and requires the LV mains supply to be connected.

Specifications

Supply	220 - 240 V~ 50Hz	
Class	II	
Control system	**Wired** DALI-2	**Wireless** IEC62386-104 over Thread
Radio support	IEEE 802.15.4	
Frequency band	2.4 GHz	
Max radio tx power	+8 dBm	
DALI line current	2 mA	
Wiring	0.5 - 2.5 mm^2	Strip 7 mm
Operating temperature	0 to 55°C	
Material	PC UV stabilised, toughened glass, aluminium	
Ingress protection	IP20	
Compliance standards	IEC 60669-2-1 CISPR 15 IEC 62386-301	EMC-2004/108/EC LVD-2006/95/EC IEC 62386-104

System modes

	Yes ✓ No ✕
Standard 101	✓
Standard 104	✓
Standard 101+104	✓
Standalone no System	✕
Standalone 101 no Configuration	✕
Standalone 101 App Configure	✓
Standalone 104 App Configure	✓
Standalone 101+104 App Configure	✓
Standalone Direct Control	✕

More information on page 80

Last updated 2025_Q1

zencontrol Three-button smart switch **datasheet**

Product range

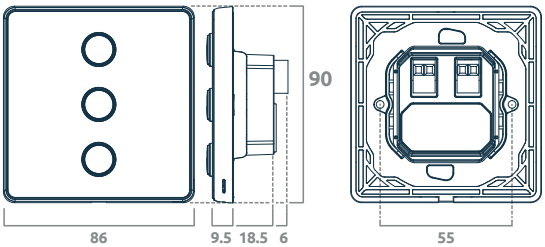
Order code	Description
zc-ss-3sw-eu-blk	Smart switch with 3 buttons to suit 84 mm wall mount, black
zc-ss-3sw-eu-wht	Smart switch with 3 buttons to suit 84 mm wall mount, white

Features

- 2 mA DALI line current
- Up to 63 units per DALI line
- Black and white finishes available
- Tactile buttons for user accessibility
- Replaceable buttons with customisable printing
- Used on wired and wireless DALI networks
- Selectable button actions on DALI-2 application controller

Dimensions (mm)

zc-ss-3sw-eu **Fixing centres** 55 mm **Dimensions** W86 / H86 / D34 mm



Notice

- The DALI line is not SELV. It must be treated like LV mains and treated with the same precautions and wiring regulations.
- This product is not bus powered and requires the LV mains supply to be connected.

Specifications

Supply	220 - 240 V~ 50Hz	
Class	II	
Control system	**Wired** DALI-2	**Wireless** IEC62386-104 over Thread
Radio support	IEEE 802.15.4	
Frequency band	2.4 GHz	
Max radio tx power	+8 dBm	
DALI line current	2 mA	
Wiring	0.5 - 2.5 mm²	Strip 7 mm
Operating temperature	0 to 55°C	
Material	PC UV stabilised, toughened glass, aluminium	
Ingress protection	IP20	
Compliance standards	IEC 60669-2-1 CISPR 15 IEC 62386-301	EMC-2004/108/EC LVD-2006/95/EC IEC 62386-104

System modes

	Yes ✓	No ✕
Standard 101	✓	
Standard 104	✓	
Standard 101+104	✓	
Standalone no System		✕
Standalone 101 no Configuration		✕
Standalone 101 App Configure	✓	
Standalone 104 App Configure	✓	
Standalone 101+104 App Configure	✓	
Standalone Direct Control		✕

More information on page 80

Last updated: 2025_Q1

zencontrol Three-button smart switch **datasheet**

Product range

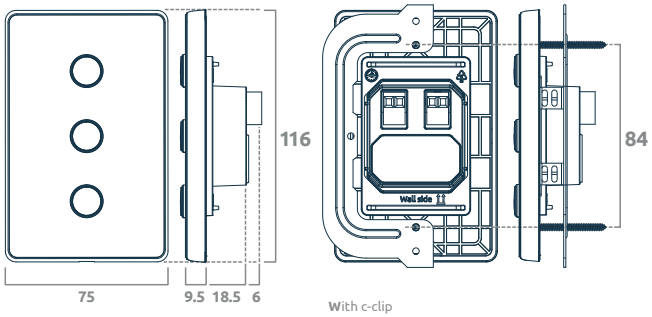
Order code	Description
zc-ss-3sw-blk	Smart switch with 3 buttons to suit 84 mm wall mount, black
zc-ss-3sw-wht	Smart switch with 3 buttons to suit 84 mm wall mount, white

Features

- 2 mA DALI line current
- Up to 63 units per DALI line
- Black and white finishes available
- Tactile buttons for user accessibility
- Replaceable buttons with customisable printing
- Used on wired and wireless DALI networks
- Selectable button actions on DALI-2 application controller

Dimensions (mm)

Fixing centres 84 mm **Dimensions** W75 / H117 / D34 mm



Notice

- The DALI line is not SELV. It must be treated like LV mains and treated with the same precautions and wiring regulations.
- This product is not bus powered and requires the LV mains supply to be connected.

Specifications

Supply	220 - 240 V~ 50Hz	
Class	II	
Control system	**Wired** DALI-2	**Wireless** IEC62386-104 over Thread
Radio support	IEEE 802.15.4	
Frequency band	2.4 GHz	
Max radio tx power	+8 dBm	
DALI line current	2 mA	
Wiring	0.5 - 2.5 mm²	Strip 7 mm
Operating temperature	0 to 55°C	
Material	PC UV stabilised, toughened glass, aluminium	
Ingress protection	IP20	
Compliance standards	IEC 60669-2-1 CISPR 15 IEC 62386-301	EMC-2004/108/EC LVD-2006/95/EC IEC 62386-104

System modes

	Yes ✓	No ✕
Standard 101	✓	
Standard 104	✓	
Standard 101+104	✓	
Standalone no System		✕
Standalone 101 no Configuration		✕
Standalone 101 App Configure	✓	
Standalone 104 App Configure	✓	
Standalone 101+104 App Configure	✓	
Standalone Direct Control		✕

More information on page 80

Last updated 2025_Q1

Product range

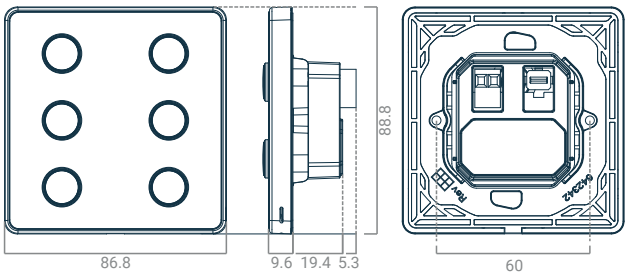
Order code	Description
zc-ss-6sw-eu-blk	Smart switch with 2 buttons to suit 84 mm wall mount, black
zc-ss-6sw-eu-wht	Smart switch with 2 buttons to suit 84 mm wall mount, white

Features

- 2 mA DALI line current
- Up to 63 units per DALI line
- Black and white finishes available
- Tactile buttons for user accessibility
- Replaceable buttons with customisable printing
- Used on wired and wireless DALI networks
- Selectable button actions on DALI-2 application controller

Dimensions (mm)

Fixing centres 60mm **Dimensions** W86.8 / H88.8 / D34.3mm



Notice

- The DALI line is not SELV. It must be treated like LV mains and treated with the same precautions and wiring regulations.
- This product is not bus powered and requires the LV mains supply to be connected.

Specifications

Supply	220 - 240 V~ 50Hz	
Class	II	
Control system	**Wired** DALI-2	**Wireless** IEC62386-104 over Thread
Radio support	IEEE 802.15.4	
Frequency band	2.4 GHz	
Max radio tx power	+8 dBm	
DALI line current	2 mA	
Wiring	0.5 - 2.5 mm^2	Strip 7 mm
Operating temperature	0 to 55°C	
Material	PC UV stabilised, toughened glass, aluminium	
Ingress protection	IP20	
Compliance standards	IEC 60669-2-1 CISPR 15 IEC 62386-301	EMC-2004/108/EC LVD-2006/95/EC IEC 62386-104

System modes

	Yes ✓	No ✕
Standard 101	✓	
Standard 104	✓	
Standard 101+104	✓	
Standalone no System		✕
Standalone 101 no Configuration		✕
Standalone 101 App Configure	✓	
Standalone 104 App Configure	✓	
Standalone 101+104 App Configure	✓	
Standalone Direct Control		✕

More information on page 80

Last updated 2025_Q1

zencontrol

Six-button smart switch **datasheet**

Product range

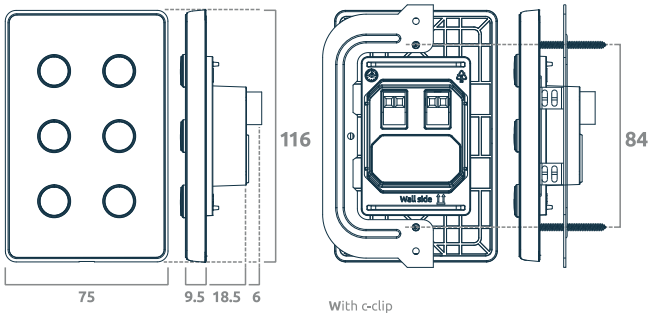
Order code	Description
zc-ss-6sw-wht	Smart switch with 6 buttons to suit 84 mm wall mount, white
zc-ss-6sw-blk	Smart switch with 6 buttons to suit 84 mm wall mount, black

Features

- 2 mA DALI line current
- Up to 63 units per DALI line
- Black and white finishes available
- Tactile buttons for user accessibility
- Replaceable buttons with customisable printing
- Used on wired and wireless DALI networks
- Selectable button actions on DALI-2 application controller

Dimensions (mm)

Fixing centres 84 mm **Dimensions** W75 / H117 / D34 mm



Notice

- The DALI line is not SELV. It must be treated like LV mains and treated with the same precautions and wiring regulations.
- This product is not bus powered and requires the LV mains supply to be connected.

Specifications

Supply	220 - 240 V~ 50Hz	
Class	II	
Control system	**Wired** DALI-2	**Wireless** IEC62386-104 over Thread
Radio support	IEEE 802.15.4	
Frequency band	2.4 GHz	
Max radio tx power	+8 dBm	
DALI line current	2 mA	
Wiring	0.5 - 2.5 mm²	Strip 7 mm
Operating temperature	0 to 55°C	
Material	PC UV stabilised, toughened glass, aluminium	
Ingress protection	IP20	
Compliance standards	IEC 60669-2-1 CISPR 15 IEC 62386-301	EMC-2004/108/EC LVD-2006/95/EC IEC 62386-104

System modes

	Yes ✓	No ✕
Standard 101	✓	
Standard 104	✓	
Standard 101+104	✓	
Standalone no System		✕
Standalone 101 no Configuration		✕
Standalone 101 App Configure	✓	
Standalone 104 App Configure	✓	
Standalone 101+104 App Configure	✓	
Standalone Direct Control		✕

More information on page 80

Last updated 2025_Q1

Product range

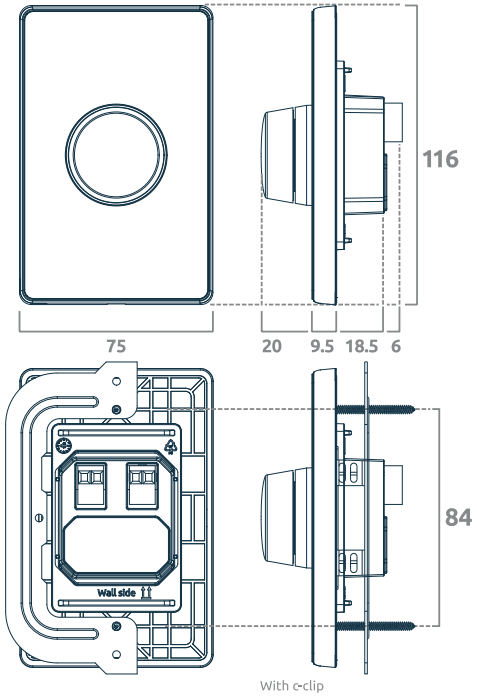
Order code	Description
zc-ss-rot-wht	Smart switch rotary to suit 84 mm wall mount, white
zc-ss-rot-blk	Smart switch rotary to suit 84 mm wall mount, black

Features

- 2 mA DALI line current
- Up to 63 units per DALI line
- Black and white finishes available
- Tactile knob for user accessibility
- Customisable LED colour to suit different applications
- Use on wired and wireless DALI networks

Dimensions (mm)

Fixing centres 84 mm **Dimensions** W75 / H117 / D34 mm



Notice

- The DALI line is not SELV. It must be treated like LV mains and treated with the same precautions and wiring regulations.
- This product is not bus powered and requires the LV mains supply to be connected.

Specifications

Supply	220 - 240 V~ 50Hz 4mA	
Class	II	
Control system	**Wired** DALI-2	**Wireless** IEC62386-104 over Thread
Radio support	IEEE 802.15.4	
Frequency band	2.4 GHz	
Max radio tx power	+8 dBm	
DALI line current	2 mA	
Wiring	0.5 - 2.5 mm²	Strip 7 mm
Operating temperature	0 to 55°C	
Material	PC UV stabilised, toughened glass, aluminium	
Ingress protection	IP20	
Compliance standards	IEC 61347-2-11 CISPR 15 IEC 62386-301	EMC-2004/108/EC LVD-2006/95/EC IEC 62386-104

System modes

	Yes ✓ No ✕
Standard 101	✓
Standard 104	✓
Standard 101+104	✓
Standalone no System	✕
Standalone 101 no Configuration	✕
Standalone 101 App Configure	✓
Standalone 104 App Configure	✓
Standalone 101+104 App Configure	✓
Standalone Direct Control	✕

More information on page 80

Last updated 2025_Q1

zencontrol

Smart touch switch **datasheet**

Product range

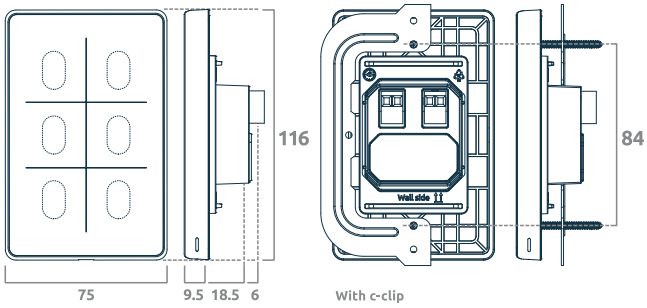
Order code	Description
zc-sst-6sw-blk	Smart switch with 6 capacative touch buttons, to suit 84 mm wall mount, black
zc-sst-6sw-wht	Smart switch with 6 capacative touch buttons, to suit 84 mm wall mount, white

Features

- 2 mA DALI line current
- Up to 12 units per DALI line
- Inbuilt temperature sensor
- Black and white finishes available
- Inbuilt configurable RGBW LEDs
- Touch buttons for user accessibility
- Customiseable button prints to suit different applications
- Selectable button actions on DALI application controller
- Wireless mesh models do not require a local control interface
- Used on wired and wireless DALI networks

Dimensions (mm)

Fixing centres 84 mm **Dimensions** W75 / H117 / D34 mm



Dotted line indicates touch-sensitive area, custom print designs should ideally be located within this area.

Notice

- The DALI line is not SELV. It must be treated like LV mains and treated with the same precautions and wiring regulations.
- This product is not bus powered and requires the LV mains supply to be connected.

Specifications

Supply	220 - 240 V	
Control system	**Wired** DALI-2	**Wireless** IEC62386-104 over Thread
Radio support	IEEE 802.15.4	
Frequency band	2.4 GHz	
Max radio tx power	+8 dBm	
DALI line current	2 mA	
Wiring	1 - 4 mm^2	Strip 8 - 10 mm
Operating temperature	0 to 55°C	
Material	PC UV stabilised, toughened glass, aluminium	
Ingress protection	IP20	
Compliance standards	IEC 61347-2-11 CISPR 15 IEC 62386-301	EMC-2004/108/EC LVD-2006/95/EC

System modes

	Yes ✓	No ✕
Standard 101	✓	
Standard 104	✓	
Standard 101+104	✓	
Standalone no System		✕
Standalone 101 no Configuration		✕
Standalone 101 App Configure	✓	
Standalone 104 App Configure	✓	
Standalone 101+104 App Configure	✓	
Standalone Direct Control		✕

More information on page 80

Last updated 2025_Q1

zencontrol

Smart switch display **datasheet**

Product range

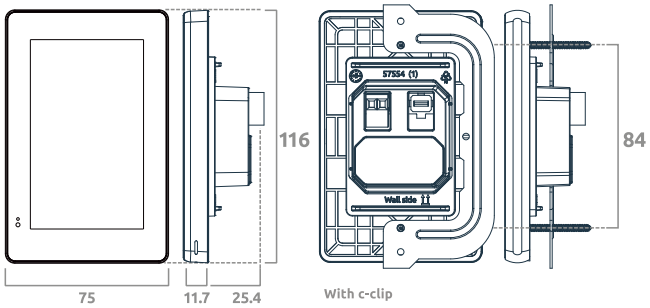
Order code	Description
zc-ssd-blk	Smart switch with programmable touch display, black, to suit 84 mm wall mount
zc-ssd-wht	Smart switch with programmable touch display, white, to suit 84 mm wall mount

Features

- 1 to 4 buttons per page, up to 4 pages
- Multiple scenes and set-ups available
- 100+ icons and custom labels
- Simple Cloud commissioning
- Per page language settings
- Up to 5 units per DALI line
- Full-colour touch screen
- 2 mA DALI line current
- Inbuilt wireless bridge for control of downstream DALI devices

Dimensions

Fixing centres	84 mm	**Frame thickness**	11.7 mm
Dimensions	W75 / H116 / D37 mm	**Screen size**	52 x 87 mm



Specifications

Supply	220 - 240 V
Supply current	30 mA
Control system	DALI-2
DALI line current	2 mA
Wiring	1 - 4 mm^2 Strip 8 - 10 mm
Operating temperature	0 to 45°C
Material	Anodised aluminium, toughened glass
Ingress protection	IP20
Compliance standards	IEC 61347-2-11 CISPR 15 IEC 62386-301 EMC-2004/108/EC LVD-2006/95/EC

Notice

- The DALI line is not SELV. It must be treated like LV mains and treated with the same precautions and wiring regulations.
- zencontrol Application controllers support up to 80 pushbutton instances per line
- A zc-ssd-blk with every button enabled will consume 1ECD address with 16 pushbutton instances

System modes

	Yes ✓	No ✕
Standard 101	✓	
Standard 104	✓	
Standard 101+104	✓	
Standalone no System		✕
Standalone 101 no Configuration		✕
Standalone 101 App Configure	✓	
Standalone 104 App Configure	✓	
Standalone 101+104 App Configure	✓	
Standalone Direct Control		✕

More information on page 80

Last updated 2025_Q1

Product range

Order code	Description
zc-iot-bridge	Wireless bridge
zc-iot-bridge-oem	Wireless bridge for OEM*
zc-iot-bridge-oem-s	Wireless bridge for OEM with nano+ sensor*

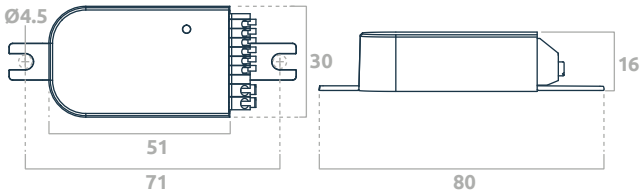
Features

- Powered from DALI line
- Protected against DALI over-voltage
- Supports IEC 62386-104 over Thread®
- Smart sensor and switch attachments
- Compact form factor for easy integration
- Compatible with DALI and DALI-2 devices
- A wireless control system solution for D4i
- Converts DALI ECGs and ECDs to a wireless system

*OEM models support zc-pir-nano+ sensor only, this incl. PIR/lux/IR/ and wireless connectivity.

Dimensions

Dimensions	W80 / H30 / D16 mm



System modes

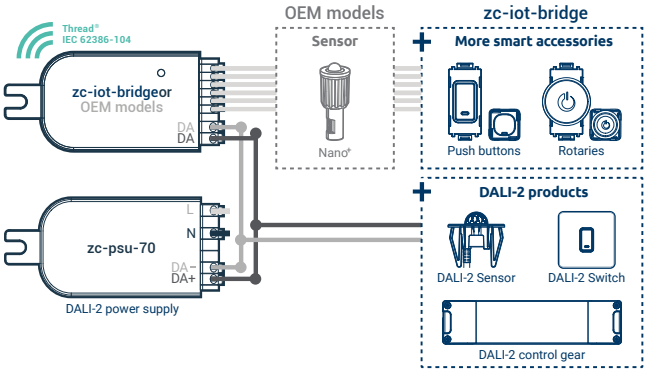
	Yes ✓	No ✕
Standard 101	✓	
Standard 104	✓	
Standard 101+104	✓	
Standalone no System		✕
Standalone 101 no Configuration		✕
Standalone 101 App Configure	✓	
Standalone 104 App Configure	✓	
Standalone 101+104 App Configure	✓	
Standalone Direct Control		✕

More information on page 80

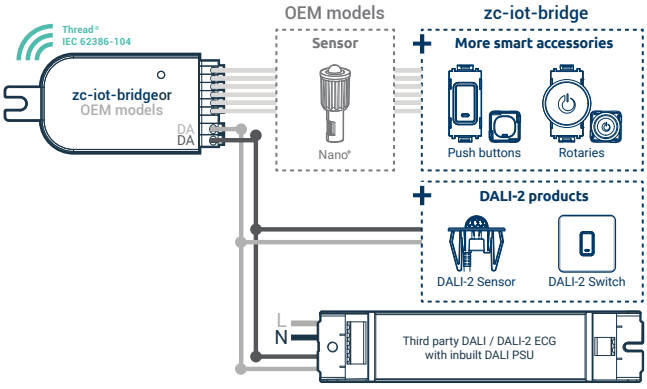
Specifications

Supply voltage	9.5 - 22.5 V (DALI line)	
Control system	IEC62386-104 over Thread	
DALI line current	40 mA	
Wiring	0.2 - 1.5 mm² (DALI)	
	0.2 - 0.5 mm² (accessories)	
	Strip 8 - 9 mm	
Operating temperature	0 to 60°C	
Material	PC	
Classification	Class II	
Mounting	Inbuilt	
Ingress protection	IP20	
Compliance standards	IEC 61347-2-11	IEC 62386-104
	IEC 60950-1	IEC 62386-103
	EN 55015	EMC-2004/108/EC
	EN 55022	LVD-2006/95/EC

Wiring: Wireless sensor / switch / smart accessory

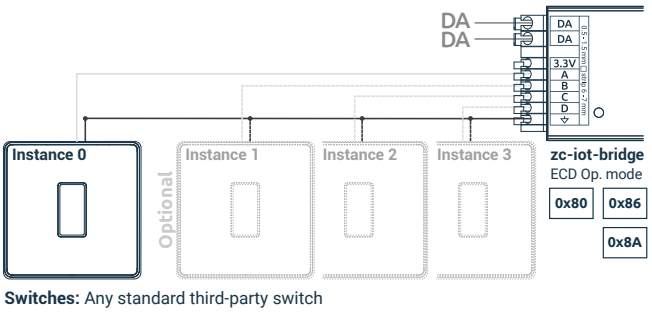


Wiring: Wireless smart luminaire

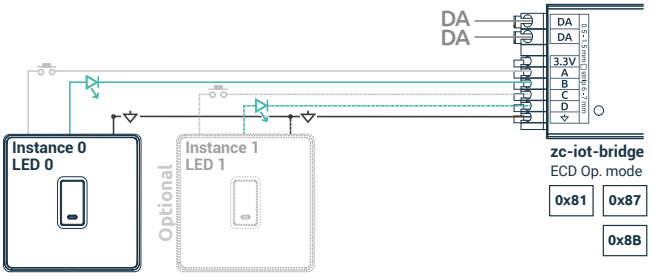


Last updated 2025_Q1

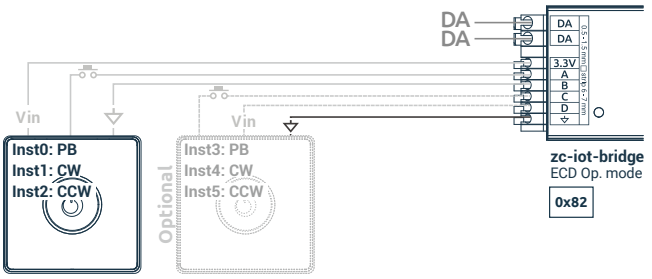
Wiring diagrams



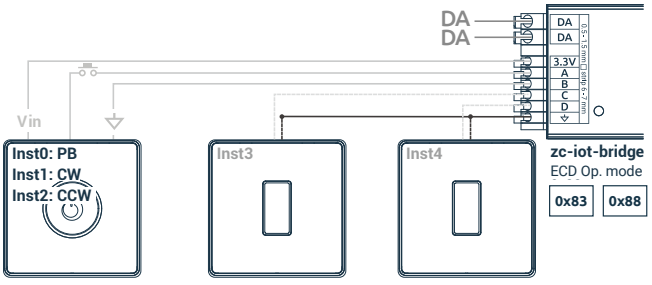
Switches: Any standard third-party switch



Illuminated pushbutton switches: zc-pbs-2550

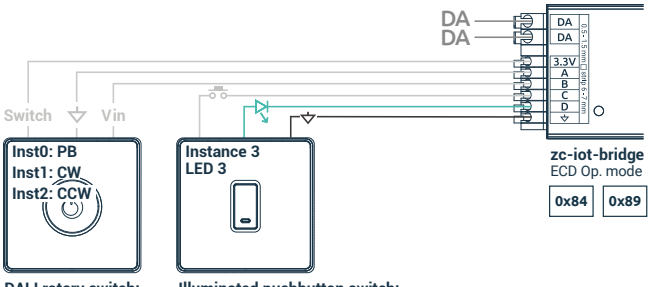


DALI rotary switch: zc-rotary-2550



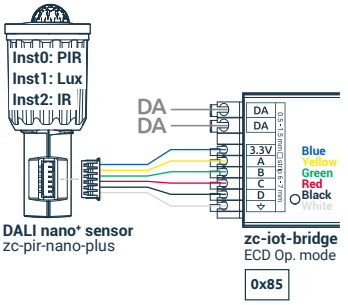
DALI rotary switch:
zc-rotary-2550

Switches: Any standard third-party switch

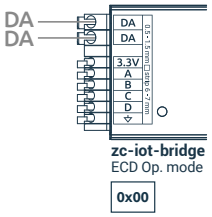


DALI rotary switch:
zc-rotary-2550

Illuminated pushbutton switch:
zc-pbs-2550



DALI nano⁺ sensor
zc-pir-nano-plus



Accessories range

Order code	Description
zc-fm-kit	Field mount kit
zc-pir-nano+	PIR Nano⁺ sensor, accessory kit
zc-rotary-kit	Rotary 20 x 20 mm, accessory kit
zc-rotary-2550-kit	Rotary 25 x 50 mm, accessory kit
zc-rotary-2550-b-kit	Black rotary 25 x 50 mm, accessory kit
zc-pbs-2020-kit	Illuminated pushbutton switch 20 x 20 mm, accessory kit
zc-pbs-2550-wh-kit	Illuminated pushbutton switch 25 x 50 mm, white, accessory kit
zc-pbs-2550-st-kit	Illuminated pushbutton switch 25 x 50 mm, stainless brushed, accessory kit

Last updated 2025_Q1

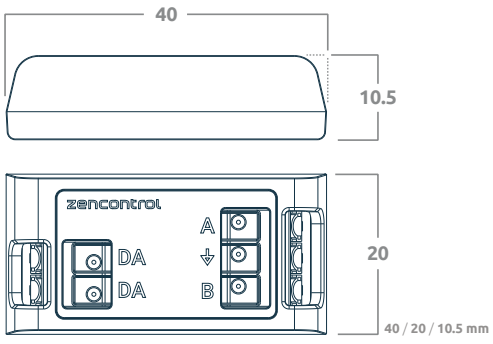
Product range

Order code	Description
zc-switch	DALI-2 switch module

Features

- DALI-2 certified
- Compliant to IEC 62386-301
- Multiple control devices per line
- Suitable for DALI-2 application controller
- Suitable for up to 32 devices per DALI line
- Suitable for momentary switch mechanisms
- Two configurable inputs for volt-free contacts
- Upgradeable to match changes in DALI standards
- Small form factor for mounting behind switch panels
- Either input can be reconfigured to act as a logical output
- Powered directly from DALI line, no separate supply required
- Control scenes / groups / actions / events with a zencontrol control system

Dimensions



Specifications

Supply	DALI
Control system	DALI-2
DALI line current	5 mA
Input	2 floating contacts
Output	3.3 V logic level output
Wiring	0.5 - 0.75 mm² Strip 6 - 7 mm
Operating temperature	0 to 45°C
Material	PC
Ingress protection	IP20
Compliance standards	IEC 61347-2-11 CISPR 15 IEC 62386-301 EMC-2004/108/EC LVD-2006/95/EC

Notice

- The switch must not be connected to any mains. It is powered directly from the DALI line.
- Input switches should be connected directly to the switch. They shall be volt-free contacts and must not be connected to mains.
- The DALI line is not SELV. It must be treated like LV mains and treated with the same precautions and wiring regulations.

System modes

	Yes ✓ No ✕
Standard 101	✓
Standard 104	✕
Standard 101+104	✕
Standalone no System	✕
Standalone 101 no Configuration	✓
Standalone 101 App Configure	✕
Standalone 104 App Configure	✕
Standalone 101+104 App Configure	✕
Standalone Direct Control	✕

More information on page 80

Last updated 2025_Q1

zencontrol

DALI-2 switch module **datasheet**

Product range

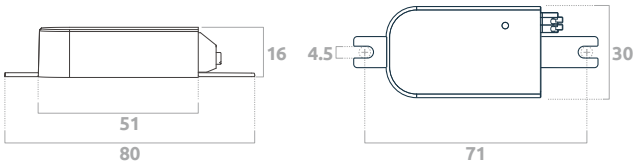
Order code	Description
zc-switch-6	DALI-2 switch module 6 Input

Features

- Dali bus powered
- Compatible to IEC 62386-301
- Supplied with 100mm pre-wired Dali cable
- Supplied with 150mm Wire loom
- For use with DALI-2 compliant application controller
- 6 momentary inputs.
- Control scenes / groups / actions / events with a zencontrol control system

Dimensions

Dimensions	W80 / H16 / D30 mm
Mounting options	Inbuilt



System modes

	Yes ✓	No ✕
Standard 101	✓	
Standard 104		✕
Standard 101+104		✕
Standalone no System		✕
Standalone 101 no Configuration	✓	
Standalone 101 App Configure		✕
Standalone 104 App Configure		✕
Standalone 101+104 App Configure		✕
Standalone Direct Control		✕

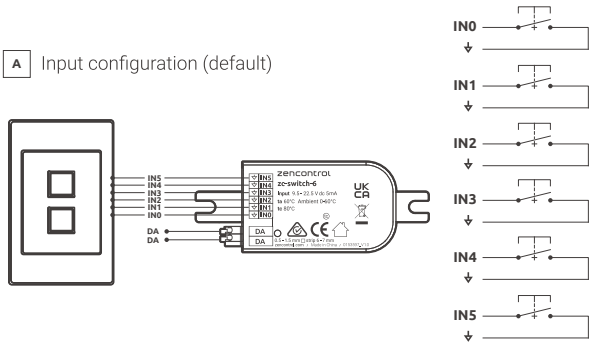
More information on page 80

Specifications

Supply voltage	9.5 - 22.5 V dc (supplied from DALI)
Control system	DALI-2
Supply current	5 mA
Input	6 floating dry contacts Note: Any switch used shall be LV rated
Wiring	0.5 - 0.75 mm^2 Strip 6 - 7 mm
Operating temperature	0 to 45°C
Material	PC
Ingress protection	IP20

Wiring diagram

A Input configuration (default)



Last updated 2025_Q1

zencontrol

DALI-2 switch module **datasheet**

Product range

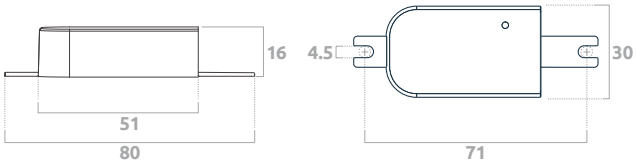
Order code	Description
zc-switch-6-be	DALI-2 switch module 6 Input

Features

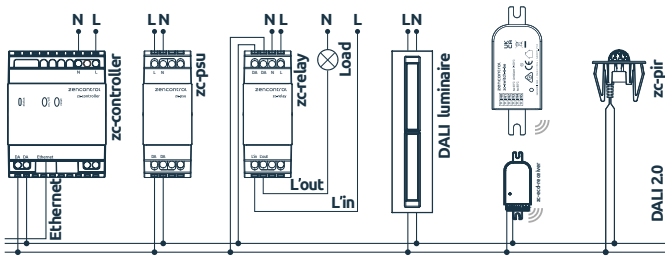
- Dali bus powered
- Compatible white IEC 62386-301
- Supplied with 100mm pre-wired Dali cable
- Supplied with 150mm Wire loom
- For use with DALI-2 compliant application controller
- 6 momentary inputs.
- Control scenes / groups / actions / events with a zencontrol control system

Dimensions

Dimensions	W80 / H16 / D30 mm
Mounting options	Inbuilt



System overview



System modes

	Yes ✓	No ✕
Standard 101	✓	
Standard 104		✕
Standard 101+104		✕
Standalone no System		✕
Standalone 101 no Configuration		✕
Standalone 101 App Configure	✓	
Standalone 104 App Configure		✕
Standalone 101+104 App Configure		✕
Standalone Direct Control		✕

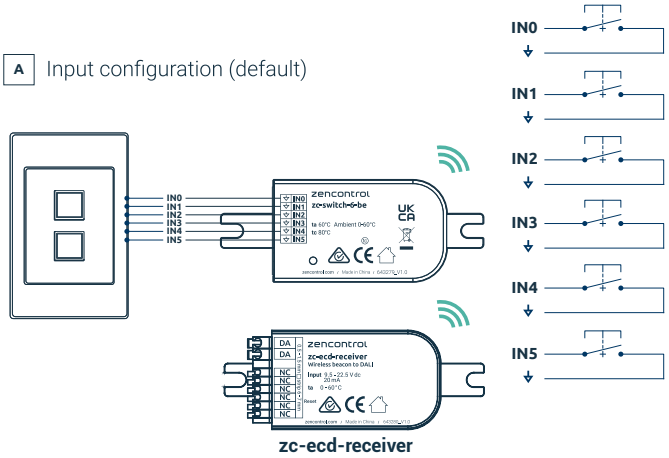
More information on page 80

Specifications

Supply voltage	coin cell CR2032
Radio support	IEEE 802.15.4
Frequency band	2.4 GHz
Max radio tx power	+8 dBm
Independent channels	4
Operating temperature	0 to 45°C
Material	PC
Ingress protection	IP20
Classification	III

Wiring diagram

A Input configuration (default)



Last updated 2025_Q1

zencontrol

DALI sensor adapter **datasheet**

Product range

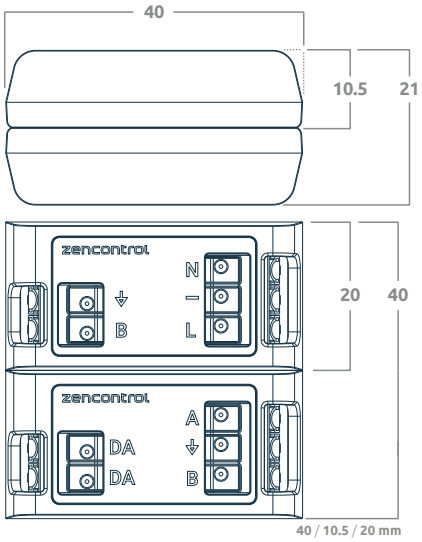
Order code	Description
zc-sens-adpt	DALI sensor adapter for mains rated sensors

Features

- For use with DALI-2 compliant application controller
- Designed for compliance to IEC 62386-303*
- Control scenes / groups / actions / events with a zencontrol control system
- Multiple control devices per line
- Suitable for one DALI line of up to 32 devices
- Supplied with zc-switch for connection to DALI

* Pending publication of test sequences

Dimensions



System modes

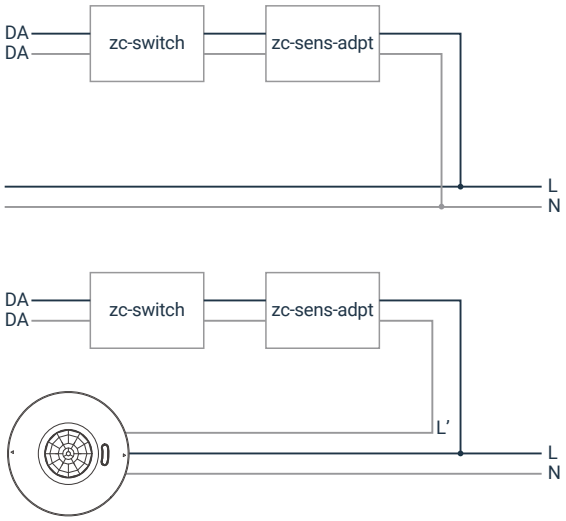
	Yes ✓ No ✗
Standard 101	✓
Standard 104	✗
Standard 101+104	✗
Standalone no System	✗
Standalone 101 no Configuration	✗
Standalone 101 App Configure	✗
Standalone 104 App Configure	✗
Standalone 101+104 App Configure	✗
Standalone Direct Control	✗

More information on page 80

Specifications

Supply	DALI
Control system	DALI-2
DALI line current	5 mA
Input	220 - 240 ~ 50 Hz
Wiring	0.5 - 0.75 mm² Strip 6 - 7 mm
Operating temperature	0 to 45°C
Material	PC
Ingress protection	IP20
Compliance standards	IEC 61347-2-11 CISPR 15 IEC 62386-303 EMC-2004/108/EC LVD-2006/95/EC

Wiring diagram



Notice

- The switch must not be connected to any mains. It is powered directly from the DALI line.
- Input switches should be connected directly to the switch. They shall be volt-free contacts and must not be connected to mains.
- The DALI line is not SELV. It must be treated like LV mains and treated with the same precautions and wiring regulations.

Last updated 2025_Q1

zencontrol

Nano+ sensor **datasheet**

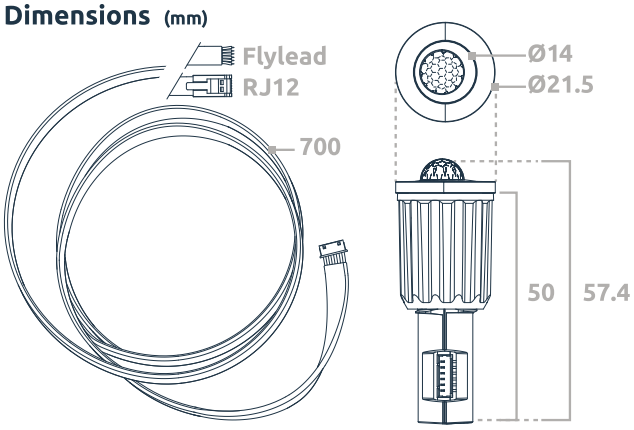
Product range

Order code	Description
zc-pir-nano+	5 m, PIR and lux sensor, with IR expansion kit, nano form factor, fly-lead
zc-pir-nano+p	5 m, PIR and lux sensor, with IR expansion kit, nano form factor, RJ12 connection cable

Features

- Expansion for zc-iot-bridge, zc-switch-pro and zc-smart-driver-40
- Functions as IEC62386-303 occupancy sensor
- Functions as IEC62386-304 light level sensor
- Ideal for built-in sensor and light fitting solutions
- Support for up to 64 control devices per DALI line
- Inbuilt IR for commissioning and custom controls
- Light control based on ambient light and motion detection
- Adds < 50 mW additional power consumption to zencontrol driver
- Available as surface and recessed mount
- Uses no additional DALI line current
- Easy mounting in 16mm ø cut-out

Dimensions (mm)



Supported models

Model	Order code	Description
zc-pir-nano+	**zc-iot bridge**	Wireless bridge
	zc-switch-pro	Switch Pro module
zc-pir-nano+p	**zc-smart-driver-40 range**	40 W DALI Smart driver

Accessory range

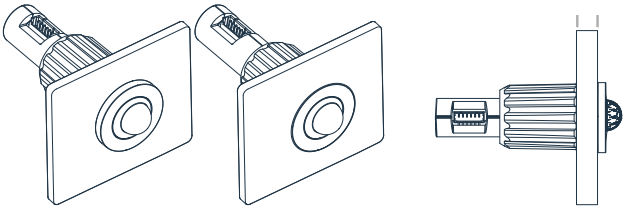
Order code	Description
zc-ir-ctrl	Hand-held infrared control unit
zc-ir-ctrl-com	Hand-held infrared control and commissioning unit

Specifications

Supply	Powered from zencontrol compatible
Operating power	40 mW
Lens	Fresnel
Sensor	PIR, ambient light, colour, IR
Wiring	Plug-in loom / fly-lead
Material	PC (body)
Mounting	Surface / recessed
Operating temperature	0 to 45°C
Ingress protection	IP20
Compliance standards	IEC 61347-2-11 CISPR 15 EN 55015 IEC 62386-303 (with zencontrol compatible device) IEC 62386-304 (with zencontrol compatible device)

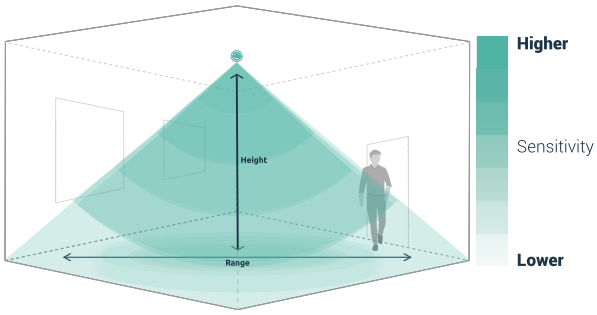
Mounting

Surface	Recessed	Wall thickness
Cut out Ø 16 mm	Cut out Ø 22 mm	Max 8 mm / min 0



Detection pattern

Range ø	Height
5 m	2.7 m



System modes

	Yes ✓ No ✕
Standard 101	✕
Standard 104	✕
Standard 101+104	✕
Standalone no System	✕
Standalone 101 no Configuration	✕
Standalone 101 App Configure	✕
Standalone 104 App Configure	✕
Standalone 101+104 App Configure	✕
Standalone Direct Control	✕

More information on page 80

Last updated 2025_Q1

zencontrol

DALI-2 PIR sensors **datasheet**

Specifications

Supply	DALI
Control system	DALI-2
Supply current	8 mA
Lens	Fresnel
Sensors	PIR, ambient light
Wiring	Flylead
Operating temperature	0 to 35°C
Material	PC (body)
Ingress protection	IP20
Compliance standards	IEC 61347-2-11 CISPR 15 EN 55015 IEC 62386-303 IEC 62386-304

Product range

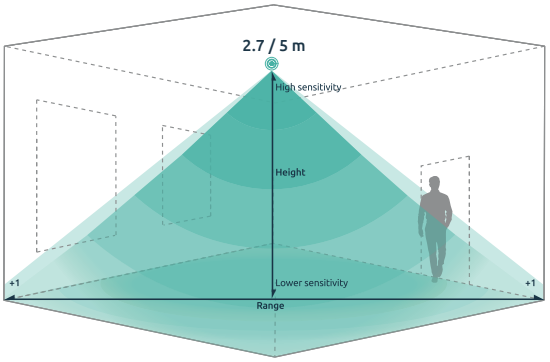
Order code	Description
zc-pir-5m-bp	DALI-2 PIR sensor 5 m
zc-pir-8m-bp	DALI-2 PIR sensor 8 m
zc-pir-5m-sp-bp	DALI-2 PIR sensor, 5m detection area with stainless steel springs bulk packed
zc-pir-8m-sp-bp	DALI-2 PIR sensor, 8m detection area with stainless steel springs bulk packed

Features

- For use with DALI-2 application controller
- Suitable for up to 32 devices per DALI line
- Compliant to IEC 62386-303 and 62386-304
- The 8 m is suitable for high ceilings and warehouses
- Light control based on ambient light and motion detection
- Multi-master compatible / multiple control devices per line
- Available as surface & recessed mount, and as a plug-in module
- Control scenes / groups / actions / events with a zencontrol control system

Detection pattern

Order code	Range ø	Mounting height
zc-pir-5m	5 m	2.7 m
zc-pir-8m	8 m	2.7 - 5 m



Usage

Ambient light level sensing	Measurements between 0 - 10,000 Lux Set points and trigger levels controlled by DALI application controller
Time-out actions and events	Configuration dependent on DALI application controller

Notice

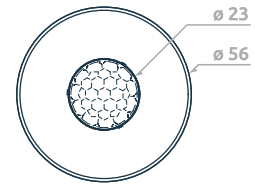
- The switch must not be connected to any mains. It is powered directly from the DALI line.
- The DALI line is not SELV. It must be treated like LV mains and treated with the same precautions and wiring regulations.

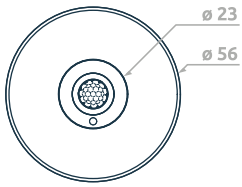
Accessory range

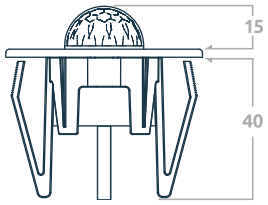
Order code	Description
zc-pir-rs-kit	PIR sensor recessed mount kit
zc-pir-cd-kit	PIR sensor conduit mount kit
zc-pir-sm-kit	PIR sensor surface mount kit
zc-pir-rs-kit-sp-b	DALI-2 PIR sensor, 8m detection area with stainless steel springs bulk packed

Last updated 2025_Q1

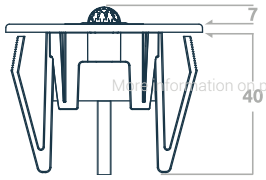
Dimensions





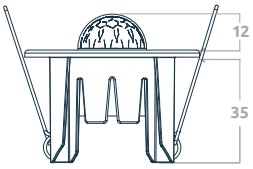


Cut out **Ø 44 - 45 mm**

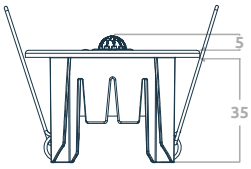


More information on page 80

Cut out **Ø 44 - 45 mm**



Cut out **Ø 44 - 45 mm**



Cut out **Ø 44 - 45 mm**

System modes	Yes ✓	No ✗
Standard 101	✓	
Standard 104		✗
Standard 101+104		✗
Standalone no System		✗
Standalone 101 no Configuration	✓	
Standalone 101 App Configure		✗
Standalone 104 App Configure		✗
Standalone 101+104 App Configure		✗
Standalone Direct Control		✗

Last updated 2025_Q1

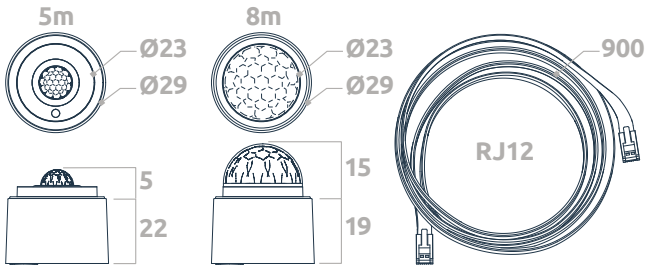
Product range

Order code	Description
zc-pir-5m-p	5 m, PIR and lux sensor, expansion kit for zc-smart-driver*
zc-pir-8m-p	8 m, PIR and lux sensor with IR, expansion kit for zc-smart-driver*

Features

- Plug-in expansion for Smart driver range*
- Functions as IEC62386-304 light level sensor
- Functions as IEC62386-303 occupancy sensor
- Ideal for built-in sensor and light fitting solutions
- Inbuilt IR for commissioning and custom controls
- Light control based on ambient light and motion detection
- Registers on DALI network as fully DALI compliant input device
- Optional external recessed and surface mounts available
- Adds < 50 mW additional power consumption to driver
- No additional DALI line current

Dimensions (mm)



Kit content

5 or 8 m, PIR and lux sensor expansion kit for zc-smart-driver*, IR included in 8 m version
RJ12 connection cable, 900 mm

Supported models*

Order code	Description
zc-smart-driver-40	40 W DALI Smart driver, with softwire plug
zc-smart-driver-40-t	40 W DALI Smart driver, with screw terminal
zc-smart-driver-40-p	40 W DALI Smart driver, with push terminal
zc-smart-driver-em-40	40 W DALI Smart driver with emergency, softwire plug
zc-smart-driver-em-40-t	40 W DALI Smart driver with emergency, screw-terminal
zc-smart-driver-em-40-p	40 W DALI Smart driver with emergency, push-terminal
zc-smart-driver-em-40-au	40 W DALI Smart driver with emergency, 90 min, softwire plug
zc-smart-driver-em-40-au-t	40 W DALI Smart driver with emergency, 90 min, screw-terminal

Specifications

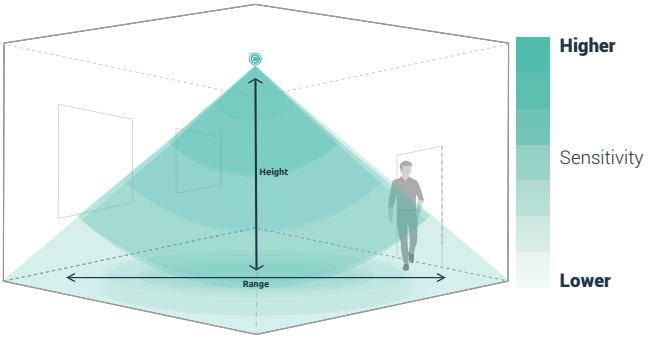
Supply	Powered from zc-smart-driver*	
Operating power	40 mW	
Lens	Fresnel	
Sensors	**5 m**	PIR, ambient light, colour
	8 m	PIR, ambient light, colour, IR
Wiring	Plug-in loom	
Material	PC (body)	
Mounting	Inbuilt/recessed (mounting accessories available)	
Cut out	Cut out Ø 44 - 45 mm	
Operating temperature	0 to 45°C	
Ingress protection	IP20	
Compliance standards	IEC 61347-2-11 CISPR 15 EN 55015	IEC 62386-303 IEC 62386-304

Accessory range

Order code	Description
zc-pir-sm-kit	PIR sensor surface mount kit
zc-pir-rs-kit	PIR sensor recessed mount kit
zc-pir-cd-kit	PIR sensor conduit mount kit
zc-ir-ctrl	Hand-held infrared control unit
zc-ir-ctrl-com	Hand-held infrared control and commissioning unit

Detection pattern

Order code	Range ø	Height
zc-pir-5m-p	5 m	2.7 m
zc-pir-8m-p	8 m	2.7 m



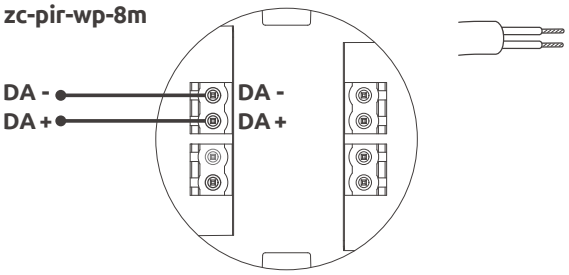
System modes

	Yes ✓ No ✕
Standard 101	✕
Standard 104	✕
Standard 101+104	✕
Standalone no System	✕
Standalone 101 no Configuration	✕
Standalone 101 App Configure	✕
Standalone 104 App Configure	✕
Standalone 101+104 App Configure	✕
Standalone Direct Control	✕

More information on page 80

Last updated 2025_Q1

Wiring

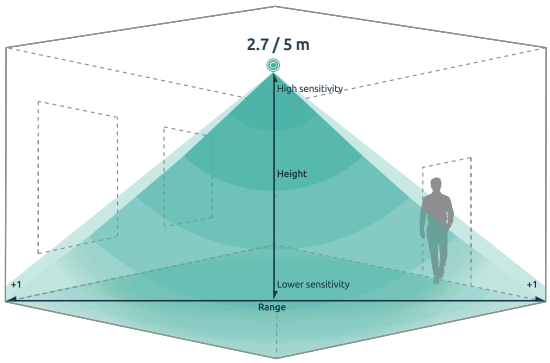


Product range

Order code	Description
zc-pir-wp-8m	DALI-2 PIR sensor 8 m

Detection pattern

Order code	Range ø	Mounting height
zc-pir-wp-8m	8 m	2-5 m



Specifications

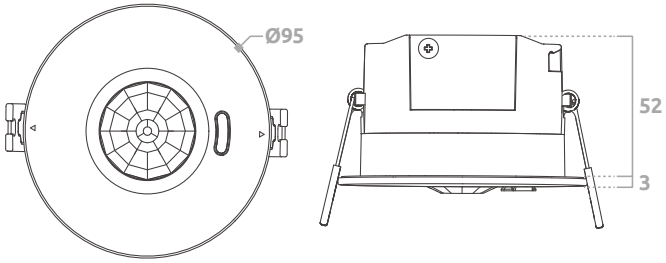
Supply voltage	9.5 - 22.5 V dc (supplied from DALI)
Supply current	8 mA
Control system	DALI-2
Sensors	PIR, ambient light
Operating temperature	-10°C - 35°C
Lens	Fresnel
Wiring	Terminal block
Ingress protection	IP54 (front-face only)
	IP65 (with surface or wall mount kit)
Material	PC (body)

- The detection range of the unit may alter with changes in ambient temperature.
- Position sensor so that movement occurs across the scan area.

  When walking directly towards or away from the sensor the detection range will be reduced.
- Do not direct sensor at reflective surfaces or variable heat sources i.e. windows or air conditioners.
- Do not aim the sensor directly at the sun as this may cause damage to the PIR sensor.

Dimensions

Mounting (kits sold separately)	Recessed (cut-out minØ83 mm)
	Wall mount kit (mounting centres 85 mm)
	Surface mount kit
	Rod mount kit
	Conduit mount kit (mounting centres 50-60 mm)
Dimensions	Ø95 / 55 mm



System modes

	Yes ✓ No ✕
Standard 101	✓
Standard 104	✕
Standard 101+104	✕
Standalone no System	✕
Standalone 101 no Configuration	✓
Standalone 101 App Configure	✕
Standalone 104 App Configure	✕
Standalone 101+104 App Configure	✕
Standalone Direct Control	✕

More information on page 80

Last updated 2025_Q1

zencontrol Plug-in smart microwave sensor **datasheet**

Product range

Order code	Description
zc-mw-p	Microwave sensor for zc-smart-driver*

Features

- Plug-in expansion for Smart driver range*
- Functions as IEC62386-303 occupancy sensor
- Ideal for built-in sensor and light batten solutions
- Light control based on motion detection
- Adds < 50 mW additional power consumption to zencontrol driver
- No additional DALI line current

Specifications

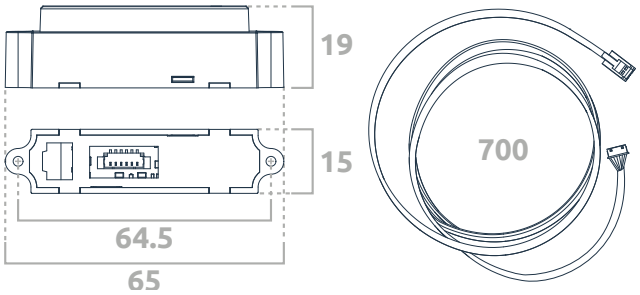
Supply	Powered from zc-smart-driver*
Operating power	40 mW
Sensors	Microwave
Frequency	5.8 GHz
Radiated power (EIRP)	0.2 mW
Wiring	Plug-in loom
Material	PC (body)
Detection range	8 m, at 2.7m mounting height
Mounting	Inbuilt
Operating temperature	0 to 45°C
Ingress protection	IP20
Compliance standards	IEC 62386-303

Supported models*

Order code	Description
zc-smart-driver-40	40 W DALI Smart driver, with softwire plug
zc-smart-driver-40-t	40 W DALI Smart driver, with screw terminal
zc-smart-driver-40-p	40 W DALI Smart driver, with push terminal
zc-smart-driver-em-40	40 W DALI Smart driver with emergency, softwire plug
zc-smart-driver-em-40-t	40 W DALI Smart driver with emergency, screw-terminal
zc-smart-driver-em-40-p	40 W DALI Smart driver with emergency, push-terminal
zc-smart-driver-em-40-au	40 W DALI Smart driver with emergency, 90 min, softwire plug
zc-smart-driver-em-40-au-t	40 W DALI Smart driver with emergency, 90 min, screw-terminal

Dimensions

Width	Height	Length
15 mm	19 mm	65 mm



System modes

	Yes ✓	No ✕
Standard 101		✕
Standard 104		✕
Standard 101+104		✕
Standalone no System		✕
Standalone 101 no Configuration		✕
Standalone 101 App Configure		✕
Standalone 104 App Configure		✕
Standalone 101+104 App Configure		✕
Standalone Direct Control		✕

More information on page 80

Last updated 2025_Q1

zencontrol Standalone smart PIR sensor **datasheet**

Product range

Order code	Description
zc-pir-st-1sw-r	Standalone smart PIR sensor
zc-pir-st-1sw-r-blk	Standalone smart PIR black sensor

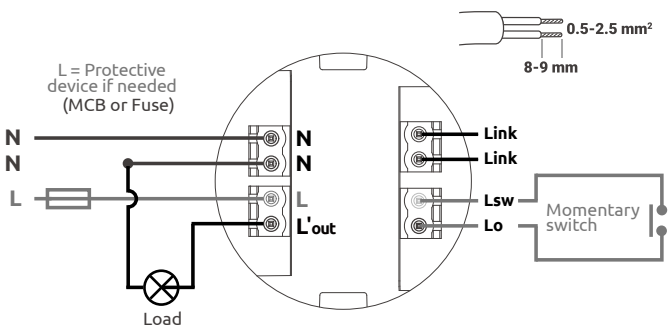
Specifications

Supply	220 - 240 V ~50 Hz
Supply current	< 0.020 A
Relay output (-r models)	6 A resistive
Lens	Fresnel
Sensors	PIR, IR, lux
IR	38 kHz
Wiring	2.5 mm² cable
Operating temperature	0 -35°C
Material	PC (body)
Ingress protection	IP54 (front-face only)
	IP65 (with surface or wall mount kit)

Accessory range

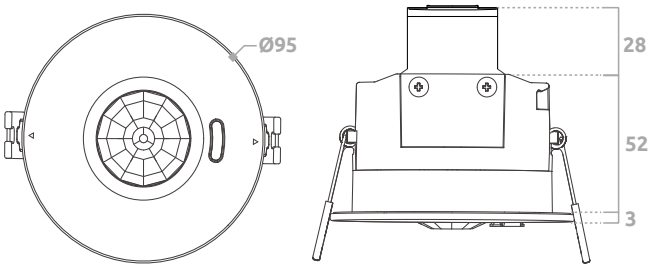
Order code	Description
zc-smart-wall-kit	Smart sensor wall mount kit
zc-smart-sm-kit	Smart sensor surface mount kit, for surface, rod, conduit mount
zc-rodmount-wht	Rod mount kit, white, for with Smart sensor surface mount kit
zc-ir-ctrl-com	Hand-held infrared control and commissioning unit

Wiring



Dimensions

Mounting (kits sold separately)	Recessed (cut-out minØ83 mm)
	Wall mount kit (mounting centres 85 mm)
	Surface mount kit
	Rod mount kit
	Conduit mount kit (mounting centres 50-60 mm)
Dimensions	Ø95 / 55 mm



Remote Control

System modes	Yes ✓ No ✕
Standard 101	✕
Standard 104	✕
Standard 101+104	✕
Standalone no System	✓
Standalone 101 no Configuration	✕
Standalone 101 App Configure	✕
Standalone 104 App Configure	✕
Standalone 101+104 App Configure	✕
Standalone Direct Control	✕

More information on page 80

Last updated 2025_01

zencontrol

DALI-2 PIR sensor **datasheet**

Product range

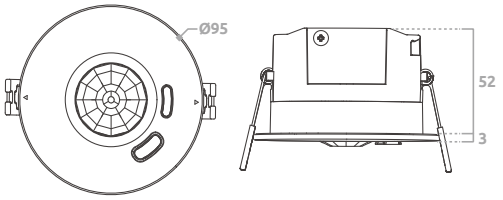
Order code	Description
zc-pir-da	DALI-2 smart PIR sensor 8 m
zc-pir-da-2sw-r	Smart PIR sensor 8 m, with inbuilt relay and two switches
zc-pir-da-2sw-vf	Smart PIR sensor 8 m, with inbuilt volt-free relay and two switches
zc-pir-da-2sw-r-blk	Smart PIR sensor 8 m, with inbuilt relay and two switches-Black

Specifications

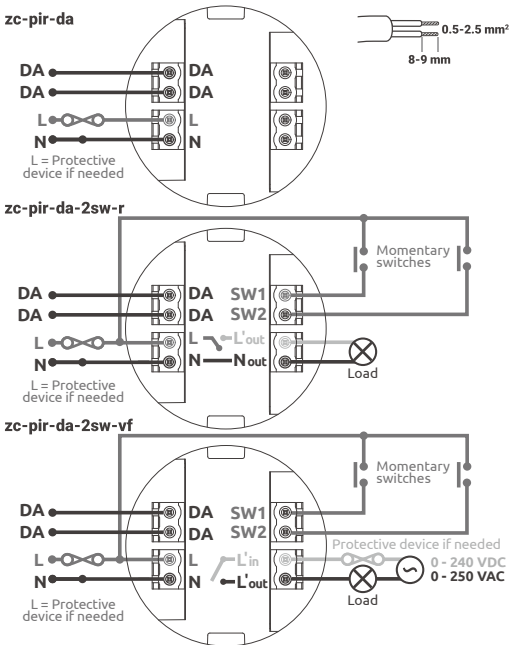
Supply	220 - 240 V ~50 Hz
Supply current	< 0.1 A
Control system	DALI-2
DALI bus current	<2 mA
Relay output (-r models)	165 A / 20 ms inrush current 492 A / 1.5 ms LED inrush current 10 A capacitive 10 A inductive 10 A resistive
Output load rating AC (-vf models)	10 A resistive 6 A inductive
Output load rating DC (-vf models)	0 - 25 V 3 A resistive 25 - 240 V 200 mA resistive
Lens	Fresnel
Sensors	PIR, IR, lux
IR	38 kHz
Wiring	2.5 mm² cable (no earth, suits round and tps)
Operating temperature	-10 to 55°C
Material	PC (body)
Ingress protection	IP54 (front-face only)
	IP65 (with surface or wall mount kit)

Dimensions

Mounting (kits sold separately)	Recessed (cut-out min Ø83 mm)
	Wall mount kit (mounting centres 85 mm)
	Surface mount kit
	Rod mount kit
	Conduit mount kit (mounting centres 50-60 mm)
Dimensions	Ø95 / 55 mm



Wiring



System modes

	Yes ✓ No ✕
Standard 101	✓
Standard 104	✕
Standard 101+104	✕
Standalone no System	✕
Standalone 101 no Configuration	✕
Standalone 101 App Configure	✓
Standalone 104 App Configure	✕
Standalone 101+104 App Configure	✕
Standalone Direct Control	✓

More information on page 80

Last updated 2025_Q1

zencontrol

Wireless PIR sensors **datasheet**

Product range

Order code	Description
zc-pir-iot-da	Wireless PIR sensor 8 m
zc-pir-iot-da-2sw-r	Wireless PIR sensor 8 m, with inbuilt relay and two switches
zc-pir-iot-da-2sw-vf	Wireless PIR sensor 8 m, with inbuilt volt-free relay and two switches

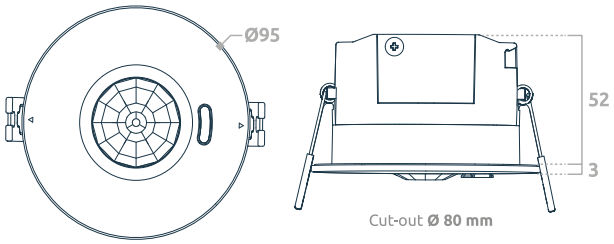
Features
- Wireless connectivity
- PIR motion sensor
- Light level measurement
- Programmable via IR remote
- Power supply for DALI devices (35mA)
- Wireless support for IEC62386-104 over Thread
- IP65 weatherproof rating with mounting accessory
- Broadcast control of DALI devices with inbuilt application controller

Fully independent IEC62386 devices
- IEC62386-101 Power supply
- IEC62386-208 Relay
- IEC62386-303 Motion sensor
- IEC62386-304 Light level sensor
- IEC62386-301 Switch (x2)

Programmable features (IR)
- Sensor time-out
- Corridor mode
- Daylight harvesting
- Lux level, dusk (if under lux level, activate sensor)
- Lux level, disable (if over lux level, disable sensor)

Programmable features (switch)
- Switch type (dimmer, on / off, up / down, colour dimmer, colour warmer, colour cooler)
- Switch actions (enable / disable sensor, enable / disable lux)
- Switch override time

Dimensions (mm)



Notice

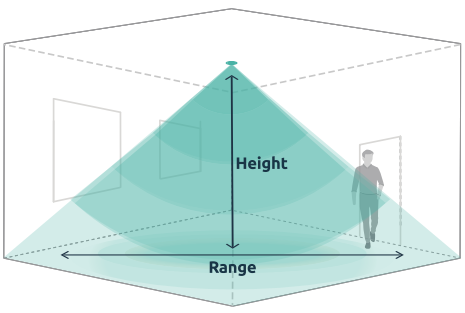
- The DALI line is not SELV. It must be treated like LV mains and treated with the same precautions and wiring regulations.

Specifications

Supply	220 - 240 V AC
Supply current	< 0.1 A
DALI bus current	<2 mA
Relay output (-r models)	165 A / 20 ms inrush current 492 A / 1.5 ms LED inrush current 10 A capacitive 10 A inductive 10 A resistive
Output voltage rating AC (-vf models)	10 A resistive 6 A inductive
Output load rating DC (-vf models)	0 - 25 V 3 A resistive 25 - 240 V 200 mA resistive
Lens	Fresnel
Sensors	PIR,lux
Wireless	IEC62386-104 over Thread
Wiring	2.5 mm² cable (no earth, suits round and tps)
Operating temperature	0 to 35°C
Material	PC (body)
Ingress protection	IP54 (with seal installed into roof) IP65 (with surface or wall mount)
Mounting (kits sold separately)	Recessed (cut-out Ø 80 mm) Wall mount kit (mounting centres 85 mm) Surface mount kit Rod mount kit Conduit mount kit (mounting centres 50 - 60 mm)
Compliance standards	IEC 61347-2-11 IEC 62386-104 IEC 62386-302 IEC 60669-2-1 IEC 62386-208 IEC 62386-303 CISPR 15 IEC 62386-301 IEC 62386-304 EN 55015

Detection pattern

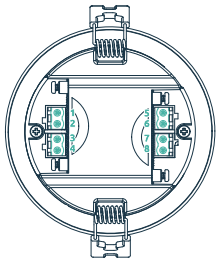
Mounting height 2 - 5 m **Range ø** 8 m (mounted at 2.7 m)

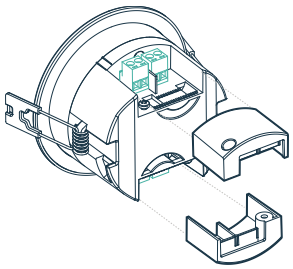


Last updated 2025_Q1

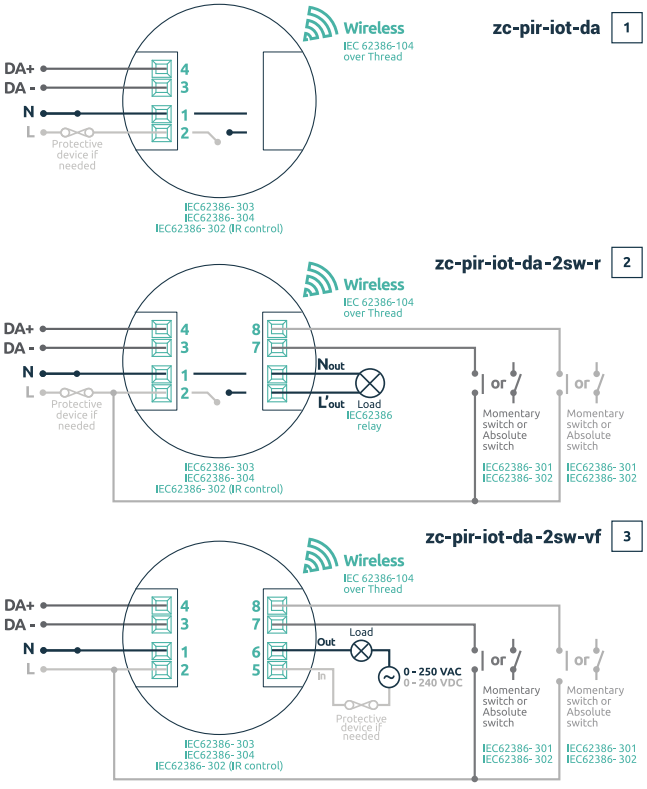
Wiring overview

The smart IoT sensor can be wired via the terminals found under the terminal covers, as seen below. The amount of terminals will vary depending on model.





Wiring



Accessory range

Fig.	Order code	Description
6	**zc-smart-wall-kit**	Smart sensor wall mount kit
7	**zc-smart-sm-kit**	Smart sensor surface mount kit, suitable for surface, rod and conduit mounting
8	**zc-rodmount-wht**	Rod mount kit, white, to be used with Smart sensor surface mount kit
9	**zc-smart-sm-kit**	Conduit mount, not supplied by zencontrol, used with Smart sensor surface mount kit

6 **Wall mount**

7 **Surface mount**

8 **Rod mount**

9 **Conduit mount**

System modes

	Yes ✓ No ✕
Standard 101	✓
Standard 104	✓
Standard 101+104	✓
Standalone no System	✕
Standalone 101 no Configuration	✕
Standalone 101 App Configure	✓
Standalone 104 App Configure	✓
Standalone 101+104 App Configure	✓
Standalone Direct Control	✓

More information on page 80

Last updated 2025_Q1

zencontrol

Wireless PIR multi-sensors **datasheet**

Product range

Order code	Description
zc-pms-iot-2sw-r	PIR multi-sensor 8m, with inbuilt relay, two switches and DALI psu
zc-pms-iot-2sw-vf	PIR multi-sensor 8m, with inbuilt volt-free relay, two switches and DALI psu
zc-pms-da-2sw-r	PIR multi-sensor 8 m, with inbuilt relay and two switches
zc-pms-da-2sw-vf	PIR multi-sensor 8 m, with inbuilt volt-free relay and two switches

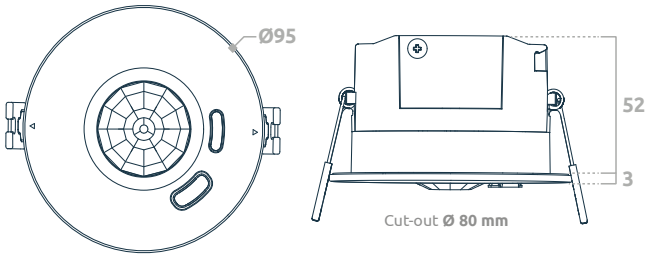
Features
- eCO_2 sensor
- eVOC sensor
- Humidity sensor
- PIR motion sensor
- Sound level sensor
- Temperature sensor
- Light level measurement
- Programmable via IR remote
- Power supply for DALI devices (35mA)
- Wireless support for IEC62386-104 over Thread
- Fully compatible with other DALI-2 application controllers
- Broadcast control of DALI devices with inbuilt application controller

Fully independent IEC62386 devices
- IEC62386-101 Power supply
- IEC62386-208 Relay
- IEC62386-303 Motion sensor
- IEC62386-304 Light level sensor
- IEC62386-301 Switch (x2)
- IEC62386-3XX Generic input sensor (x4)

Programmable features (IR)
- Sensor time-out
- Corridor mode
- Daylight harvesting
- Lux level, dusk (if under lux level, activate sensor)
- Lux level, disable (if over lux level, disable sensor)

Programmable features (switch)
- Switch type (dimmer, on / off, up / down, colour dimmer, colour warmer, colour cooler)
- Switch actions (enable / disable sensor, enable / disable lux)
- Switch override time

Dimensions (mm)



Notice

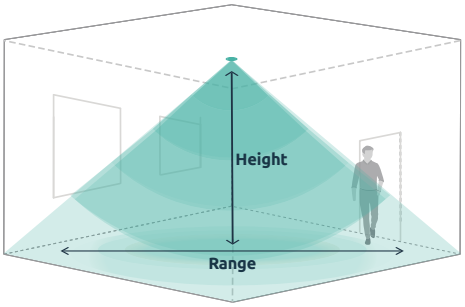
- The DALI line is not SELV. It must be treated like LV mains and treated with the same precautions and wiring regulations.

Specifications

Supply	220 - 240 V AC
Supply current	< 0.1 A
DALI bus current	<2 mA
Relay output (-r models)	165 A / 20 ms inrush current 492 A / 1.5 ms LED inrush current 10 A capacitive 10 A inductive 10 A resistive
Output voltage rating AC (-vf model)	10 A resistive 6 A inductive
Output load rating DC (-vf model)	0 - 25 V 3 A resistive 25 - 240 V 200 mA resistive
Lens	Fresnel
Sensors	PIR, lux
Wireless	IEC62386-104 over Thread
Temperature	-20℃ to 85℃ (±1℃)
	-10℃ to 40℃ (±0.5℃)
Humidity	0 to 100% (RH±5%)
Lux	0 to 10,000 Lux (±5 %)
TVOC	0 to 60,000 ppb
CO_2eq	0 to 60,000 ppm
Sound level	35 to 100 dBA Leq (±2 dBA Leq)
Wiring	2.5 mm² cable (no earth, suits round and tps)
Operating temperature	0 to 35°C
Material	PC (body)
Ingress protection	IP20
Mounting (kits sold separately)	Recessed (cut-out Ø 80 mm)
	Wall mount kit (mounting centres 85 mm)
	Surface mount kit
	Rod mount kit
	Conduit mount kit (mounting centres 50 - 60 mm)
Compliance standards	IEC 61347-2-11 IEC 62386-104 IEC 62386-302 IEC 60669-2-1 IEC 62386-208 IEC 62386-303 CISPR 15 IEC 62386-301 IEC 62386-304 EN 55015

Detection pattern

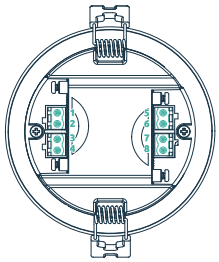
Mounting height 2 - 5 m **Range ø** 8 m (mounted at 2.7 m)

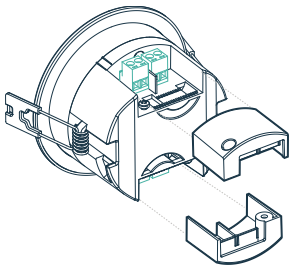


Last updated 2025_Q1

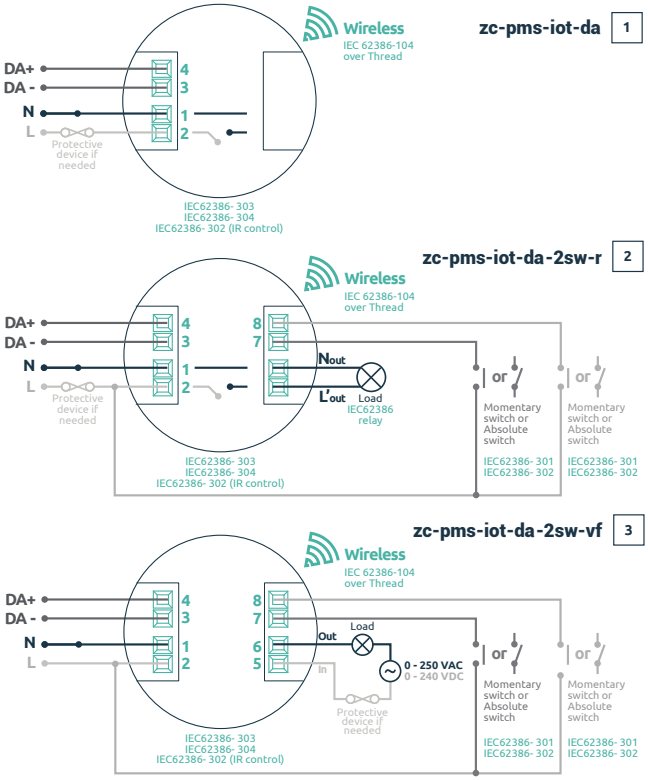
Wiring overview

The smart IoT sensor can be wired via the terminals found under the terminal covers, as seen below. The amount of terminals will vary depending on model.





Wiring



Accessory range

Fig.	Order code	Description
6	**zc-smart-wall-kit**	Smart sensor wall mount kit
7	**zc-smart-sm-kit**	Smart sensor surface mount kit, suitable for surface, rod and conduit mounting
8	**zc-rodmount-wht**	Rod mount kit, white, to be used with Smart sensor surface mount kit
9	**zc-smart-sm-kit**	Conduit mount, not supplied by zencontrol, used with Smart sensor surface mount kit

6 Wall mount

7 Surface mount

8 Rod mount

9 Conduit mount

System modes

	Yes ✓ No ✕
Standard 101	✓
Standard 104	✓
Standard 101+104	✓
Standalone no System	✕
Standalone 101 no Configuration	✕
Standalone 101 App Configure	✓
Standalone 104 App Configure	✓
Standalone 101+104 App Configure	✓
Standalone Direct Control	✕

More information on page 80

Last updated 2025_Q1

Product range

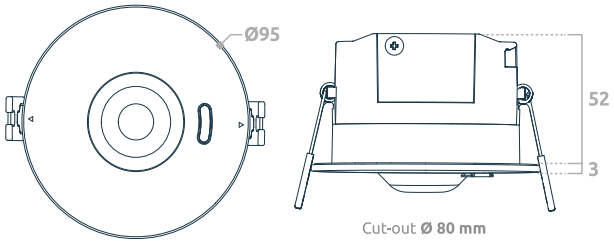
Order code	Description
zc-mw-iot-da	Wireless microwave sensor 8 m
zc-mw-iot-da-2sw-r	Wireless microwave sensor 8 m, with inbuilt relay
zc-mw-iot-da-2sw-vf	Wireless microwave sensor 8 m, with inbuilt volt-free relay

Features
- Wireless connectivity
- Microwave motion sensor
- Light level measurement
- Programmable via IR remote
- Wireless support for IEC62386-104 over Thread
- IP65 weatherproof rating with mounting accessory
- Fully compatible with other DALI-2 application controllers
- Broadcast control of DALI devices with inbuilt application controller

Fully independent IEC62386 devices
- IEC62386 -208 Relay
- IEC62386 -303 Motion sensor
- IEC62386 -304 Light level sensor

Programmable features (IR)
- Sensor time-out
- Corridor mode
- Daylight harvesting
- Lux level, dusk (if under lux level, activate sensor)
- Lux level, disable (if over lux level, disable sensor)

Dimensions (mm)



Notice

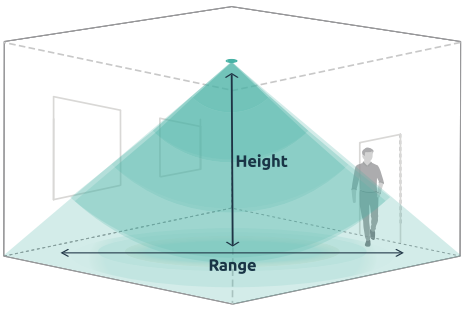
- The DALI line is not SELV. It must be treated like LV mains and treated with the same precautions and wiring regulations.

Specifications

Supply	220 - 240 V AC	
Supply current	< 0.1 A	
DALI bus current	<2 mA	
Relay output (-r models)	165 A / 20 ms inrush current 492 A / 1.5 ms LED inrush current 10 A capacitive 10 A inductive 10 A resistive	
Output voltage rating AC (-vf models)	10 A resistive 6 A inductive	
Output load rating DC (-vf models)	0 - 25 V 3 A resistive 25 - 240 V 200 mA resistive	
Sensors	Microwave, lux	
Microwave	Microwave 5.8 GHz, 0.2 mW	
Wireless	IEC62386-104 over Thread	
Wiring	2.5 mm² cable (no earth, suits round and tps)	
Operating temperature	0 to 55°C	
Material	PC (body)	
Ingress protection	IP54 (with seal installed into roof)	
	IP65 (with surface or wall mount)	
Mounting (kits sold separately)	Recessed (cut-out Ø 80 mm)	
	Wall mount kit (mounting centres 85 mm)	
	Surface mount kit	
	Rod mount kit	
	Conduit mount kit (mounting centres 50 - 60 mm)	
Compliance standards	IEC 61347-2-11 IEC 60669-2-1 CISPR 15 EN 55015 IEC 62386-104	IEC 62386-208 IEC 62386-301 IEC 62386-302 IEC 62386-303 IEC 62386-304

Detection pattern

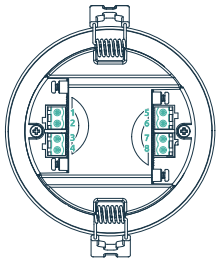
Mounting height 2 - 5 m **Range ø** 8 m (mounted at 2.7 m)

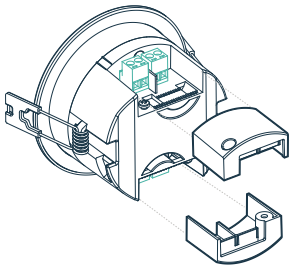


Last updated 2025_Q1

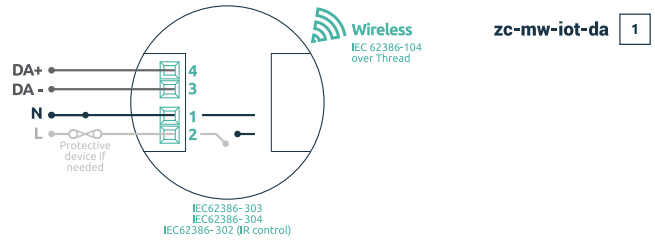
Wiring overview

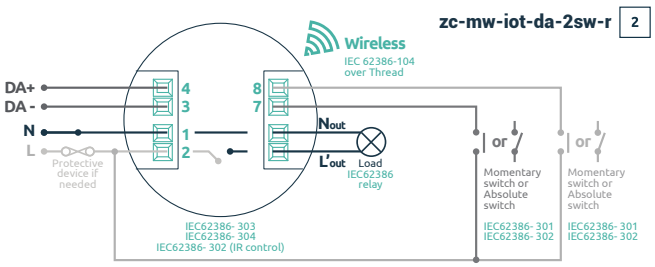
The smart IoT sensor can be wired via the terminals found under the terminal covers, as seen below. The amount of terminals will vary depending on model.

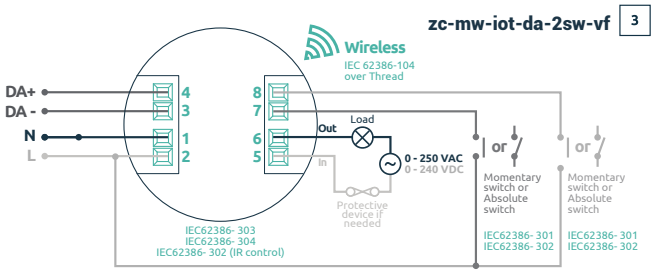




Wiring







Accessory range

Fig.	Order code	Description
6	**zc-smart-wall-kit**	Smart sensor wall mount kit
7	**zc-smart-sm-kit**	Smart sensor surface mount kit, suitable for surface, rod and conduit mounting
8	**zc-rodmount-wht**	Rod mount kit, white, to be used with Smart sensor surface mount kit
9	**zc-smart-sm-kit**	Conduit mount, not supplied by zencontrol, used with Smart sensor surface mount kit

6 Wall mount

7 Surface mount

8 Rod mount

9 Conduit mount

System modes

System modes	Yes ✓	No ✗
Standard 101	✓	
Standard 104	✓	
Standard 101+104	✓	
Standalone no System		✗
Standalone 101 no Configuration		✗
Standalone 101 App Configure	✓	
Standalone 104 App Configure	✓	
Standalone 101+104 App Configure	✓	
Standalone Direct Control	✓	

More information on page 80

Last updated 2025_Q1

zencontrol

Zhaga 0-10v smart controller **datasheet**

Product range

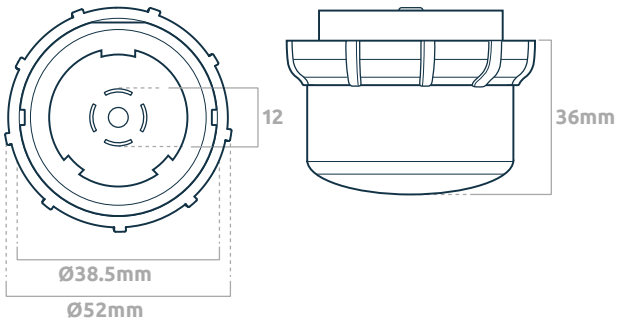
Order code	Description
zc-z10-mw	Wireless microwave sensor, zhaga 0-10 output
zc-z10	Wireless zhaga 0-10 output

Features

- Wireless and standalone
- Works with zencontrol connect
- Bluetooth commissioning
- Light level measurement
- IP66 weatherproof rating
- DALI broadcast control with inbuilt application controller
- Fully compatible with other DALI-2 application controllers
  -mw models include a Microwave motion sensor
  -z10 models include configurable 0-10V or 1-10V output and is powered from the 0-10V driver (3 wire)

Dimensions

Mounting options	Zhaga male plug
Dimensions	W Ø52 / H 360 mm



System modes

	Yes ✓ No ✕
Standard 101	✕
Standard 104	✓
Standard 101+104	✕
Standalone no System	✓
Standalone 101 no Configuration	✕
Standalone 101 App Configure	✕
Standalone 104 App Configure	✓
Standalone 101+104 App Configure	✕
Standalone Direct Control	✓

More information on page 80

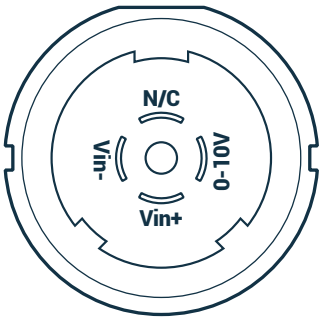
Specifications

Supply voltage	12 - 24 Vdc
Supply current	<50mA
Control system	IEC62386-104 over Thread
Operating temperature	0 to 40°C
Material	PC
Mounting	Zhaga port (female)
Ingress protection	IP66
Output voltage (0-10)	0-10Vdc
Output current (0-10)	<2mA max
Classification	II
Detection range	8 m (mounted at 2.7m)
Mounting height	2 - 8 m
Microwave	Microwave 5.8 GHz, 0.2 mW

Accessory range

Fig.	Order code	Description
	zc-zhaga18-socket	Female Screw socket for the zc-z10- series and the zc-zd- series products

Wiring diagram



Terminal configuration table

N/C	No connection
0-10V	0-10V / 1-10V control signal
Vin+	Device positive power supply
Vin-	Voltage negative power supply

Last updated 2025_Q1

Product range

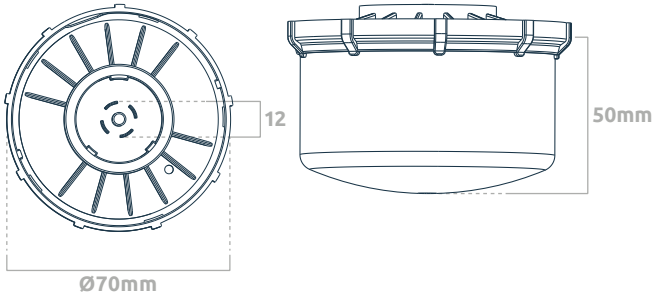
Order code	Description
zc-z10-mw-ulr	Zhaga long range microwave sensor and wireless 0-10V control interface

Features

- Powered from 12-24Vdc aux supply
- Supports IEC 62386-104 over Thread®
- Inbuilt microwave and light sensor
- Configurable microwave sensitivity
- Compatible with Zhaga (Book 18)
- A wireless control system solution for 0-10V luminaires
- Standalone configuration with zencontrol express

Dimensions

Dimensions W Ø50 / H70 mm



System modes

	Yes ✓	No ✕
Standard 101		✕
Standard 104	✓	
Standard 101+104		✕
Standalone no System	✓	
Standalone 101 no Configuration		✕
Standalone 101 App Configure		✕
Standalone 104 App Configure	✓	
Standalone 101+104 App Configure		✕
Standalone Direct Control	✓	

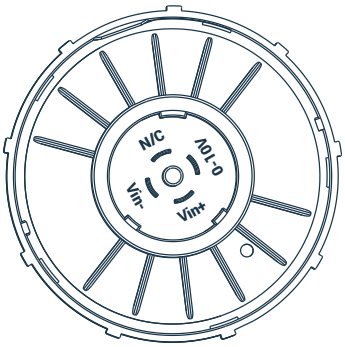
More information on page 80

Specifications

Supply voltage	12-24Vdc	
Supply current	<50mA	
Control system	IEC62386-104 over Thread®	
Operating temperature	-20 to 55°C	
Material	PC	
Classification	Class III	
Mounting	Zhaga (Book 18) 40mm	
Ingress protection	IP66	
Compliance standards	IEC 61347-2-11 IEC 60950-1 EN 55015 EN 55022	IEC 62386-104 IEC 62386-103 EMC-2004/108/EC LVD-2006/95/EC

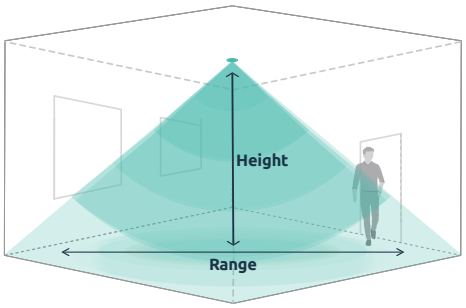
Wiring

Pin function	
1	DC+ (12-24V)
2	0-10V Dim - / DC -
3	Not used
4	0-10V dim+



Detection pattern

Mounting height 3 - 15 m **Range ø** 8 m (mounted at 10 m)



Last updated 2025_Q1

zencontrol

40 W smart driver **datasheet**

Product range

Order code	Connector	Emergency duration	Smart sensor	Smart switch	Tunable white
zc-smart-driver-em-40-au	Plug	90 min	Yes	Yes	Yes (DT-8)
zc-smart-driver-em-40	Plug	180 min	Yes	Yes	Yes (DT-8)
zc-smart-driver-em-40-au-t	Screw	90 min	Yes	Yes	Yes (DT-8)
zc-smart-driver-em-40-t	Screw	180 min	Yes	Yes	Yes (DT-8)
zc-smart-driver-40	Plug	Non-EM	Yes	Yes	
zc-smart-driver-40-t	Screw	Non-EM	Yes	Yes	
zc-driver-40	Plug	Non-EM		Yes	
zc-driver-40-t	Screw	Non-EM			
zc-smart-driver-em-40-b	Plug	90 min	Yes	Yes	
zc-smart-driver-em-40-b-t	Screw	90 min	Yes	Yes	

Features

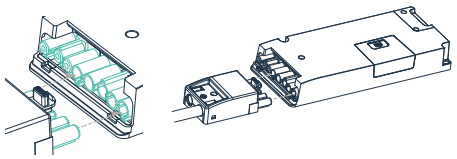
- Mains rated switch / sensor inputs
- 40 W driver and 6 W emergency output
- Average standby power consumption < 0.25 W
- Supports premium lithium batteries ($LiFePO_4$)
- Dual output channels for tunable white and long life fittings
- Compliant to Australian and international safety & performance standards

Specifications

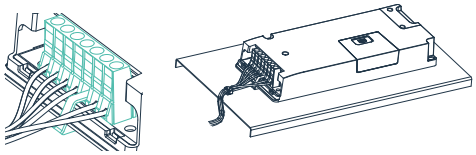
Supply voltage	220 - 240V ~ 50 Hz	
Control system	DALI / DALI-2	
Wiring	Soft-wiring, screw or push-terminal	
Material	PC body	
Operating temperature	0 to 55°C	
Classification	Class II	
Ingress protection	IP20	
Duration	90 / 180 min (dependent on model)	
Battery	**Type**	$LiFePO_4$
	Temperature	60°C
	Input/ output voltage	4.5 - 7.5 V
	Input current	0 - 1.75 A
	Output current	0 - 300 mA
Charge	**Type**	Smart
	Time	16 hours
	Operation	Multi-state
Output power rating	**Output voltage**	9 - 39 V
	Total	40 W
	Per channel	0 - 40 W
	Emergency operation	Dependent on model
Compliance standards	IEC 61347-1 IEC 61347-2-7 IEC 61347-2-13 AS/NZS 61347-1 AS/NZS 61347-2-13 AS/NZS 2293.3 CISPR 15	
Automatic test facility	Automatic and self test facility operates per the requirements of IEC62386-202	

Last updated 2025_Q1

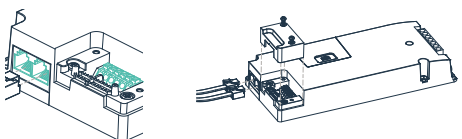
Wiring diagram



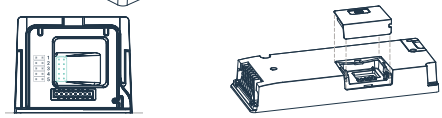
Plug



Screw terminal

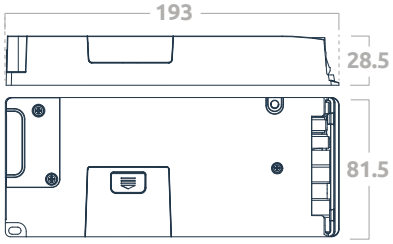


Output



Current selection

Dimensions



193 / 28.5 / 81.5 mm
Fixing centres 150 mm

System modes

	Yes ✓ No ✕
Standard 101	✓
Standard 104	✕
Standard 101+104	✕
Standalone no System	✕
Standalone 101 no Configuration	✕
Standalone 101 App Configure	✕
Standalone 104 App Configure	✕
Standalone 101+104 App Configure	✕
Standalone Direct Control	✕

More information on page 80

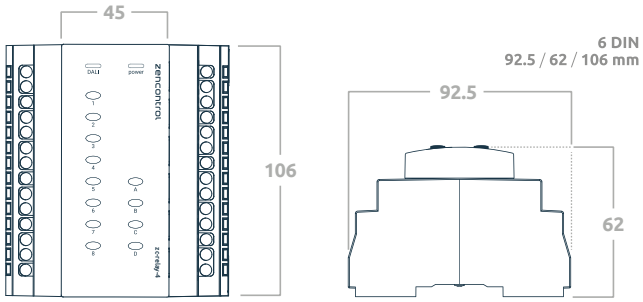
Product range

Order code	Description
zc-relay-4	4 Channel DALI relay controller

Features

- 4 x NO relay output 10A resistive or 6A fluorescent (IEC62386-208)
- Rated inrush of 492A at 1.5ms or 165A at 20ms
- Suitable for distribution board mounting on standard DIN rail
- Reinforced insulation between DALI and mains supply
- Protected against DALI over voltage
- LED indicators for system status

Dimensions (mm)



System modes

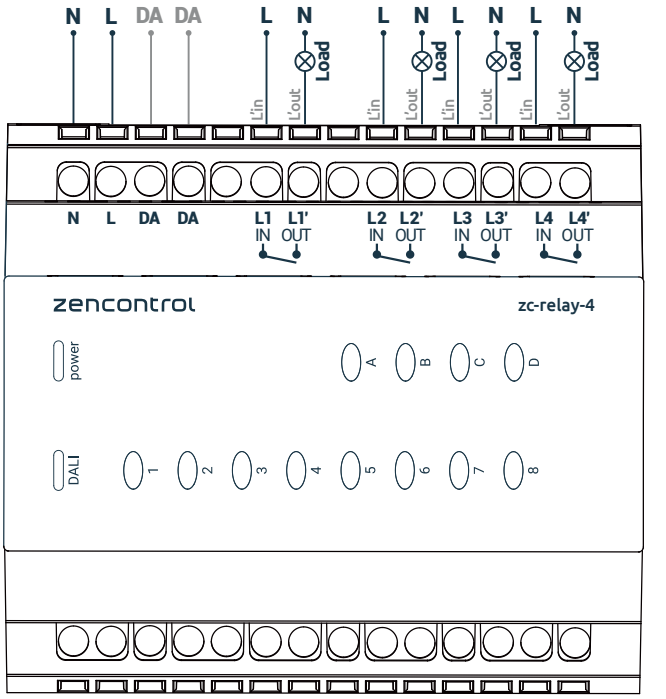
	Yes ✓ No ✗
Standard 101	✓
Standard 104	✓
Standard 101+104	✓
Standalone no System	✗
Standalone 101 no Configuration	✗
Standalone 101 App Configure	✓
Standalone 104 App Configure	✓
Standalone 101+104 App Configure	✓
Standalone Direct Control	✓

More information on page 80

Specifications

Supply voltage	220 - 240 V ~ 50 Hz
Control system	**Wired** DALI-2 **Wireless** IEC62386-104 over Thread
DALI line current	2 mA
Wiring	1 - 4 mm^2 Strip 6 - 7 mm
Operating temperature	0 to 55°C
Material	PC
Classification	Class II
Mounting	DIN rail (35 mm)
Ingress protection	IP20
Compliance standards	IEC 60669-2-1 IEC 60950-1 CISPR 15 CISPR 22 EN 55015 EN 55022 IEC62386-205 IEC62386-208 IEC62386-301/302/303 EMC-2004/108/EC LVD-2006/95/EC

Wiring diagram



Last updated 2025_Q1

Product range

Order code	Description
zc-relay-4-pro	4 Channel DALI Pro relay controller, with 8 x 0-10V

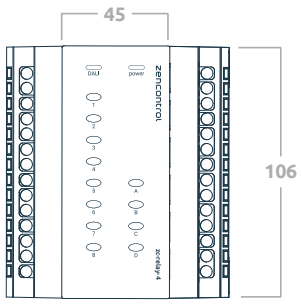
Features

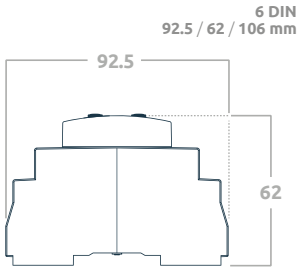
- 4 x Relay output 16A/160A inrush (IEC62386-208)
- 8 x 0 -10v
- Source Current 5 mA
- Suitable for distribution board mounting on standard DIN rail
- Reinforced insulation between DALI and mains supply
- Protected against DALI over voltage
- LED indicators for system status
- Rated inrush of 492A at 1.5ms or 165A at 20ms

Specifications

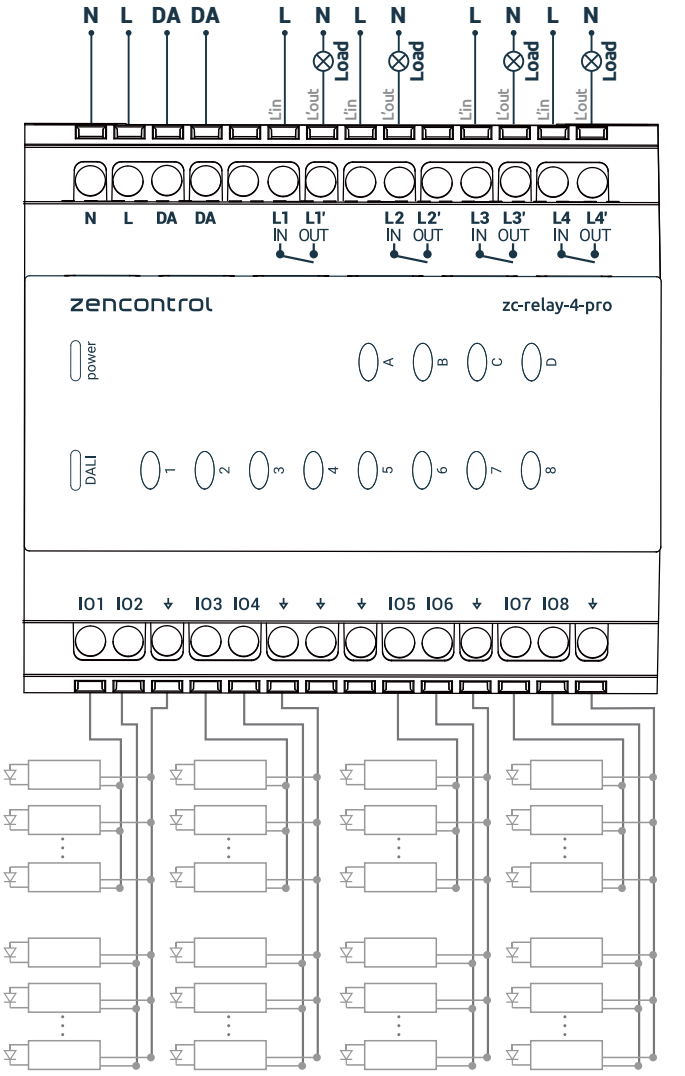
Supply voltage	230 V ~ 50 Hz	
Control system	**Wired** DALI-2 **Wireless** IEC62386-104 over Thread	
DALI line current	2 mA	
Wiring	1 - 4 mm² Strip 6 - 7 mm	
Operating temperature	0 to 55°C	
Material	PC	
Classification	Class II	
Mounting	DIN rail (35 mm)	
Ingress protection	IP20	
Compliance standards	IEC 60669-2-1 IEC 60950-1 CISPR 15 CISPR 22 EN 55015 EN 55022	IEC62386-205 IEC62386-208 IEC62386-301/302/303 EMC-2004/108/EC LVD-2006/95/EC

Dimensions (mm)





Wiring diagram



System modes

	Yes ✓ No ✕
Standard 101	✓
Standard 104	✓
Standard 101+104	✓
Standalone no System	✕
Standalone 101 no Configuration	✕
Standalone 101 App Configure	✓
Standalone 104 App Configure	✓
Standalone 101+104 App Configure	✓
Standalone Direct Control	✓

More information on page 80

Last updated 2025_Q1

Product range

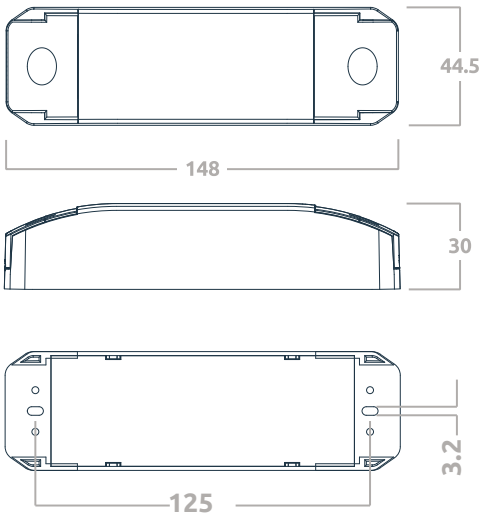
Order code	Description
zc-smart-relay	Wired / wireless DALI high current relay

Features

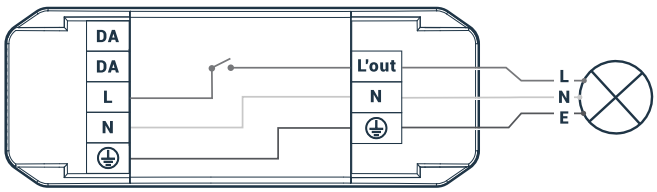
- For use with DALI control system
- Compatible with DALI and DALI-2
- Supports IEC 62386-104 over Thread®
- Protected against DALI over voltage
- Mains high current relay output
- Converts DALI ECGs and ECDs to a wireless system
- Compliant to IEC 62386-208
- DALI device type 7
- Rated inrush of 492A at 1.5ms or 165A at 20ms

Dimensions

Fixing centres	125 mm
Dimensions	W148 / H30 / D44.5 mm



Wiring diagram



Specifications

Supply voltage	230 V ~ 50 Hz
Control system	**Wired** DALI-2 **Wireless** IEC62386-104 over Thread
Radio support	IEEE 802.15.4
Frequency band	2.4 GHz
Max radio tx power	+8 dBm
DALI line current	2 mA
Output load	10 A resistive 6 A inductive
Output type	Switched active 240V~
Max. in-rush	165 A 20ms 492 A 1.5ms
Min. rated relay operations	40 000
Contact rating	100mΩ max. (at 1A 6V dc)
Max. operations per hour	360
Relay type	Non-latching normally open
Wiring	1 - 4 mm² Strip 6 - 7 mm
Operating temperature	0 to 55°C
Material	PC
Classification	Class II
Mounting	Independently mounted control for surface mounting
Ingress protection	IP20
Compliance standards	IEC 60669-2-1 IEC 60950-1 IEC 62386-104 IEC 62386-208 EN 55015 EN 55022 CISPR 15

System modes

	Yes ✓ No ✗
Standard 101	✓
Standard 104	✓
Standard 101+104	✓
Standalone no System	✗
Standalone 101 no Configuration	✗
Standalone 101 App Configure	✓
Standalone 104 App Configure	✓
Standalone 101+104 App Configure	✓
Standalone Direct Control	✗

More information on page 80

Last updated 2025_Q1

Product range

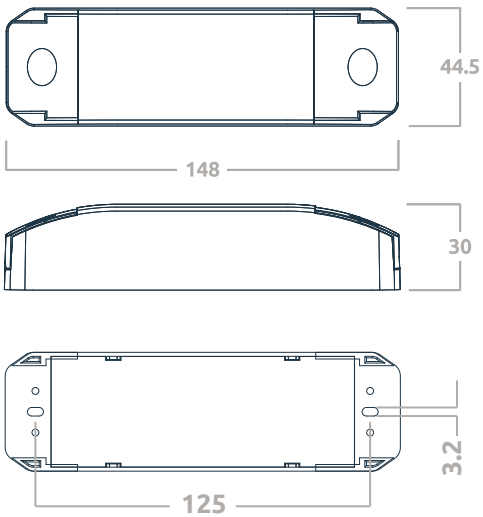
Order code	Description
zc-smart-relay-vf	Wireless relay controller, field mount, volt free

Features

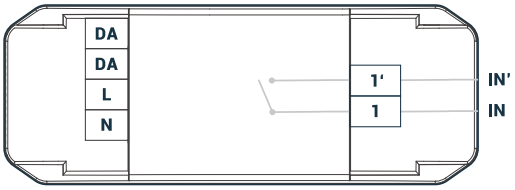
- For use with DALI control system
- Compatible with DALI and DALI-2
- Supports IEC 62386-104 over Thread®
- Protected against DALI over voltage
- Mains high current relay output
- Converts DALI ECGs and ECDs to a wireless system
- Compliant to IEC 62386-208
- DALI device type 7
- Rated inrush of 492A at 1.5ms or 165A at 20ms

Dimensions

Fixing centres	125 mm
Dimensions	W148 / H30 / D44.5 mm



Wiring diagram



Wire preparation

1 - 4 mm²

Specifications

Supply voltage	230 V ~ 50 Hz
Control system	**Wired** DALI-2 **Wireless** IEC62386-104 over Thread
Radio support	IEEE 802.15.4
Frequency band	2.4 GHz
Max radio tx power	+8 dBm
DALI line current	2 mA
Output load	10 A resistive 6 A inductive
Output type	0 - 240V ~ 50Hz
Max. in-rush	165 A 20ms 492 A 1.5ms
Min. rated relay operations	40 000
Contact rating	100mΩ max. (at 1A 6V dc)
Max. operations per hour	360
Relay type	Non-latching normally open
Wiring	1 - 4 mm² Strip 6 - 7 mm
Operating temperature	0 to 55°C
Material	PC
Classification	Class II
Mounting	Independently mounted control for surface mounting
Ingress protection	IP20
Compliance standards	IEC 60669-2-1 IEC 60950-1 IEC 62386-104 IEC 62386-208 EN 55015 EN 55022 CISPR 15

System modes

	Yes ✓ No ✗
Standard 101	✓
Standard 104	✓
Standard 101+104	✓
Standalone no System	✗
Standalone 101 no Configuration	✗
Standalone 101 App Configure	✓
Standalone 104 App Configure	✓
Standalone 101+104 App Configure	✓
Standalone Direct Control	✗

More information on page 80

Last updated 2025_Q1

zencontrol

Wireless 3 channel volt free relay controller **datasheet**

Product range

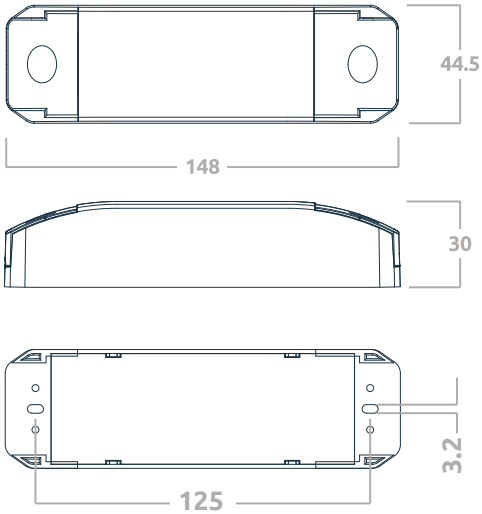
Order code	Description
zc-smart-relay-3-vf	wireless 3 channel relay controller,field mount,dry contact / volt free

Features

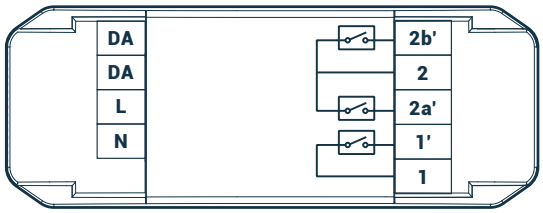
- For use with DALI control system
- Compatible with DALI and DALI-2
- Supports IEC 62386-104 over Thread®
- Protected against DALI over voltage
- Volt free high current relay output
- Converts DALI ECGs and ECDs to a wireless system
- Compliant to IEC 62386-208
- DALI device type 7

Dimensions

Mounting options	Independently mounted control for surface mounting
Fixing centres	125 mm
Dimensions	148 / 44.5 / 30 mm



Wiring diagram



Wire preparation

1 - 4 mm²

Specifications

Supply voltage	230 V ~ 50 Hz
Control system	**Wired** DALI-2 **Wireless** IEC62386-104over Thread
Radio support	IEEE 802.15.4
Frequency band	2.4 GHz
Max radio tx power	+8 dBm
DALI line current	2 mA
Wiring	1 - 4 mm² Strip 6 - 7 mm
Output load	3A maximum
Output type	Volt free / dry contact
Output voltage rating AC	220 - 240V 50 / 60Hz
Relay type	Non-latching normally open
Operating temperature	0 to 55°C
Material	PC
Classification	Class II
Ingress protection	IP20

System modes

	Yes ✓	No ✕
Standard 101	✓	
Standard 104	✓	
Standard 101+104	✓	
Standalone no System		✕
Standalone 101 no Configuration		✕
Standalone 101 App Configure	✓	
Standalone 104 App Configure	✓	
Standalone 101+104 App Configure	✓	
Standalone Direct Control		✕

More information on page 80

Last updated 2025_Q1

zencontrol

Inline blind controller **datasheet**

Product range

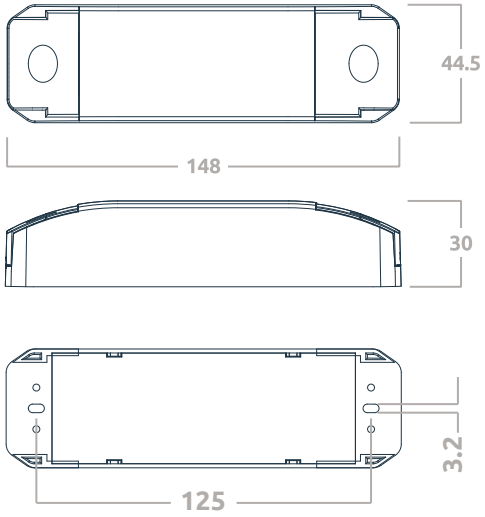
Order code	Description
zc-smart-blind	Wired / wireless blind controller

Features

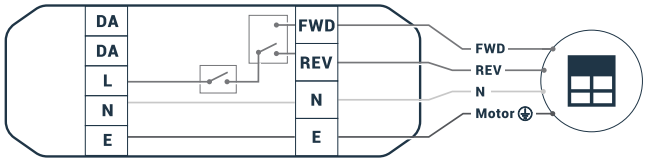
- For use with DALI control system
- Compatible with DALI and DALI-2 ®
- Supports IEC 62386-104 over Thread
- Compliant to IEC 62386-208
- Protected against DALI over voltage
- DALI device type 7
- Converts DALI ECGs and ECDs to a wireless system

Dimensions

Fixing centres	125 mm
Dimensions	W148 / H30 / D44.5 mm



Wiring



Specifications

Supply voltage	230 V ~ 50 Hz
Control system	**Wired** DALI-2 **Wireless** IEC62386-104 over Thread
Radio support	IEEE 802.15.4
Frequency band	2.4 GHz
Max radio tx power	+8 dBm
DALI line current	2 mA
Wiring	1 - 4 mm² Strip 6 - 7 mm
Motor control	375 W / ½ HP 1.6 A inductive load
Operating temperature	0 to 55°C
Material	PC
Classification	Class II
Mounting	Independently mounted control for surface mounting
Ingress protection	IP20
Compliance standards	IEC 60669-2-1 IEC 60950-1 IEC 62386-104 IEC 62386-208 EN 55015 EN 55022 CISPR 15

System modes

	Yes ✓	No ✕
Standard 101	✓	
Standard 104	✓	
Standard 101+104	✓	
Standalone no System		✕
Standalone 101 no Configuration		✕
Standalone 101 App Configure	✓	
Standalone 104 App Configure	✓	
Standalone 101+104 App Configure	✓	
Standalone Direct Control		✕

More information on page 80

Last updated 2025_Q1

zencontrol

Inline fan controller **datasheet**

Product range

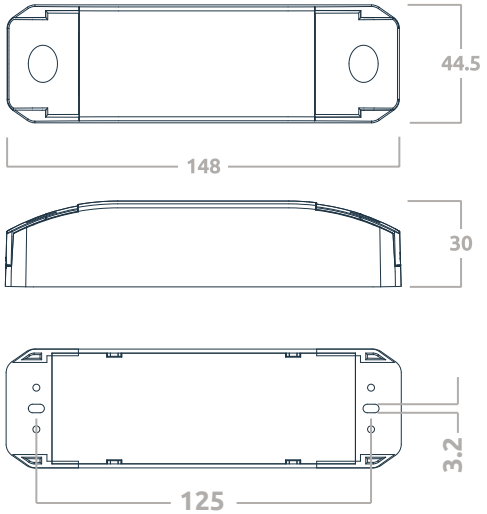
Order code	Description
zc-smart-fan	Wired / wireless fan controller

Features

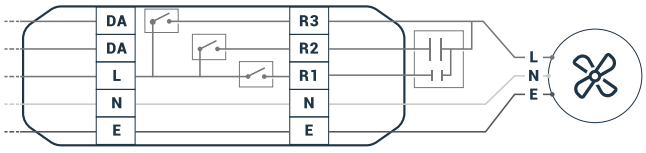
- For use with DALI control system
- Compatible with DALI and DALI-2
- Supports IEC 62386-104 over Thread®
- Compliant to IEC 62386-208
- Protected against DALI over voltage
- DALI device type 7
- Converts DALI ECGs and ECDs to a wireless system

Dimensions

Fixing centres	125 mm
Dimensions	W148 / H30 / D44.5 mm



Wiring schematic



Specifications

Supply voltage	230 V ~ 50 Hz
Control system	**Wired** DALI-2 **Wireless** IEC62386-104 over Thread
Radio support	IEEE 802.15.4
Frequency band	2.4 GHz
Max radio tx power	+8 dBm
DALI line current	2 mA
Wiring	1 - 4 mm² Strip 6 - 7 mm
Motor control	375 W / ½ HP 1.6 A inductive load
Operating temperature	0 to 55°C
Material	PC
Classification	Class II
Mounting	Independently mounted control for surface mounting
Ingress protection	IP20
Compliance standards	IEC 60669-2-1 IEC 60950-1 IEC 62386-104 IEC 62386-208 EN 55015 EN 55022 CISPR 15

Four speed output configuration

■ On ✕ Off

Speed	Arc min	Arc max	R1	R2	R3
0 (Off)	-	0	✕	✕	✕
1 (Low)	1 (0.1%)	63 (0.545%)	■	✕	✕
2	64 (0.559%)	127 (3.119%)	✕	■	✕
3	128 (3.206%)	191 (17.905%)	■	■	✕
4 (High)	192 (18.4%)	254 (100%)	✕	✕	■

System modes

	Yes ✓ No ✕
Standard 101	✓
Standard 104	✓
Standard 101+104	✓
Standalone no System	✕
Standalone 101 no Configuration	✕
Standalone 101 App Configure	✓
Standalone 104 App Configure	✓
Standalone 101+104 App Configure	✓
Standalone Direct Control	✕

More information on page 80

Last updated 2025_Q1

zencontrol Smart emergency converter **datasheet**

Product range

Order code	Description
zc-em-smart-50	Smart emergency converter, 10V - 50 V LED
zc-em-smart-250	Smart emergency converter, 50V - 250 V LED

Features

- 10 years design life
- Non-maintained operation
- Premium Lithium batteries ($LiFePO_4$)
- Includes automatic and manual test facility
- Suitable for LED arrays of 10 - 50 V or 50 - 250 V
- Compliant to Australian and international safety and performance standards
- Adjustable rated duration of 1hr, 2hrs and 3hrs
- Adjustable constant power emergency output
  1.5W, 2.5W, 3.5W (50 version) or 2.5W, 3.5W, 4.5W (250 version)
- Functions as IEC 62386-202 device for monitoring and testing
- Low profile form factor for luminaire installation

Emergency specifications

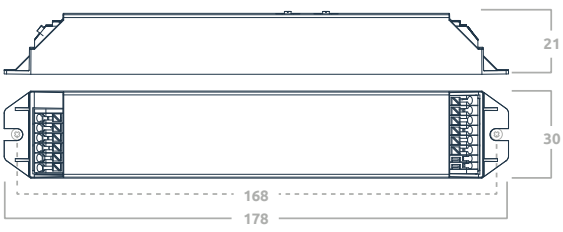
Mains voltage changeover threshold	According to EN 60598-2-22	
Emergency mode changeover	< 0.5 s from detection of emergency event	
Emergency output*	**zc-em-smart-50**	1.5 / 2.5 / 3.5 W
	zc-em-smart-250	2.5 / 3.5 / 4.5 W
Rated duration*	1hr / 2hr / 3hr	
Testing	**Function**	Weekly 5s test
	Duration*	Yearly 1hr / 2hr / 3hr test
Compliance standards	IEC 61347-1 IEC 61347-2-7 AS/NZS 61347-1 AS/NZS 2293.3	IEC 62386 - 202 IEC 62034 CISPR 15
Charger	**Type**	Variable
	Time	16 hours
Batteries: zc-batt-1A1-ADA zc-batt-1C2-ADA zc-batt-1A2-ADA zc-batt-1B2-ADA zc-batt-1B3-ADA zc-batt-1B4-ADA zc-batt-1B5-ADB	**Type**	$LiFePO_4$
	Voltage	3.2 V

Other battery configurations available upon request

*Selectable via dip switch

Dimensions

Dimensions W178 / H21 / D30 mm **Mounting centres** 168 mm



Specifications

Supply voltage	220 - 240V ~ 50 Hz	
Mains surge capability between	**L – N**	1 kV
	L / N – PE	2 kV
U-out (incl. open-/short-circuit)	**zc-em-smart-50**	60 V
	zc-em-smart-250	290 V
Wiring	Push-in terminals	
Material	PC body	
Operating temperature	-25 to +55 °C	
Classification	Class II	
Mounting	Built-in	
Ingress protection	IP20	
Lifetime	Up to 100,000 hrs	

zc-em-smart-50

Design life	**5 Years**			**10 Years**		
Battery code	**1hr**	**2hrs**	**3hrs**	**1hr**	**2hrs**	**3hrs**
zc-batt-1A1-ADA	1.5 W					
zc-batt-1C2-ADA	2.5 W 3.5 W	1.5 W		1.5 W		
zc-batt-1A2-ADA		2.5 W	1.5 W	2.5 W		
zc-batt-1B2-ADA		3.5 W	2.5 W 3.5 W	3.5 W	1.5 W 2.5 W	1.5 W
zc-batt-1B3-ADA					3.5 W	2.5W
zc-batt-1B4-ADA						3.5 W

zc-em-smart-250

Design life	**5 Years**			**10 Years**		
Battery code	**1hr**	**2hrs**	**3hrs**	**1hr**	**2hrs**	**3hrs**
zc-batt-1C2-BDA	2.5 W 3.5 W					
zc-batt-1A2-BDA	4.5 W	2.5 W		2.5 W		
zc-batt-1B2-BDA		3.5 W 4.5 W	2.5 W 3.5 W	3.5 W 4.5 W	2.5 W	
zc-batt-1B3-BDA			4.5 W		3.5 W	2.5W
zc-batt-1B4-BDA					4.5 W	3.5 W
zc-batt-1B5-BDA						4.5 W

System modes

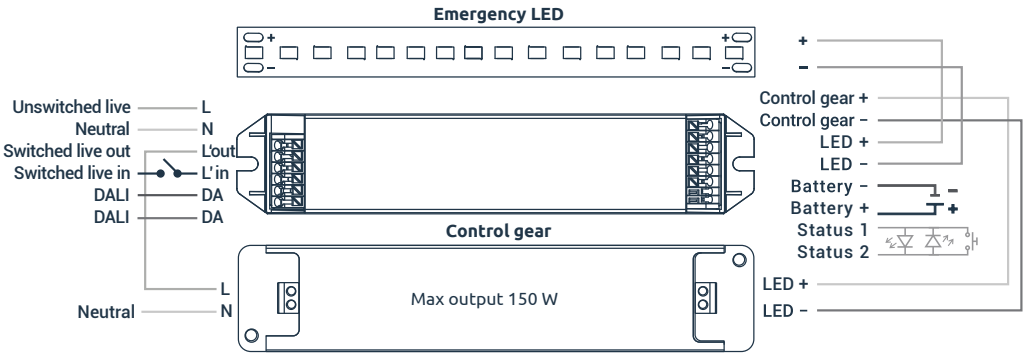
	Yes ✓ No ✕
Standard 101	✓
Standard 104	✓
Standard 101+104	✓
Standalone no System	✓
Standalone 101 no Configuration	✕
Standalone 101 App Configure	✓
Standalone 104 App Configure	✓
Standalone 101+104 App Configure	✓
Standalone Direct Control	✕

More information on page 80

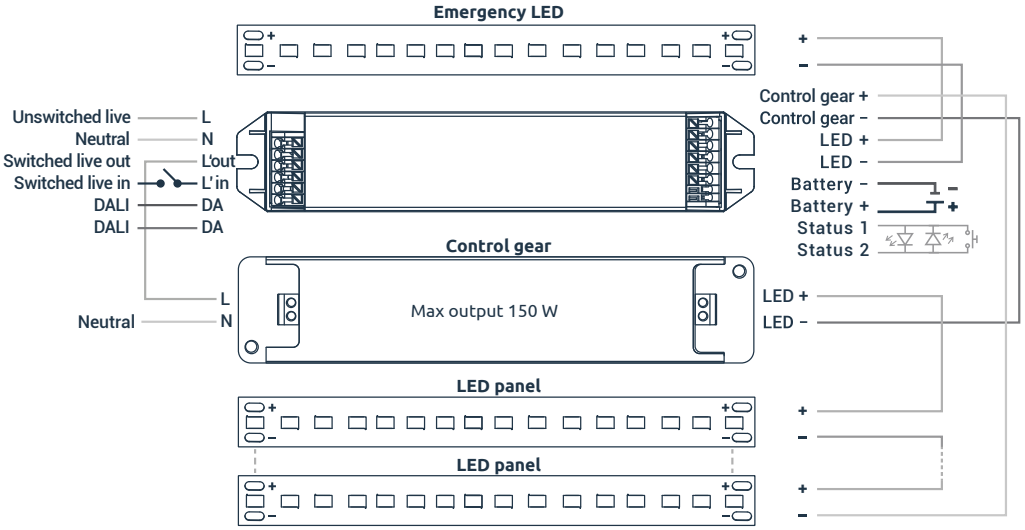
Last updated 2025_Q1

Wiring diagrams

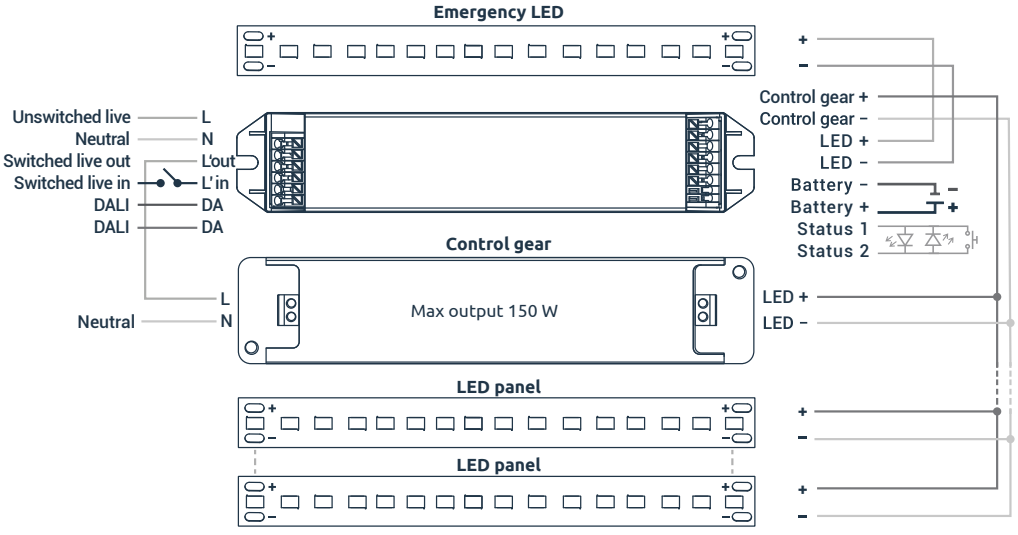
zc-em-smart configured with external LED driver for maintained mode in addition to emergency mode



zc-em-smart configured with external LED driver supplying series wired maintained LED panels with emergency panel.



zc-em-smart configured with external LED driver powering LED panels in parallel in maintained operation with emergency support.



Last updated 2025_Q1

zencontrol Self test emergency converter **datasheet**

Product range

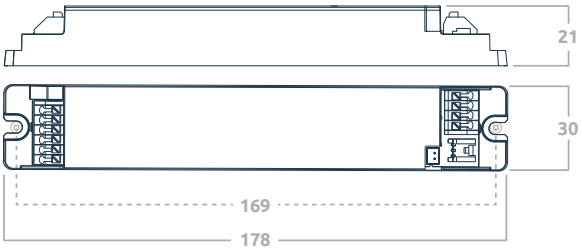
Order code	Description
zc-em-core-50	Self-test emergency converter, 10V - 50 V LED
zc-em-core-100	Self-test emergency converter, 50V - 100 V LED
zc-em-core-250	Self-test emergency converter, 100V - 250 V LED

Features

- 6 years design life
- Non-maintained operation
- Premium Lithium batteries ($LiFePO_4$)
- Rated duration of 1hr, 2hrs and 3hrs *(special order)*
- Includes automatic and manual test facility
- Low profile form factor for luminaire installation
- Suitable for LED arrays of 10 - 50 V, 50 - 100 V, or 50 - 250 V
- Compliant to Australian and international safety and performance standards
- Adjustable power output using NFC

Dimensions

Dimensions	W178 / H21 / D30 mm	**Mounting centres**	169 mm



System modes

	Yes ✓ No ✕
Standard 101	✓
Standard 104	✓
Standard 101+104	✓
Standalone no System	✓
Standalone 101 no Configuration	✕
Standalone 101 App Configure	✓
Standalone 104 App Configure	✓
Standalone 101+104 App Configure	✓
Standalone Direct Control	✕

Emergency specifications

Mains voltage changeover threshold	According to EN 60598-2-22	
Emergency mode changeover	< 1.05 s from detection of emergency event	
Emergency output*	**zc-em-core-50**	1.5 / 2.5 / 3.5 W
	zc-em-core-100	2.0 / 3.65 W
	zc-em-core-250	2.5 / 3.5 / 4.5 W
Rated duration*	1hr / 2hr / 3hr	
Testing	**Function**	60 seconds *(once a month)*
	Duration*	Yearly 1hr / 2hr / 3hr test
Compliance standards	IEC 61347-1 IEC 61347-2-7 AS/NZS 61347-1 AS/NZS 2293.3 IEC 62386 - 202 IEC 62034 CISPR 15	
Charger	**Type**	Variable
	Time	16 hours
Batteries: zc-batt-1A1-ADA zc-batt-1C2-ADA zc-batt-1A2-ADA zc-batt-1B2-ADA zc-batt-1B3-ADA zc-batt-1B4-ADA zc-batt-1B5-ADB	**Type**	$LiFePO_4$
	Voltage	3.2 V

Other battery configurations available upon request

*Selectable via dip switch

Specifications

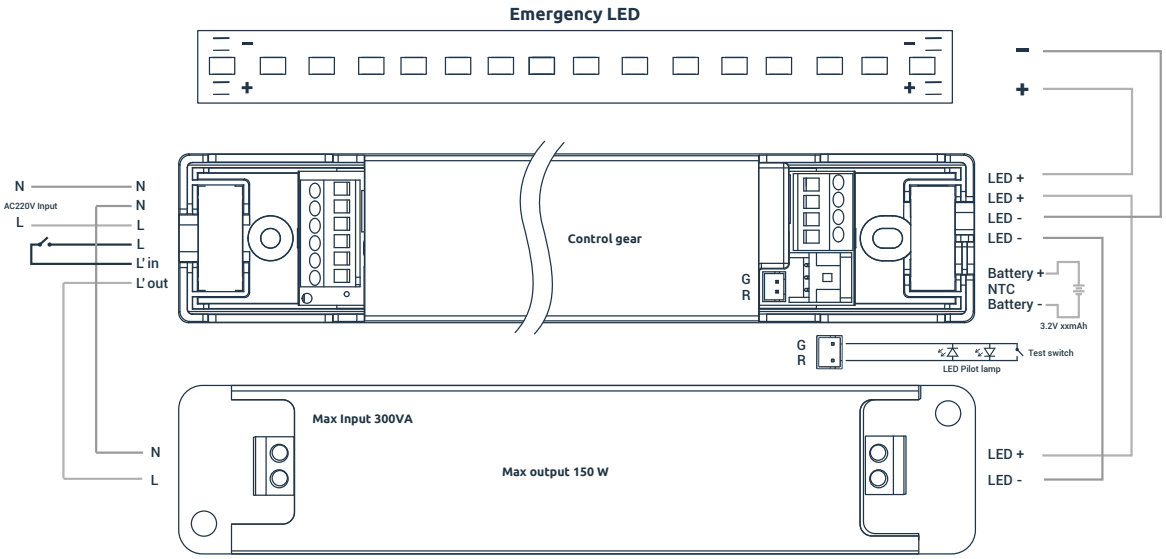
Supply voltage	220 - 240V ~ 50 Hz	
Mains surge capability between	**L – N**	1 kV
	L / N – PE	2 kV
U-out (incl. open-/short-circuit)	**zc-em-core-50**	60 V
	zc-em-core-100	120 V
	zc-em-core-250	290 V
Wiring	Push-in terminals	
Material	PC body	
Operating temperature	-25 to +55 °C	
Classification	Class II	
Mounting	Built-in	
Ingress protection	IP20	
Lifetime	Up to 100,000 hrs	

More information on page 80

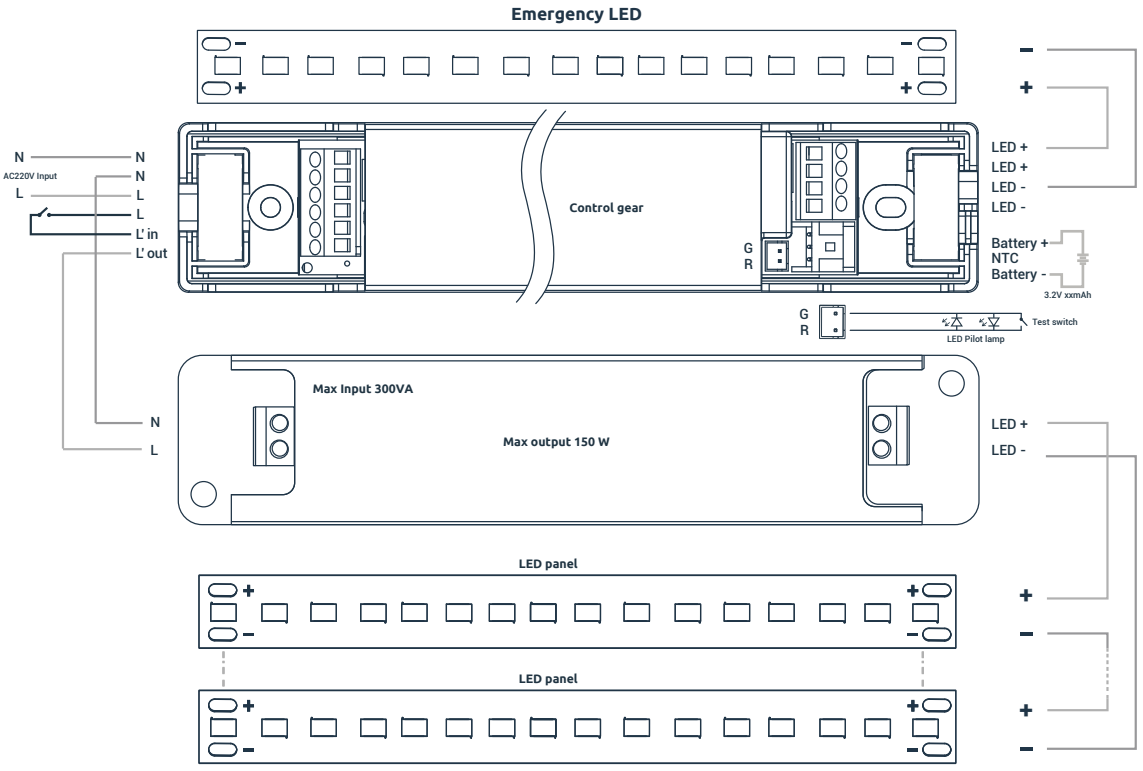
Last updated 2025_Q1

Wiring diagrams

zc-em-core configured with external LED driver for maintained mode in addition to emergency mode



zc-em-core configured with external LED driver supplying series wired maintained LED panels with emergency panel.



Last updated 2025_Q1

zencontrol

LED pwm controller **datasheet**

Product range

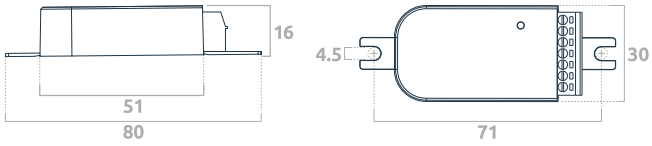
Order code	Description
zc-pwm-iot-4ch-6a	LED pwm controller

Features

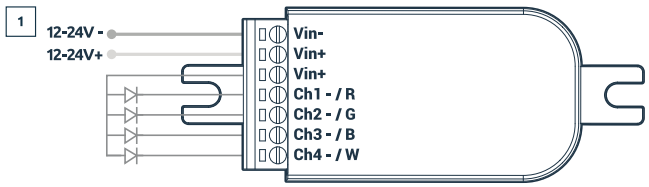
- Supports IEC 62386-104 over Thread®
- Compliant to IEC 62386-208 and IEC 62386-209 (TC, RGBW)
- Can be configured as 4 channel LED, 2x tuneable white or RGBW controller

Dimensions

Dimensions	W80 / H16 / D30 mm
Mounting options	Inbuilt



Wiring diagram



Wire preparation
0.2 - 1.5 mm²

System modes

	Yes ✓	No ✗
Standard 101		✗
Standard 104	✓	
Standard 101+104		✗
Standalone no System		✗
Standalone 101 no Configuration		✗
Standalone 101 App Configure		✗
Standalone 104 App Configure	✓	
Standalone 101+104 App Configure		✗
Standalone Direct Control		✗

More information on page 80

Specifications

Supply voltage	12 - 24 Vdc
Control system	**Wireless** IEC62386-104 over Thread
Radio support	IEEE 802.15.4
Frequency band	2.4 GHz
Max radio tx power	+8 dBm
Output load	6A total (0-6A per channel)
Output load type	LED only
Independent channels	4
Bus unit configurations	4 x DT6, 2 x DT8-TC, DT8-RGBW *(see bus unit configuration table)*
Wiring	0.2 - 1.5 mm² Strip 6 - 7 mm
Operating temperature	0 to 55°C
Material	PC
Ingress protection	IP20
Classification	III

Bus unit configurations

Bus unit config.	No. of ECG	Channel 1	Channel 2	Channel 3	Channel 4
192 (default)	4	ECG index 0 DT6 (LED)	ECG index 1 DT6 (LED)	ECG index 2 DT6 (LED)	ECG index 3 DT6 (LED)
193	2	ECG index 0 DT8-TC (cool)	ECG index 0 DT8-TC (warm)	ECG index 1 DT8-TC (cool)	ECG index 1 DT8-TC (warm)
194	1	ECG index 0 DT8-RGBW (red)	ECG index 0 DT8-RGBW (green)	ECG index 0 DT8-RGBW (blue)	ECG index 0 DT8-RGBW (white)

Note: Bus unit configuration RGBW can be set using the zencontrol commissioning application. See support.zencontrol.com for more information.

Last updated 2025_Q1

zencontrol

LED pwm dimmer **datasheet**

Product range

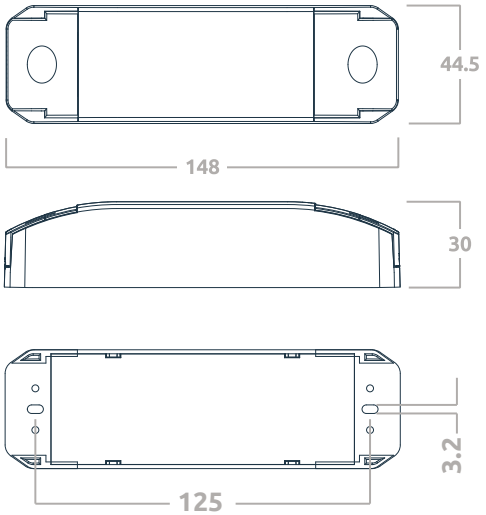
Order code	Description
zc-iot-pwm-4ch-10a	LED pwm dimmer, field mount

Features

- For use with DALI control system
- Compatible with DALI and DALI-2
- Supports IEC 62386-104 over Thread®
- Protected against DALI over voltage
- Converts DALI ECGs and ECDs to a wireless system
- Compliant to IEC 62386-208 and IEC 62386-209 (TC, RGBW)
- Can be configured as 4 channel LED, 2x tuneable white or RGBW controller

Dimensions

Fixing centres	125 mm
Dimensions	W148 / H30 / D44.5 mm



System modes

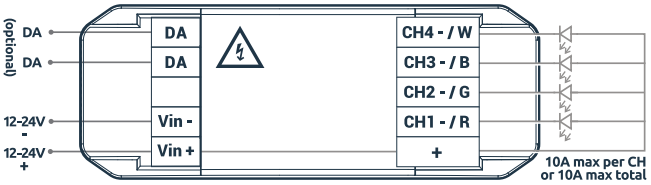
	Yes ✓	No ✕
Standard 101	✓	
Standard 104	✓	
Standard 101+104	✓	
Standalone no System		✕
Standalone 101 no Configuration		✕
Standalone 101 App Configure	✓	
Standalone 104 App Configure	✓	
Standalone 101+104 App Configure	✓	
Standalone Direct Control		✕

More information on page 80

Specifications

Supply voltage	12 - 24 Vdc
Control system	**Wired** DALI-2 **Wireless** IEC62386-104 over Thread
Radio support	IEEE 802.15.4
Frequency band	2.4 GHz
Max radio tx power	+8 dBm
DALI line current	2 mA
Output load	10A total (0-10A per channel)
Output load type	LED only
Independent channels	4
Bus unit configurations	4 x DT6, 2 x DT8-TC, DT8-RGBW *(see bus unit configuration table)*
Wiring	1 - 4 mm² Strip 6 - 7 mm
Operating temperature	0 to 55°C
Material	PC
Ingress protection	IP20
Classification	III

Wiring diagram

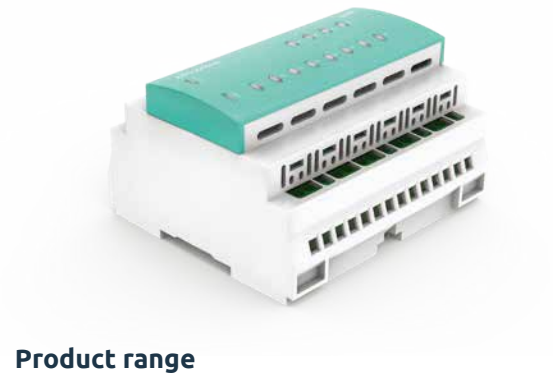


Bus unit configurations

Bus unit config.	No. of ECG	Channel 1	Channel 2	Channel 3	Channel 4
192 (default)	4	ECG index 0 DT6 (LED)	ECG index 1 DT6 (LED)	ECG index 2 DT6 (LED)	ECG index 3 DT6 (LED)
193	2	ECG index 0 DT8-TC (cool)	ECG index 0 DT8-TC (warm)	ECG index 1 DT8-TC (cool)	ECG index 1 DT8-TC (warm)
194	1	ECG index 0 DT8-RGBW (red)	ECG index 0 DT8-RGBW (green)	ECG index 0 DT8-RGBW (blue)	ECG index 0 DT8-RGBW (white)

Note: Bus unit configuration RGBW can be set using the zencontrol commissioning application. See support.zencontrol.com for more information.

Last updated 2025_Q1



Product range

Order code	Description
zc-io-8	I/O interface with 8 x 01-10V or 8x switch inputs, 6 DIN

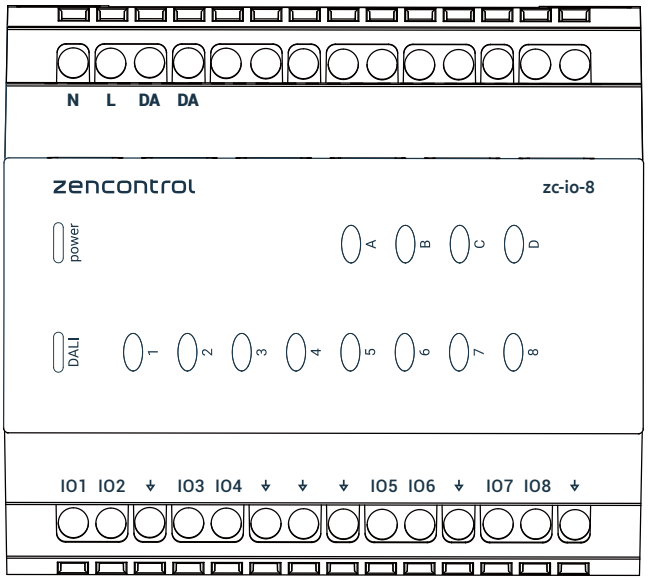
Features

- 8 x 0-10V Outputs (IEC62386-205) or
  8 x digital switch/sensor inputs (IEC62386-301/302/303)
- Suitable for distribution board mounting on standard DIN rail
- Reinforced insulation between DALI and mains supply
- Protected against DALI over voltage
- LED indicators for system status

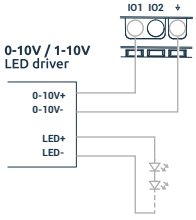
Specifications

Supply voltage	220 - 240V ~ 50 Hz
Control system	**Wired** DALI-2 **Wireless** IEC62386-104 over Thread
DALI line current	2mA
Wiring	1 - 4 mm² Strip 6 - 7 mm
Operating temperature	0 to 55°C
Material	PC
Classification	Class II
Mounting	DIN rail (35 mm)
Ingress protection	IP20
Compliance standards	IEC 61347-2-11 IEC 60950-1 CISPR 15 EN 55015 IEC62386-205 IEC62386-301/302/303 EMC-2004/108/EC LVD-2006/95/EC

Wiring diagram

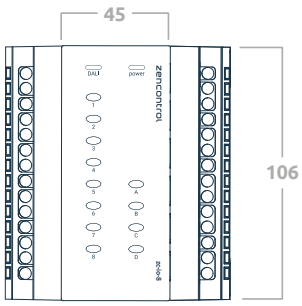


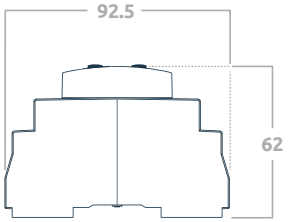
0-10V



Switch

Dimensions (mm)





System modes

System modes	Yes ✓	No ✕
Standard 101	✓	
Standard 104	✓	
Standard 101+104	✓	
Standalone no System		✕
Standalone 101 no Configuration		✕
Standalone 101 App Configure	✓	
Standalone 104 App Configure	✓	
Standalone 101+104 App Configure	✓	
Standalone Direct Control		✕

More information on page 80

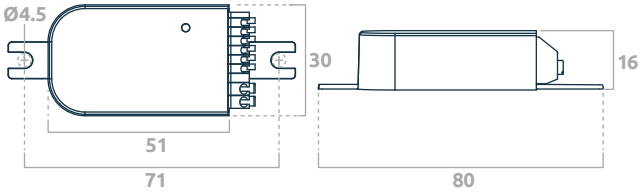
Last updated 2025_Q1

zencontrol

Smart I/O interface, 6 channel **datasheet**

Dimensions

Mounting options	Inbuilt
Dimensions	80 / 16 / 30 mm



Product range

Order code	Description
zc-io-6	Smart I/O interface, 6 channel

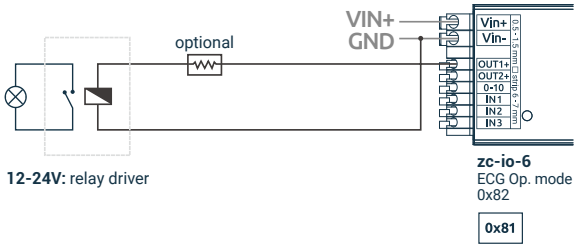
Specifications

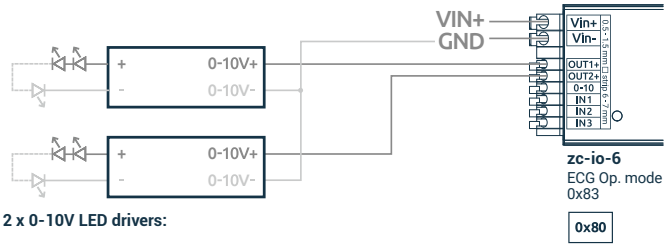
Supply voltage	12 - 24Vdc
Supply current	<0.7A
Control system	IEC62386-104 over Thread
Wiring	0.2 - 1.5 mm² (supply)
	0.2 - 0.5 mm² (accessories)
	Strip 8 - 9 mm
Operating temperature	0 to 60°C
Material	PC
Mounting	Inbuilt
Ingress protection	IP20
Output voltage (0-10)	0-10Vdc
Input Voltage (0-10)	0-24Vdc
Output current (0-10)	<2mA max
Output voltage (OUT 1, OUT 2)	Supply voltage (12 - 24Vdc)
Output current (OUT 1, OUT 2)	200mA max / channel
Input voltage (IN 1, IN 2, IN 3)	24V max
Classification	III

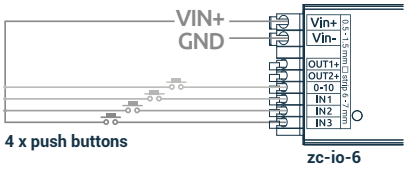
Accessories range

Order code	Description
zc-fm-kit	Field mount kit

Wiring diagrams







System modes

	Yes ✓ No ✕
Standard 101	✕
Standard 104	✓
Standard 101+104	✕
Standalone no System	✕
Standalone 101 no Configuration	✕
Standalone 101 App Configure	✕
Standalone 104 App Configure	✕
Standalone 101+104 App Configure	✕
Standalone Direct Control	✕

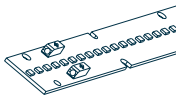
More information on page 80

Last updated 2025_01

Product range

Order code	Description
zc-l1-12-830-140/24	L1 Zhaga PCB, 140mm length, 12 pcs LEDs, 3000K, CRI80, 200mA
zc-l1-12-840-140/24	L1 Zhaga PCB, 140mm length, 12 pcs LEDs, 4000K, CRI80, 200mA
zc-l1-12-930-140/24	L1 Zhaga PCB, 140mm length, 12 pcs LEDs, 3000K, CRI90, 200mA
zc-l1-12-940-140/24	L1 Zhaga PCB, 140mm length, 12 pcs LEDs, 4000K, CRI90, 200mA
zc-l1-24-830-280/24	L1 Zhaga PCB, 280mm length, 24 pcs LEDs, 3000K,CRI80, 400mA
zc-l1-24-840-280/24	L1 Zhaga PCB, 280mm length, 24 pcs LEDs, 4000K, CRI80, 400mA
zc-l1-24-930-280/24	L1 Zhaga PCB, 280mm length, 24 pcs LEDs, 3000K, CRI90, 400mA
zc-l1-24-940-280/24	L1 Zhaga PCB, 280mm length, 24 pcs LEDs, 4000K, CRI90, 400mA
zc-l1-48-830-560/24	L1 Zhaga PCB, 560mm length, 48 pcs LEDs, 3000K, CRI80, 800mA
zc-l1-48-840-560/24	L1 Zhaga PCB, 560mm length, 48 pcs LEDs, 4000K, CRI80, 800mA
zc-l1-48-930-560/24	L1 Zhaga PCB, 560mm length, 48 pcs LEDs, 3000K, CRI90, 800mA
zc-l1-48-940-560/24	L1 Zhaga PCB, 560mm length, 48 pcs LEDs, 4000K, CRI90, 800mA
zc-l1-96-830-1120/24	L1 Zhaga PCB, 1120mm length, 96 pcs LEDs, 3000K, CRI80, 1600mA
zc-l1-96-840-1120/24	L1 Zhaga PCB, 1120mm length, 96 pcs LEDs, 4000K, CRI80, 1600mA
zc-l1-96-930-1120/24	L1 Zhaga PCB, 1120mm length, 96 pcs LEDs, 3000K, CRI90, 1600mA
zc-l1-96-940-1120/24	L1 Zhaga PCB, 1120mm length, 96 pcs LEDs, 4000K, CRI90, 1600mA

Standard connector



Solid conductor

Code legend

zc-lx-xx-yzz-wwww/24

Width
24 = W 24
55 = W 55
40 = W 40

Length
280 = L 280
560 = L560
1120 = L560

CCT
T0 = 2700/6500 K
65 = 6500 K
40 = 5000 K
35 = 3500 K
30 = 3000 K

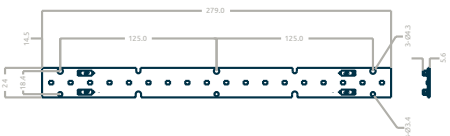
CRI
7 = 70 CRI
8 = 80 CRI
9 = 90 CRI

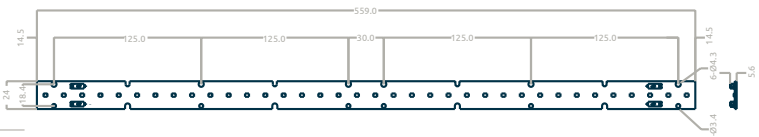
Number of LEDS

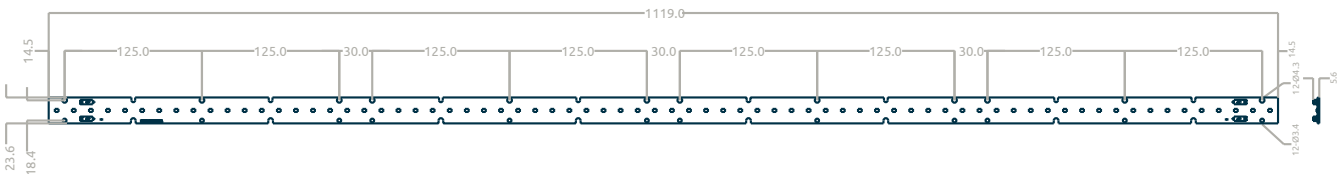
L1 = no lens
L2 = with lens

zencontrol

Dimensions







Features

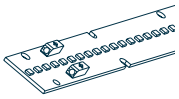
- Standard zhaga compatible mounting option
- Works with emergency converter range
- Available in CRI80 and CRI90 configurations
- Industry standard zhaga footprint
- Ideal for residential, office, retail and industrial lighting
- Extended lifetime > 80,000 H
- Minimum colour tolerance: 3MacAdam (3SDCM)
- Push-in terminal blocks, easy module fixing with zc-em-series
- Suitable for emergency applications with zencontrol inverters

Last updated 2025_Q1

Product range

Order code	Description
zc-l1-18-830-140/24	L1 Zhaga PCB, 140mm length, 18 pcs LEDs, 3000K, CRI80, 300mA
zc-l1-18-840-140/24	L1 Zhaga PCB, 140mm length, 18 pcs LEDs, 4000K, CRI80, 300mA
zc-l1-18-930-140/24	L1 Zhaga PCB, 140mm length, 18 pcs LEDs, 3000K, CRI90, 300mA
zc-l1-18-940-140/24	L1 Zhaga PCB, 140mm length, 18 pcs LEDs, 4000K, CRI90, 300mA
zc-l1-36-830-280/24	L1 Zhaga PCB, 280mm length, 36 pcs LEDs, 3000K, CRI80, 600mA
zc-l1-36-840-280/24	L1 Zhaga PCB, 280mm length, 36 pcs LEDs, 4000K, CRI80, 600mA
zc-l1-36-930-280/24	L1 Zhaga PCB, 280mm length, 36 pcs LEDs, 3000K, CRI90, 600mA
zc-l1-36-940-280/24	L1 Zhaga PCB, 280mm length, 36 pcs LEDs, 4000K, CRI90, 600mA
zc-l1-72-830-560/24	L1 Zhaga PCB, 560mm length, 72 pcs LEDs, 3000K, CRI80, 1200mA
zc-l1-72-840-560/24	L1 Zhaga PCB, 560mm length, 72 pcs LEDs, 4000K, CRI80, 1200mA
zc-l1-72-930-560/24	L1 Zhaga PCB, 560mm length, 72 pcs LEDs, 3000K, CRI90, 1200mA
zc-l1-72-940-560/24	L1 Zhaga PCB, 560mm length, 72 pcs LEDs, 4000K, CRI90, 1200mA
zc-l1-144-830-1120/24	L1 Zhaga PCB, 1120mm length, 144 pcs LEDs, 3000K, CRI80, 2400mA
zc-l1-144-840-1120/24	L1 Zhaga PCB, 1120mm length, 144 pcs LEDs, 4000K, CRI80, 2400mA
zc-l1-144-930-1120/24	L1 Zhaga PCB, 1120mm length, 144 pcs LEDs, 3000K, CRI90, 2400mA
zc-l1-144-940-1120/24	L1 Zhaga PCB, 1120mm length, 144 pcs LEDs, 4000K, CRI90, 2400mA

Standard connector



Solid conductor

Code legend

zc-lx-xx-yzz-wwww/24

Width
24 = W 24
55 = W 55
40 = W 40

Length
280 = L 280
560 = L560
1120 = L560

CCT
T0 = 2700/6500 K
65 = 6500 K
40 = 5000 K
35 = 3500 K
30 = 3000 K

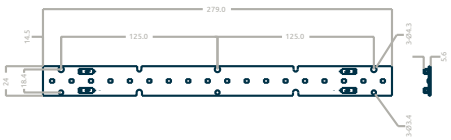
CRI
7 = 70 CRI
8 = 80 CRI
9 = 90 CRI

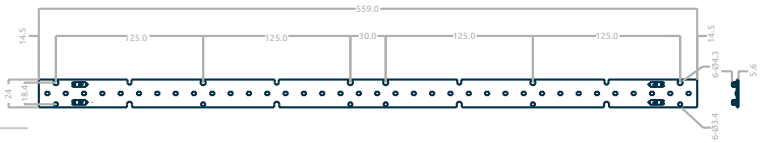
Number of LEDS

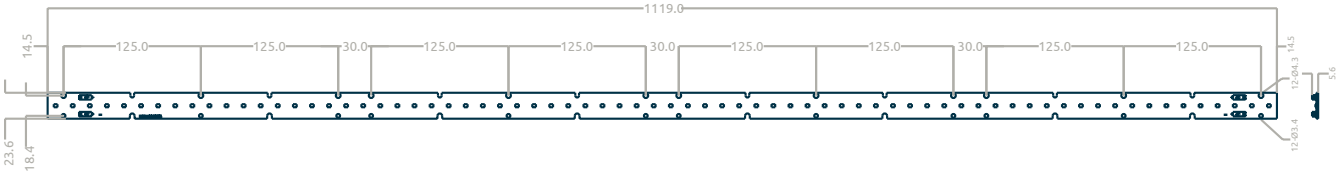
L1 = no lens
L2 = with lens

zencontrol

Dimensions







Features

- Standard zhaga compatible mounting option
- Works with emergency converter range
- Available in CRI80 and CRI90 configurations
- Industry standard zhaga footprint
- Ideal for residential, office, retail and industrial lighting
- Extended lifetime > 80,000 H
- Minimum colour tolerance: 3MacAdam (3SDCM)
- Push-in terminal blocks, easy module fixing with zc-em-series
- Suitable for emergency applications with zencontrol inverters

Last updated 2025_Q1

zencontrol L1 Zhaga PCBs - tuneable white **datasheet**

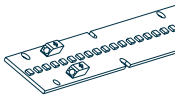
Product range

Order code	Description
zc-l1-36-8T0-280/24(a)	L1 Zhaga PCB, 280mm length, 36 pcs LEDs, TW 2700-6500K, CRI80, 300mA
zc-l1-36-9T0-280/24(a)	L1 Zhaga PCB, 280mm length, 36 pcs LEDs, TW 2700-6500K, CRI90, 300mA
zc-l1-72-8T0-560/24(a)	L1 Zhaga PCB, 560mm length, 72 pcs LEDs, TW 2700-6500K, CRI80, 600mA
zc-l1-72-9T0-560/24(a)	L1 Zhaga PCB, 560mm length, 72 pcs LEDs, TW 2700-6500K, CRI90, 600mA
zc-l1-144-8T0-1120/24(a)	L1 Zhaga PCB, 1120mm length, 144 pcs LEDs, TW 2700-6500K, CRI80, 1200mA
zc-l1-144-9T0-1120/24(a)	L1 Zhaga PCB, 1120mm length, 144 pcs LEDs, TW 2700-6500K, CRI90, 1200mA

Features

- Standard zhaga compatible mounting option
- Works with emergency converter range
- Available in CRI80 and CRI90 configurations
- Industry standard zhaga footprint
- Ideal for residential, office, retail and industrial lighting
- Extended lifetime > 80,000 H
- Minimum colour tolerance: 3MacAdam (3SDCM)
- Push-in terminal blocks, easy module fixing with zc-em-series
- Suitable for emergency applications with zencontrol inverters

Standard connector



Solid conductor

Code legend

zc-lx-xx-yzz-wwww/24

Width
24 = W 24
55 = W 55
40 = W 40

Length
280 = L 280
560 = L560
1120 = L560

CCT
T0 = 2700/6500 K
65 = 6500 K
40 = 5000 K
35 = 3500 K
30 = 3000 K

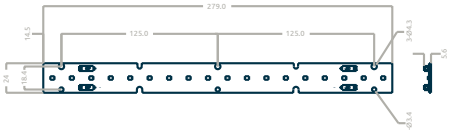
CRI
7 = 70 CRI
8 = 80 CRI
9 = 90 CRI

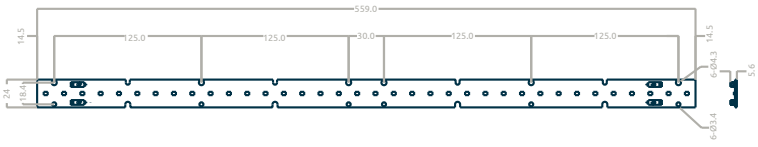
Number of LEDS

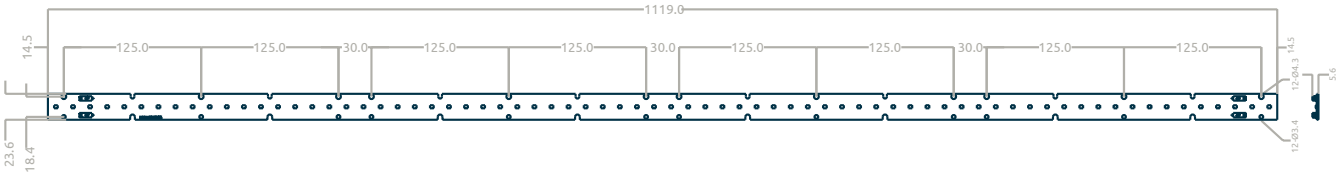
L1 = no lens
L2 = with lens

zencontrol

Dimensions







Last updated 2025_Q1

zencontrol L1 Zhaga PCBs - tuneable white **datasheet**

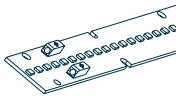
Product range

Order code	Description
zc-l2-72-940-1120/24	Zhaga 1120/24 / 36V / MAX 1900mA / L90B10:54000-Ts55 / lens
ZC-L2-36-940-560/24	Zhaga 560/24 / 36V / MAX 800mA / L90B10:54000-Ts55 / lens
ZC-L2-18-940-280/24	Zhaga 280/24 / 36V / MAX 400mA / L90B10:54000-Ts55 / lens
ZC-L2-6-940-140/24	Zhaga 140/24 / 36V / MAX 165mA / L90B10:54000-Ts55 / lens
ZC-L2-36-840-560/24	Zhaga 560/24 / 36V / MAX 800mA / L90B10:54000-Ts55 / lens

Features

- Standard zhaga compatible mounting option
- Works with emergency converter range
- Available in CRI80 and CRI90 configurations
- Industry standard zhaga footprint
- Ideal for residential, office, retail and industrial lighting
- Extended lifetime > 80,000 H
- Minimum colour tolerance: 3MacAdam (3SDCM)
- Push-in terminal blocks, easy module fixing with zc-em-series
- Suitable for emergency applications with zencontrol inverters

Standard connector



Solid conductor

Code legend

zc-lx-xx-yzz-wwww/24

Width
24 = W 24
55 = W 55
40 = W 40

Length
280 = L 280
560 = L560
1120 = L560

CCT
T0 = 2700/6500 K
65 = 6500 K
40 = 5000 K
35 = 3500 K
30 = 3000 K

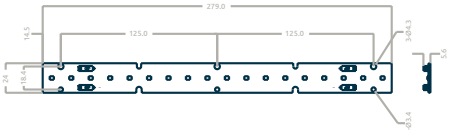
CRI
7 = 70 CRI
8 = 80 CRI
9 = 90 CRI

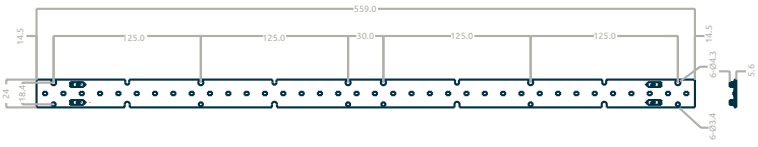
Number of LEDS

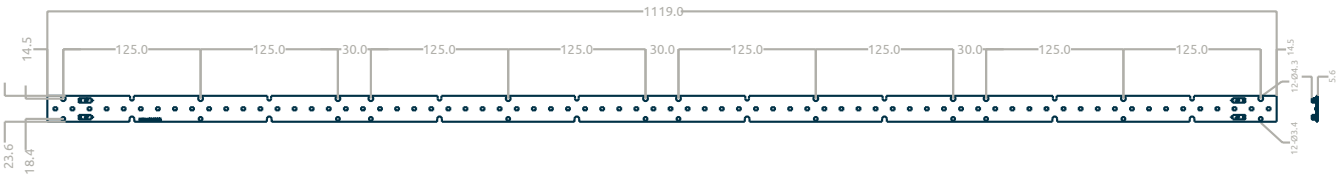
L1 = no lens
L2 = with lens

zencontrol

Dimensions







Last updated 2025_Q1

zencontrol

Battery 3.2V **datasheet**

Product range

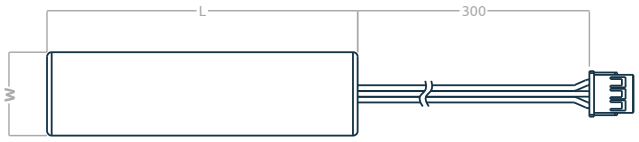
Order code	Description
1A2-AEA	Battery 1A2-AEA LiFePO4 3.2V >3000mAH Stick 1S2P with NTC
1A3-AEA	Battery 1A3-AEA LiFePO4 3.2V >4500mAH Stick 1S3P with NTC
1A4-AEA	Battery 1A4-AEA LiFePO4 3.2V >6000mAH Stick 1S4P with NTC
1A5-AEA	Battery 1A5-AEA LiFePO4 3.2V >7500mAH Stick 1S5P with NTC
1A6-AEA	Battery 1A6-AEA LiFePO4 3.2V >9000mAH Stick 1S6P with NTC

Features

- NTC Resistor 10k @25℃, 3950B.
- 3pole connector.

Dimensions

Mounting options	Push Terminal block
Dimensions	W 18.5 / L 132 mm(1A2-AEA)
	W 18.5 / L 197 mm(1A3-AEA)
	W 18.5 / L 262 mm(1A4-AEA)
	W 18.5 / L 327 mm(1A5-AEA)
	W 18.5 / L 392 mm(1A6-AEA)



Product range

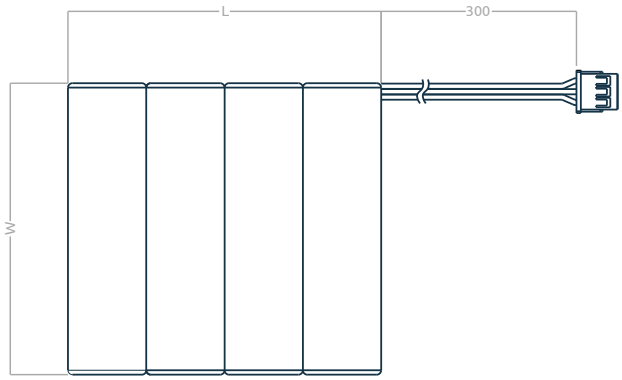
Order code	Description
1A2-AEB	Battery 1A2-AEB LiFePO4 3.2V >3000mAH Stick 1S2P with NTC
1A3-AEB	Battery 1A3-AEB LiFePO4 3.2V >4500mAH Stick 1S3P with NTC
1A4-AEB	Battery 1A4-AEB LiFePO4 3.2V >6000mAH Stick 1S4P with NTC
1A5-AEB	Battery 1A5-AEB LiFePO4 3.2V >7500mAH Stick 1S5P with NTC
1A6-AEB	Battery 1A6-AEB LiFePO4 3.2V >9000mAH Stick 1S6P with NTC

Features

- NTC Resitor 10k 25℃, 3950B.
- 3pole connector.

Dimensions

Mounting options	Push Terminal block
Dimensions	W 67 / L 37 mm(1A2-AEB)
	W 67 / L 55 mm(1A2-AEB)
	W 67 / L 73 mm(1A2-AEB)
	W 67 / L 91 mm(1A2-AEB)
	W 67 / L 109 mm(1A2-AEB)



Last updated 2025_Q1

zencontrol

Field mount kit **datasheet**

Product range

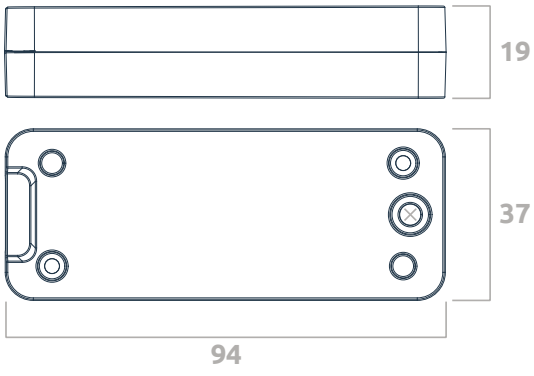
Order code	Description
zc-fm-kit	Field mount kit

Supported models

Order code	Description
zc-iot-bridge	Wireless DALI bridge
zc-iot-bridge-oem	Wireless bridge for OEM
zc-psu-70	70 mA DALI-2 power supply
zc-io-6	Smart I/O interface, 6 channel
zc-pwm-iot-4ch-6a	LED pwm controller

Dimensions (mm)

Size	W94 x H19 x D37
Mounting	Field mounting, mounting hole ⨯



Product range

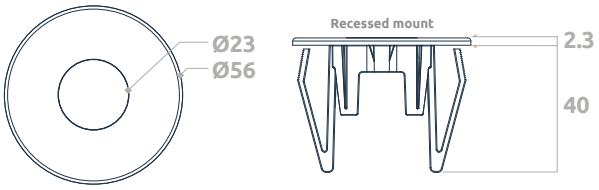
Order code	Description
zc-pir-rs-kit	PIR sensor recessed mount kit
zc-pir-rs-kit-bl	PIR sensor recessed mount kit, black

Supported models

Order code	Description
zc-pir-5m	DALI PIR sensor 5 m
zc-pir-8m	DALI PIR sensor 8 m
zc-pir-5m-p	5 m, PIR and lux sensor expansion kit for zc-smart-driver
zc-pir-8m-p	8 m, PIR and lux sensor, with IR expansion kit for zc-smart-driver
zc-smart-spot	1 W, Emergency non-maintained spot expansion kit for zc-smart-driver-em
zc-em-kit	1500 mAh, Emergency expansion kit for zc-smart-driver-em
zc-em-kit-30	3000 mAh, Emergency expansion kit for zc-smart-driver-em

Dimensions (mm)

Type	
Recessed mount	Cut-out Ø 44 - 45 mm



Last updated 2025_01

zencontrol

Mounting kits **datasheet**

Product range

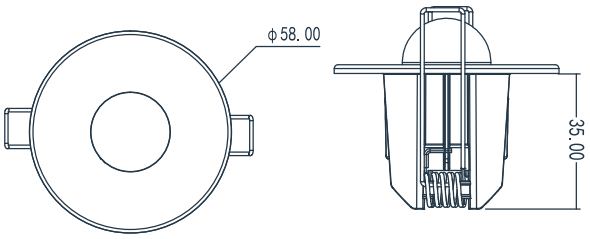
Order code	Description
zc-pir-rs-kit-sp	PIR sensors recess mount kit
zc-pir-rs-kit-sp-b	PIR sensors recess mount kit blk

Supported models

Order code	Description
zc-pir-5m-bp	DALI PIR sensor 5 m
zc-pir-8m-bp	DALI PIR sensor 8 m
zc-pir-5m-sp-bp	DALI-2 PIR sensor, 5m detection area with stainless steel springs bulk packed
zc-pir-8m-sp-bp	DALI-2 PIR sensor, 8m detection area with stainless steel springs bulk packed

Dimensions

Mounting options	Recessed
Cut out	ø 46 mm
Installation height	2.2 - 4 m
Min. ceiling depth	70 mm
Dimensions	ø 58 mm



Product range

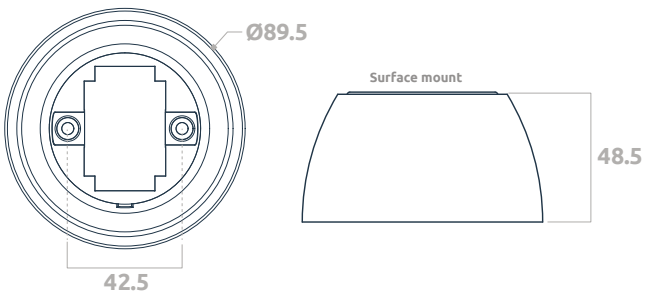
Order code	Description
zc-pir-sm-kit	PIR sensor surface mount kit
zc-pir-sm-kit-bl	PIR sensor surface mount kit, black

Supported models

Order code	Description
zc-pir-5m	DALI PIR sensor 5 m
zc-pir-8m	DALI PIR sensor 8 m
zc-pir-5m-p	5 m, PIR and lux sensor expansion kit for zc-smart-driver
zc-pir-8m-p	8 m, PIR and lux sensor, with IR expansion kit for zc-smart-driver
zc-smart-spot	1 W, Emergency non-maintained spot expansion kit for zc-smart-driver-em
zc-em-kit	1500 mAh, Emergency expansion kit for zc-smart-driver-em
zc-em-kit-30	3000 mAh, Emergency expansion kit for zc-smart-driver-em

Dimensions (mm)

Type	
Surface mount	Fitting centres 42.5 mm



Last updated 2025_Q1

Product range

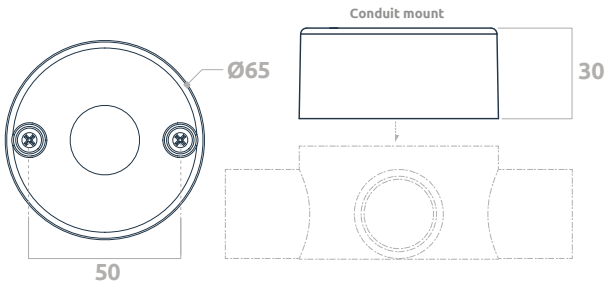
Order code	Description
zc-pir-cd-kit	PIR sensor conduit mount kit
zc-pir-cd-kit-bl	PIR sensor conduit mount kit, black

Supported models

Order code	Description
zc-pir-5m	DALI PIR sensor 5 m
zc-pir-8m	DALI PIR sensor 8 m
zc-pir-5m-p	5 m, PIR and lux sensor expansion kit for zc-smart-driver
zc-pir-8m-p	8 m, PIR and lux sensor, with IR expansion kit for zc-smart-driver
zc-smart-spot	1 W, Emergency non-maintained spot expansion kit for zc-smart-driver-em
zc-em-kit	1500 mAh, Emergency expansion kit for zc-smart-driver-em
zc-em-kit-30	3000 mAh, Emergency expansion kit for zc-smart-driver-em

Dimensions (mm)

Type	
Counduit mount	Fitting centres 50 mm, junction box not included



Product range

Order code	Description
zc-smart-wall-kit	Smart sensor wall mount kit

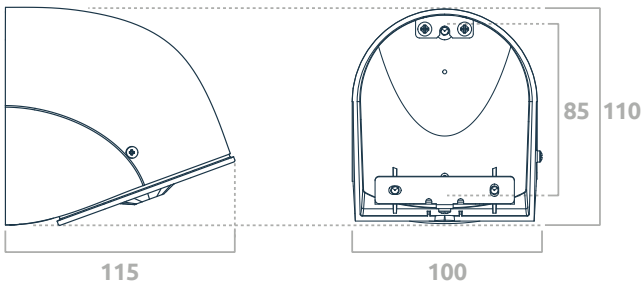
Supported PIR models

Order code	Description
zc-pir-da	PIR sensor 8 m
zc-pms-da	PIR multi-sensor 8 m
zc-pms-iot-da	Wireless PIR multi-sensor 8 m
zc-pir-iot-da	Wireless PIR sensor 8 m
zc-pir-st-da	Standalone smart PIR sensor 8 m
zc-pir-st	Standalone PIR sensor 8 m
zc-pir-wp-8m	DALI-2 PIR sensor 8 m
	Includes extensions -r, -vf, -1sw-r, -1sw-vf, -2sw-r, -2sw-vf

Dimensions (mm)

Fig.	Type	Size	Fitting centres
5	**Wall mount**	W100 x H110 x D115 mm	85 mm

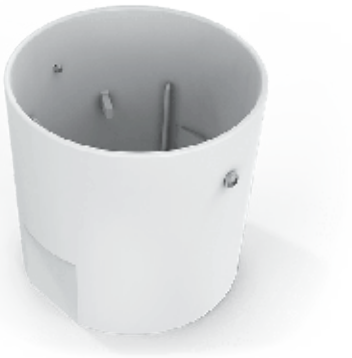
5 Wall mount



Last updated 2025_Q1

zencontrol

Mounting kits **datasheet**



Product range

Order code	Description
zc-smart-sm-kit	Smart sensor surface mount kit, suitable for surface, rod and conduit mounting

Supported PIR models

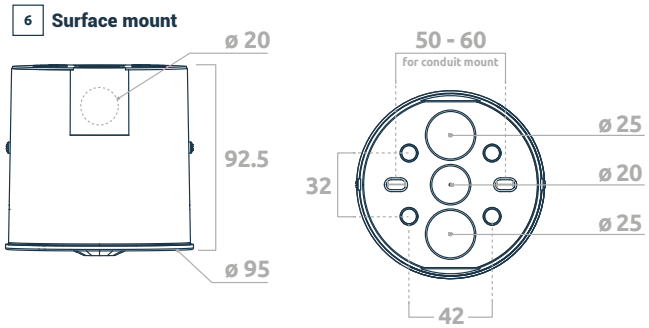
Order code	Description
zc-pir-da	PIR sensor 8 m
zc-pms-da	PIR multi-sensor 8 m
zc-pms-iot-da	Wireless PIR multi-sensor 8 m
zc-pir-iot-da	Wireless PIR sensor 8 m
zc-pir-st-da	Standalone smart PIR sensor 8 m
zc-pir-st	Standalone PIR sensor 8 m

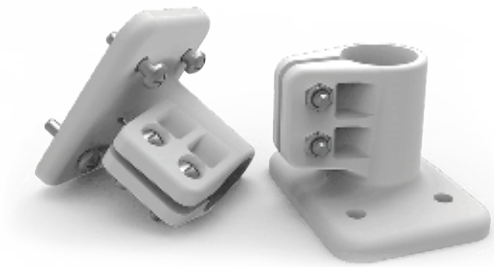
Includes extensions -r, -vf, -1sw-r, -1sw-vf, -2sw-r, -2sw-vf

Dimensions (mm)

Fig.	Type	Size	Fitting centres
6	**Surface mount**	Ø95 x H92.5 mm	See below

6 **Surface mount**





Product range

Order code	Description
zc-rodmount-whi	Rod mount kit, white, to be used with Smart sensor surface mount kit

Supported PIR models

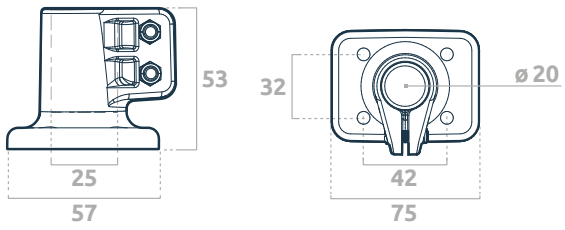
Order code	Description
zc-pir-da	PIR sensor 8 m
zc-pms-da	PIR multi-sensor 8 m
zc-pms-iot-da	Wireless PIR multi-sensor 8 m
zc-pir-iot-da	Wireless PIR sensor 8 m
zc-pir-st-da	Standalone smart PIR sensor 8 m
zc-pir-st	Standalone PIR sensor 8 m

Includes extensions -r, -vf, -1sw-r, -1sw-vf, -2sw-r, -2sw-vf

Dimensions (mm)

Fig.	Type	Size	Fitting centres
7	**Rod mount**	W75 x H53 x D57 mm, suits Ø20 mm rod, for use with surface mount kit	32 x 42 mm

7 **Rod mount**



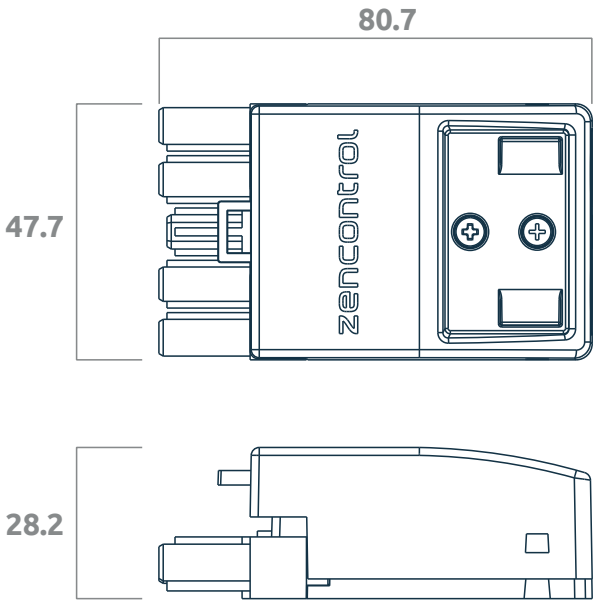
Last updated 2025_Q1

Product range

Order code	Description
zc-plug-female-d5w	DALI keyed female plug for zc-driver-40

Dimensions (mm)

Dimensions	W80.7/ H28.2/ D47.7

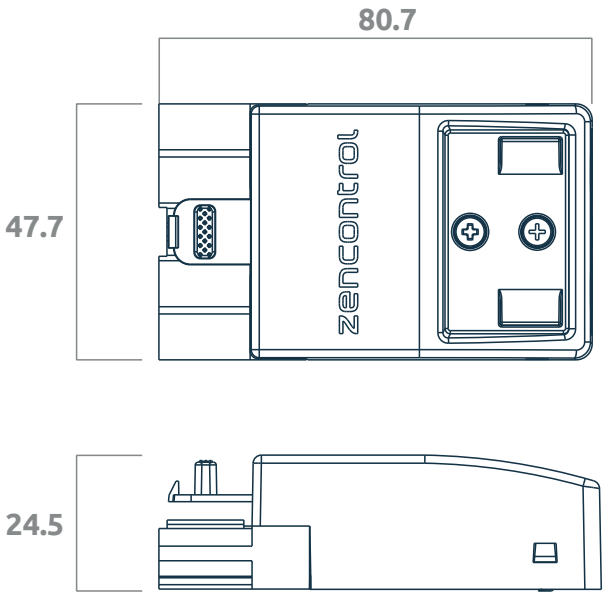


Product range

Order code	Description
zc-plug-male-d5w	DALI keyed male plug for zc-driver-40

Dimensions (mm)

Dimensions	W80.7/ H24.5/ D47.7



Last updated 2025_Q1

Product range

Order code	Description
zc-ss-xsw-blk-button	Black button for the smart switch series
zc-ss-xsw-wht-button	White button for the smart switch series

Features

- zc-ss-xsw range
- Custom laser/printing on request
- Standard pack Avaliable ask Sales for customer order.

Dimensions (mm)

Dimensions	Φ13 mm

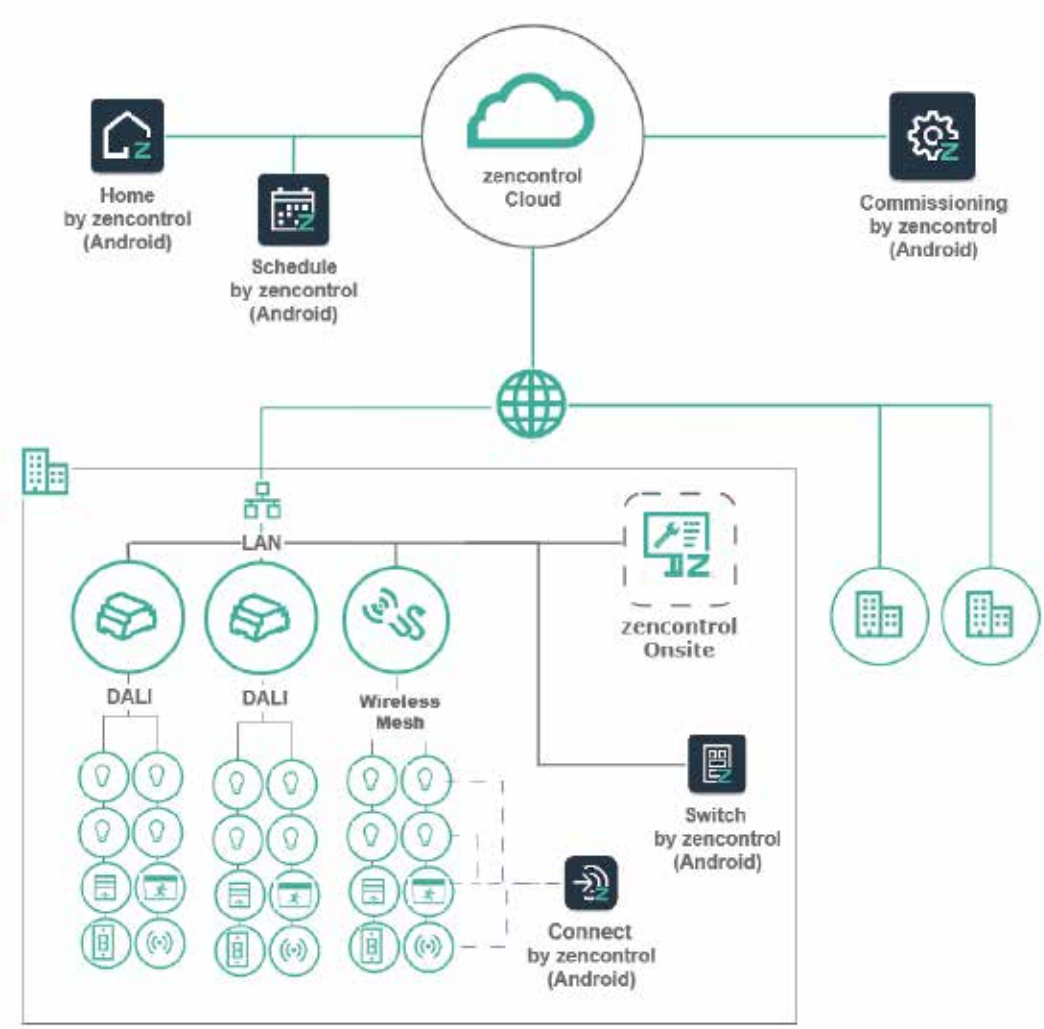
Last updated 2025_Q1

Introduction to the zencontrol Software

To make any changes to, or receive feedback from a zencontrol system we need to interface with it somehow. The way that we do this is via zencontrol software and the zencontrol cloud.

There are several software applications available, so we'll start with a diagram which shows where they sit in the general architecture and then touch on each individually.

The ecosystem



The rectangular area in the above diagram is the boundary of a site. We can see that there are a few applications which sit within that boundary, and the remainder sit outside.

This is possible because if the control systems have a path to the internet, by default they will reach out and open a connection with the cloud.The apps outside the boundary of the site then make their requests to the cloud, which acts on their behalf to make changes to or fetch information from the controllers.

The applications within the rectangular site boundary are the suite of local applications which communicate with the control systems directly over the local area network.

The cloud

The cloud is at the heart of the zencontrol system, and manages everything from the ownership and permission model to the upgrading of control systems and devices as well as commissioning, emergency test supervision, general site analytics and energy monitoring.

As a general rule, most functions which are available in the various Android applications are also available in the Cloud, and there are a number of features which are only available on the cloud.

Onsite (Windows PC)

zencontrol Onsite is an application which provides a subset of the functions of the zencontrol Cloud for sites which don't have (or opt out of providing) access to the internet. It runs within the customer's LAN and monitors the controllers directly. An offline or offline-readonly addon license is required for each control system for the onsite software to be used.

Commissioning (Android)

Commissioning by zencontrol provides functions for commissioning: creating sites, assigning and labeling control systems, addressing / grouping / labeling devices, commissioning wireless DALI networks, setting lux levels and so on.

The commissioning application is typically where you will start, primarily to configure the system so that it knows where everything is, and then you will move to the cloud to do the remainder of the fine-tuning and batch commissioning tasks.

Home (Android)

The Home application affords the end-user straightforward control over their lighting from a simplified interface.

Schedule (Android)

A simplified interface for modifying control profile schedules and determining the current control profiles of the control systems on a site. The Schedule application also provides an interface for sending all control systems on a site to a desired profile.

Switch (Android)

Configurable touchscreen interface for controlling lighting locally over the control systems' Third Party Interface API (licenced add-on). The application communicates with the control systems over UDP.

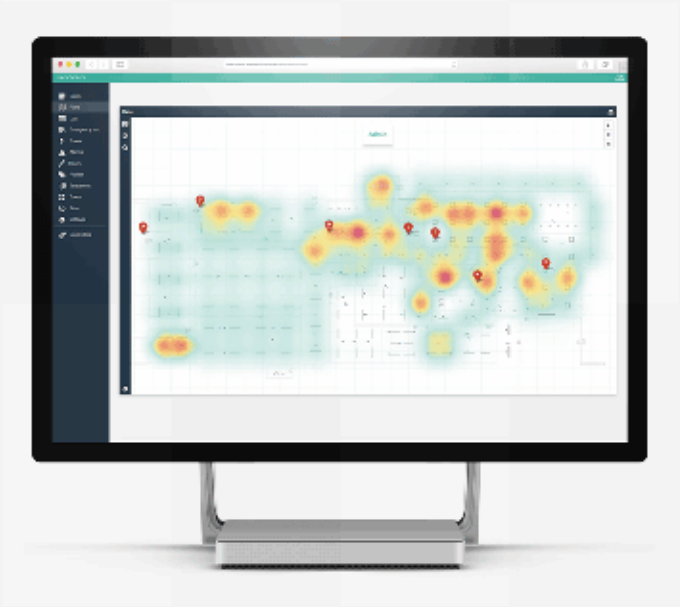
The layout and behaviour of the application can be configured and exported from

Connect (Android)

Express allows the configuration of standalone zencontrol Smart devices via bluetooth, and the commissioning of standalone wireless mesh networks. The Express application may also be used in some scenarios to manually repair/modify/extend existing wireless mesh networks.

Software

zencontrol offers a wide range of software solutions to suit your needs.



Onsite

An onsite **headend** software package and **commissioning tool.**

- Standalone software package for offline sites.
- View and maintain your buildings faults and issues.
- Produce emergency tests.
- Commission and set up your site and sites operation
- Plan view UI allows visualisation of the entire site. See faults and issues on the plan.
- Support tens of thousands of devices across the site.
- Access control models.

(The zencontrol Onsite software package works independently of the zencontrol Cloud and does not require an internet connection)

Cloud

A state-of-the-art **Cloud platform** that allows the **maintenance of all your sites from one location.**

Allows for smart building control and usage with:

- Issue management and tracking.
- Full emergency test management.
- User access control.
- Tenancy access control.
- Remote diagnostics and support.
- Analytics for power, occupancy, CO2, VOC and many other metrics
- API to connect other systems.

Learn more about the Cloud → Explore Plan view → Discover Analytics →

Commissioning Tool

The integrators tool kit for commissioning Cloud-connected sites.

Allows for smart building control and usage with:

- Create sites
- Commission devices incl. labels, addresses, IDs, state, targets, lux levels etc
- Change profiles
- Edit groups, scenes and other DALI items
- Remote diagnostics and support.
- Commission all types of devices incl. Lights, Relays, Sensors, Switches, W-Fi, Bluetooth, Thread devices and more

Home

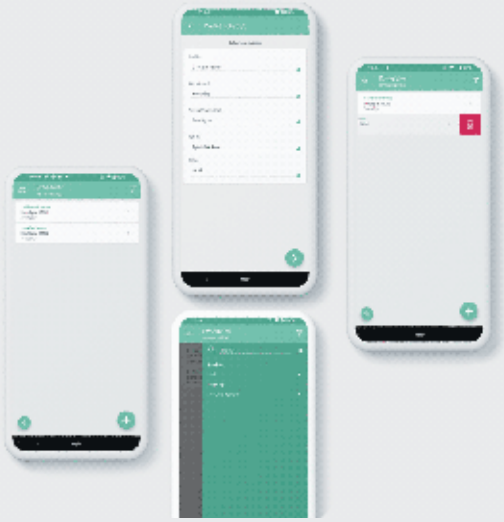
zencontrol provides easy, wireless smart integration for home installations with our lighting and control solutions

View and control your lighting with support for:

- Groups & scenes
- Issue management and tracking
- Multiple controllers
- Colour themes
- Remote diagnostics and support.
- DT8 colour devices including RGBWAF, TC and XY

For installers:

- Groups
- Automatically works with tenancy control and permission
- Select and allow visibility of groups from the Cloud
- Select and allow visibility of scenes from the Cloud
- Select and allow users ability to change and save scenes



Schedule

Adjust your buildings schedule with an easy to use interface

Automatically works with tenancy control and permissions which allows tenancies to control and adjust only the areas they have access to.

Ability to change the buildings operating times and function.

Switch

A universal launcher which runs JSON allowing an integrator to **make custom tablet applications** that suit the customers requirements.

- Allows for the simple upload of plans and selection areas for plan view type applications
- Allows for multiple pages, screens and buttons.

- Integrators can use the switch creator application or write their own JSON.

Works without Cloud-connectivity.

zencontrol connect

Connect to **zencontrol smart devices** to create **standalone or connected networks**

Introducing zencontrol connect—the ultimate solution for building smart, interconnected networks with ease. Choose to operate zencontrol smart devices as standalone controllers or seamlessly link them together, either wirelessly or via DALI-2. Simplify both basic and comple xinstallations, effortlessly integrating wireless lighting and configuring DALI device addresses, groups, and scenes.

With zencontrol connect, experience the perfect blend of simplicity and power, designed to amplify the capabilities of your zencontrol smart devices for exceptional results.

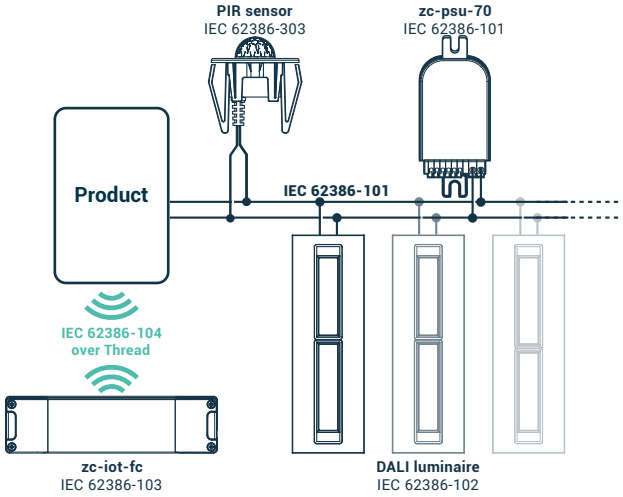
System overview: modes

Standard 104

Is enabled after the device has been added to a 104 application controller such as zc-iot-fc.

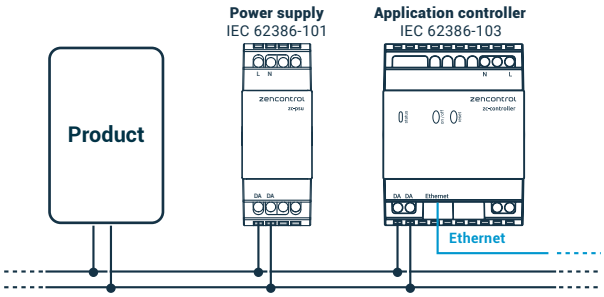
Standard 104 + 101

Bridge mode is enabled after the device has been added to a 104 controller and a 101 power supply has been connected to the DALI terminals.



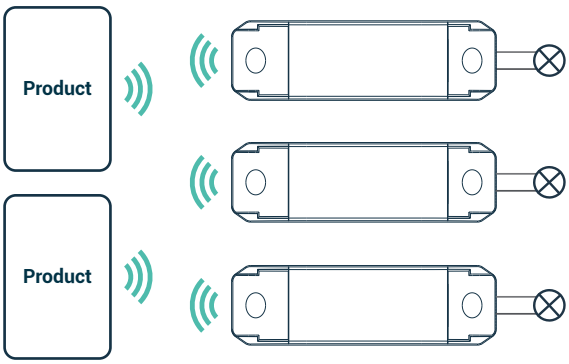
Standard 101

is enabled after a 101 power supply has been connected to the DALI terminal and the device **has not** been added to a 104 application controller.



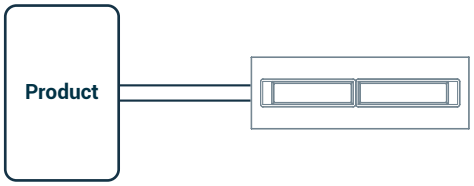
Stand Alone (104 App Configuration)

Stand alone with a IEC62386-104 type connection over Thread within a Mesh. This can be configured with Bluetooth to perform actions based on events that happen on the mesh network (Lux level change, Sensor trigger). This has a high number of configur -ation options to build a stand alone network without a master controller on the network.



Stand Alone(Direct)

Stand alone with direct connection to a third party device, this can be configured with Bluetooth to perform actions based on internal events (Lux level change, Sensor trigger) that the product has detected.



Stand Alone Stand Alone (101 no configuration)

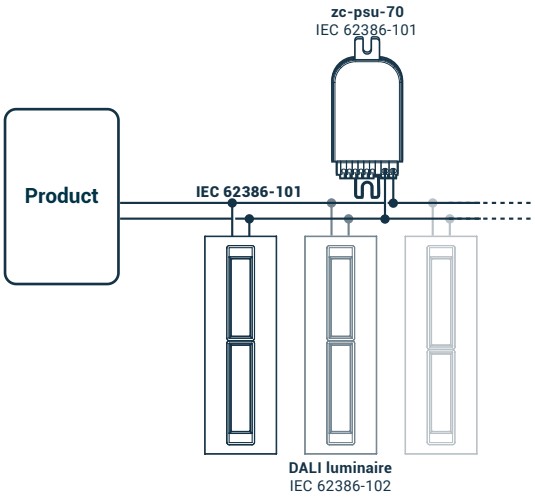
A DALI wired product that sends out lighting control commands to do simple lighting control with predetermined timers and actions.

- Sensors have a 15 minute time out.
- Switches can do: On, Off, Push to Dim.

Stand Alone (101 App Configuration)( )

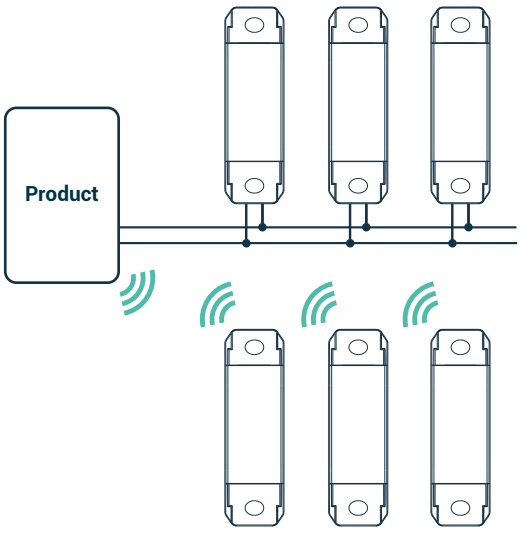
A DALI wired product that sends out lighting control commands to do simple lighting control with predetermined timers and actions.

- Sensors have a 15 minute time out.
- Switches can do: On, Off, Push to Dim.

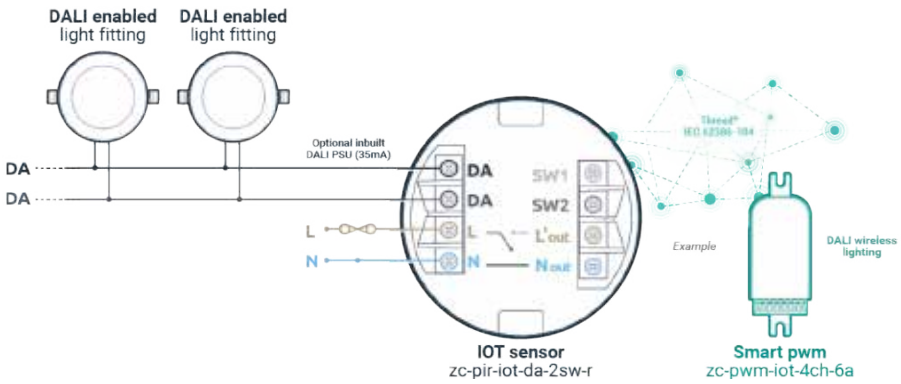


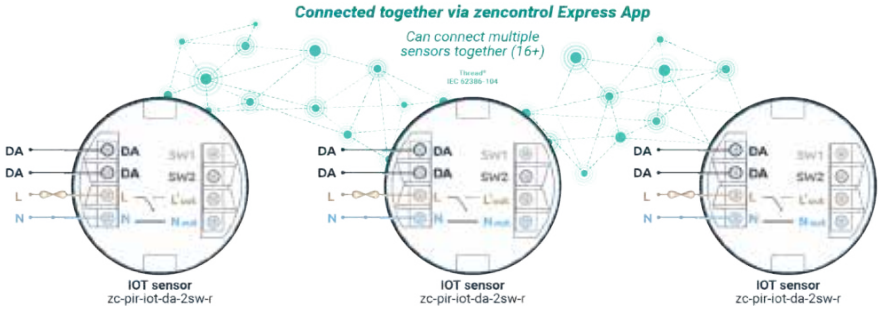
Stand Alone (101+104 App Configuration)

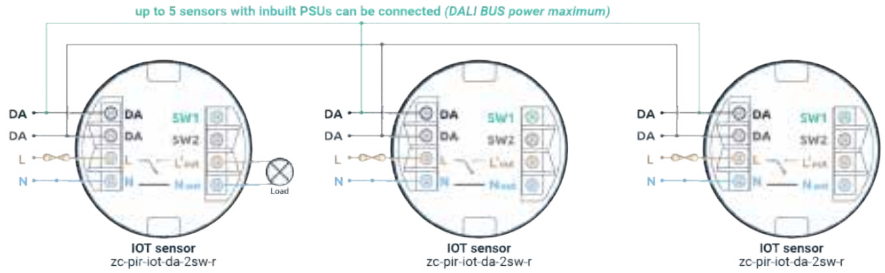
Stand alone with a IEC62386-104 type connection over Thread within a Mesh. This can be configured with Bluetooth to perform actions based on events that happen on the mesh network (Lux level change, Sensor trigger). This has a high number of configu -ration options to build a stand alone network without a master controller on the network.

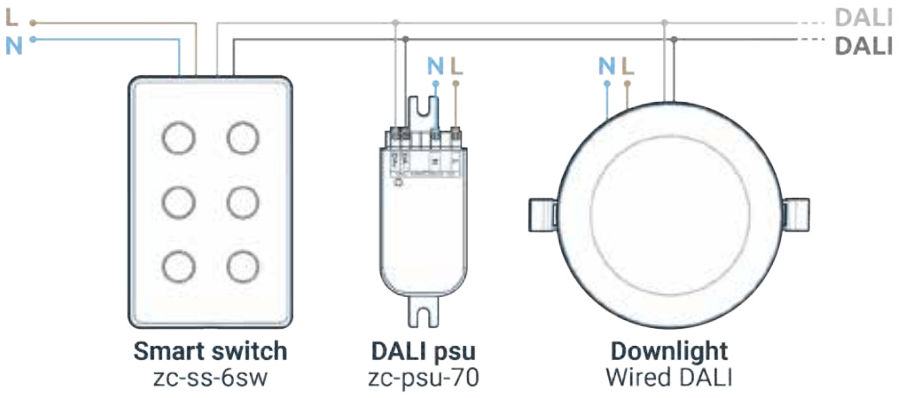


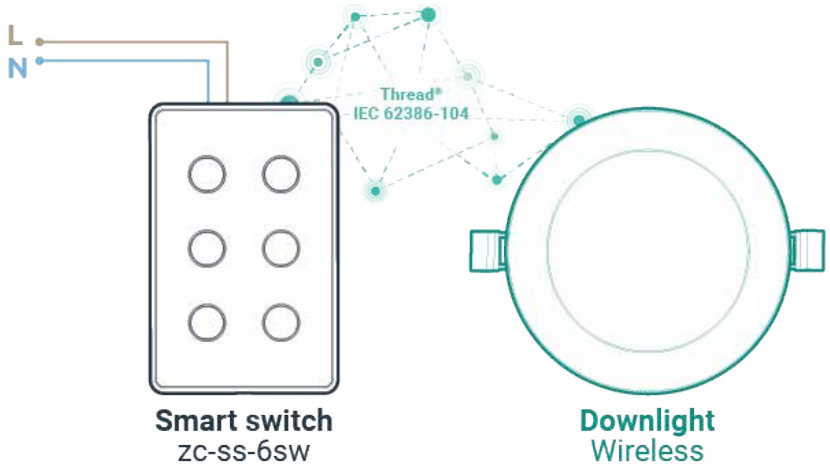
Example Wiring Diagrams

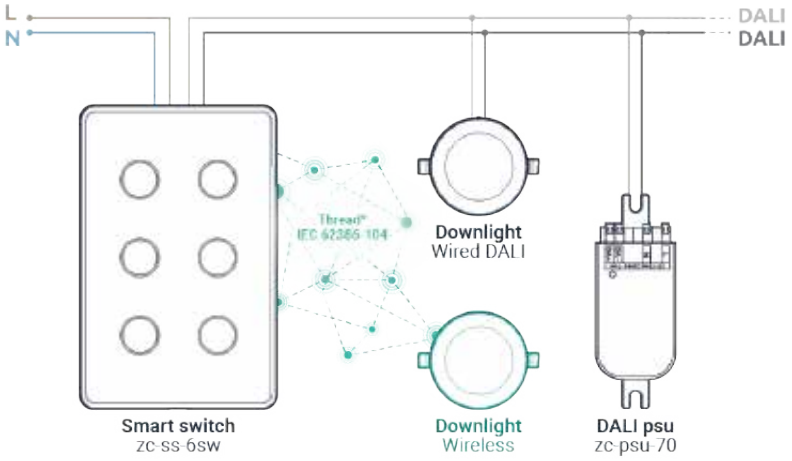




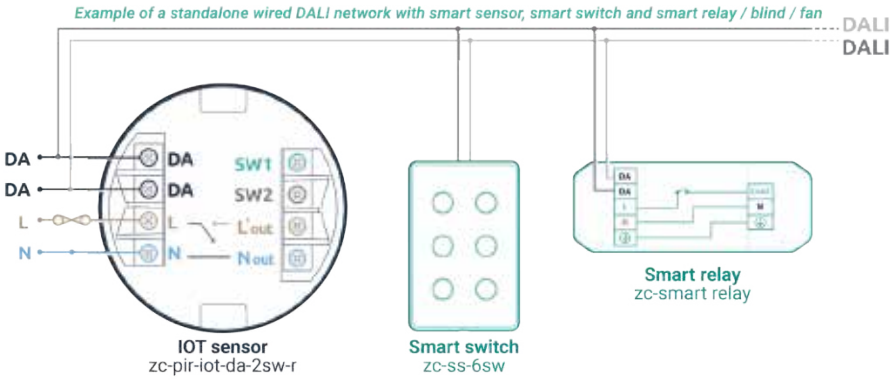




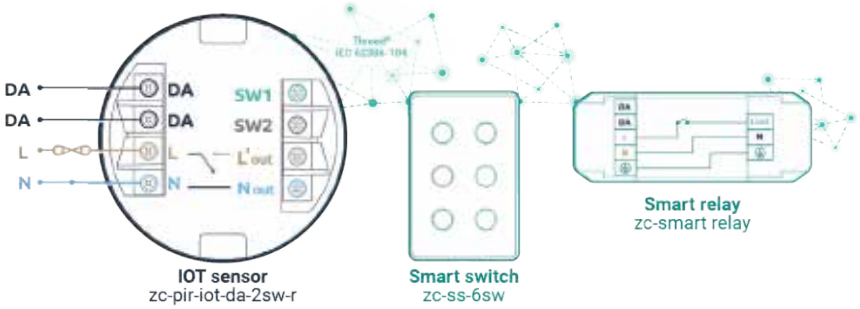




Example of a standalone wired DALI network with smart sensor, smart switch and smart relay / blind / fan



Example of a standalone wireless DALI network with smart sensor, smart switch and smart relay / blind / fan



Notes

International sales

Distributed worldwide
United Kingdom, Ireland, UAE, India, Netherlands, South Africa, China, Singapore, Australia, New Zealand

Expanding fast
New distributors worldwide are added constantly

Based in Australia
Home to an all Australian research and development team

Award winning
Our products participate in and have won multiple awards worldwide

Factory in China
zencontrol owned and operated, by founding partner Todd Milliner

Certifiable
Our products are certified and built to work for a global market

8000
square metre factory

A purpose-built 8000 m² manufacture-facility in the town of Qingxi in Dongguan

30+
billion hours run-time

30+ billion hours of product run-time measured in 2016

800,000+
products sold annually

In Australia and world-wide

DALI+
powered products

First emergency lighting company to certify a DALI+ product in the world

50
engineers hard at work

Involved in research, product development and support

150
staff employed

A team that prides itself on high quality manufacture and service

zencontrol

zencontrol.com