

# CEILING SURFACE PIR OCCUPANCY SWITCHES



This range of energy saving products is designed for the automatic switching of a wide variety of load types.

These products include a person detector and an adjustable photocell override. Designed for mounting on solid ceilings. They are hard wired and can be mounted on a square pattress box.

Product options include:

- PIR presence detector switches
- PIR absence detector switches
- PIR switches with step down illuminance
- Low voltage variants.



## SPECIFICATION

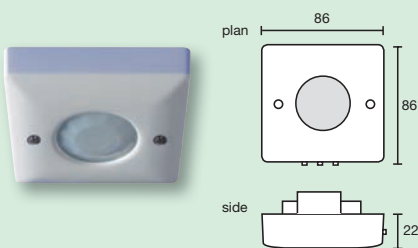
Detection zone:	360°
Max. detection area:	7m diameter at 2.4m mounting height
Max. mounting height:	5m
Photocell range:	30-1000 lux and inactive
Time lag range:	10 seconds to 40 minutes in 9 steps
Dimensions:	See diagrams below

## LOADING

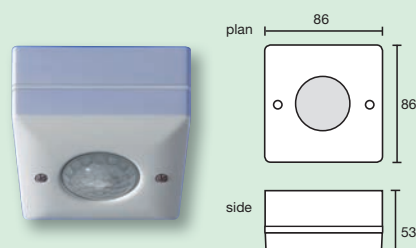
6 amps (1500W)	Resistive
6 amps (1500W)	Fluorescent
3 amps (750W)	Electronic or wire wound transformer
2 amps (500W)	LED Drivers and LED lamps and fittings
2 amps (500W)	CFL or 2D lamps
1 amp (250W)	Fans
Minimum Load:	2W resistive.

**5 YEAR WARRANTY - MADE IN THE U.K.**

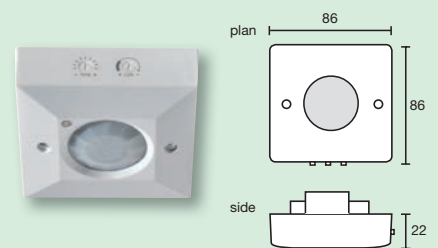
### A - Dimensions in mm



### B - Dimensions in mm

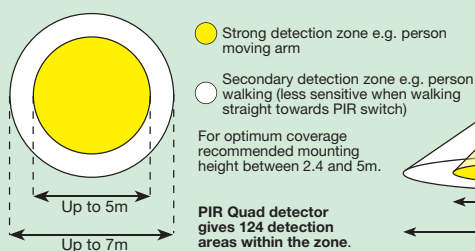


### C - Dimensions in mm

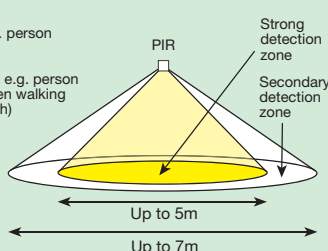


## Detection diagrams

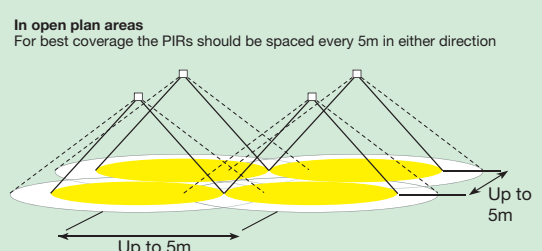
### Plan view of detection zone



### Perspective view of detection zone



### Several PIR occupancy switches

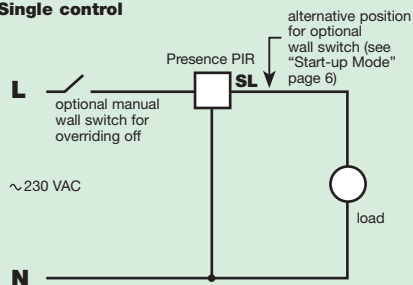


# CEILING SURFACE PIR OCCUPANCY SWITCHES

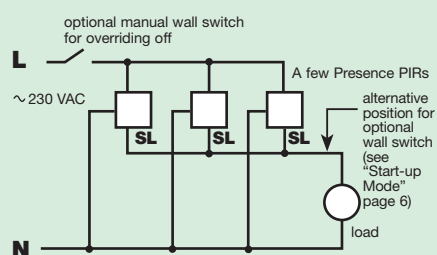
DANLERS PRODUCT ORDER CODE	DETECTION TYPE	PHOTOCELL LUX RANGE	ADDITIONAL PRODUCT DESCRIPTION	WIRING DIAGRAMS	DIMENSION DIAGRAMS
CESF PIR	Presence	30-1000 & inactive	Ceiling surface mounted PIR occupancy switch.	25.1	A
CESF PIR IP66	Presence	30-1000 & inactive	As CESF PIR, but with deeper, IP66 rated enclosure.	25.1	B
CESF PIRSV	Presence	30-1000 & inactive	As CESF PIR, but with short visit and courtesy exit modes.	25.2	C
CESFA PIR	Absence	30-1000 & inactive	As CESF PIR, but with absence detection.	25.2	C
CESP LL 10VDC	Presence	Depends on ballast	PIR occupancy switch with step down illuminance. Lights reduce to chosen set-back level on non-occupancy. For controlling 1-10VDC dimmable ballasts. Controls up to 20mA, e.g. 20 ballasts at 1mA.	25.2	A
CESP LL 10VDC IP66	Presence	Depends on ballast	As CESP LL 10VDC but with deeper, IP66 rated enclosure.	25.3	B
WACE PIR	Presence	30-1000 & inactive	Suitable for wall or ceiling mounting. See pages 34/35 for details, including detection.	25.1	A
PABO	-	-	Patress box suitable for square ceiling mounted products. 20mm knock out.	-	87 x 87 x 28mm
VARIANTS	-	-	DANLERS can also supply many variants, including low voltage versions of standard products, to special order. Please contact us to discuss your requirements.	-	-

## 25.1. Wiring diagrams Presence PIR

### Single control

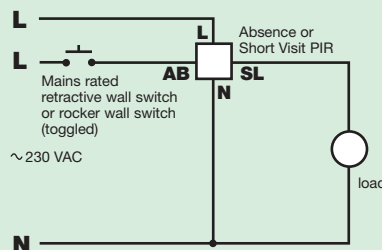


### A few controls wired in parallel

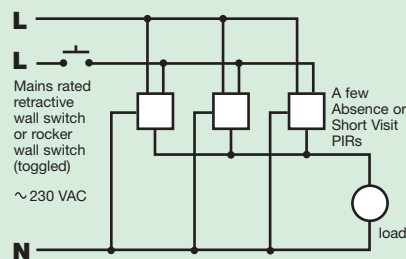


## 25.2. Wiring diagrams Absence PIR and Short Visit PIR

### Single control

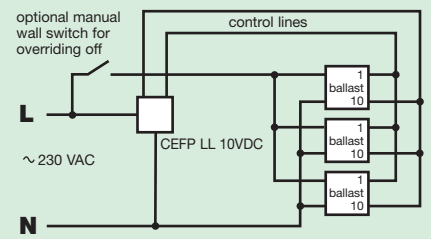


### A few controls wired in parallel



## 25.3. Wiring diagram Step Down Illuminance PIR

### Single CESP LL 10VDC (IP66)



# CEILING SURFACE PIR OCCUPANCY SWITCHES



This range of energy saving products is designed for the automatic switching of a wide variety of load types.

These products include a person detector and an adjustable photocell override. They are hard wired and can be mounted directly onto solid ceilings or onto a range of different mounting boxes.



Product options include:

- PIR presence detector switches
- PIR absence detector switches
- PIR switch / dim detector controls
- Low voltage variants.

## SPECIFICATION

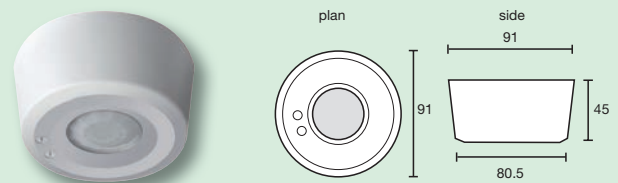
Detection zone:	360°
Max. detection area:	7m diameter at 2.4m mounting height
Max. mounting height:	5m
Photocell range:	30-1000 lux and inactive
Time lag range:	10 seconds to 40 minutes in 9 steps
Dimensions:	91mm diameter x 45mm

## LOADING

6 amps (1500W)	Resistive
6 amps (1500W)	Fluorescent
3 amps (750W)	Electronic or wire wound transformer
2 amps (500W)	LED Drivers and LED lamps and fittings
2 amps (500W)	CFL or 2D lamps
1 amp (250W)	Fans
Minimum Load:	2W resistive.

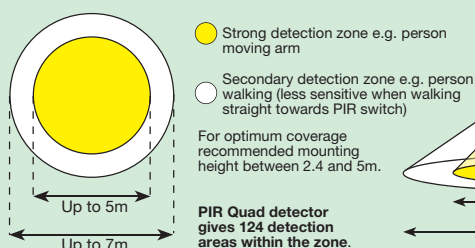
**5 YEAR WARRANTY - MADE IN THE U.K.**

## A - Dimensions in mm

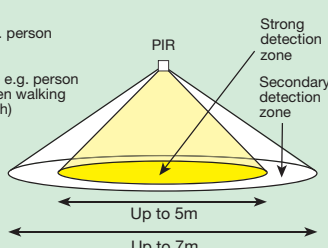


## Detection diagrams

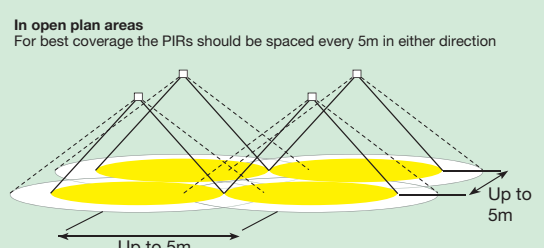
### Plan view of detection zone



### Perspective view of detection zone

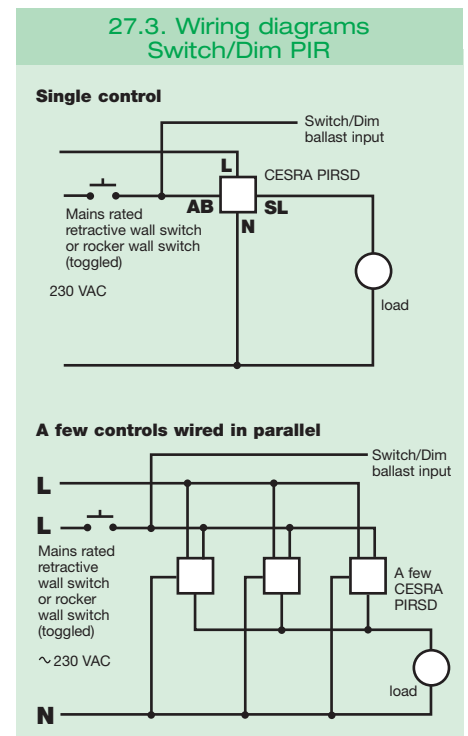
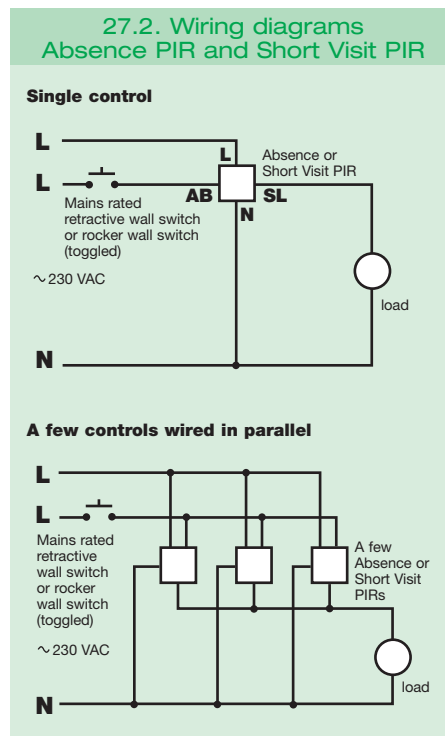
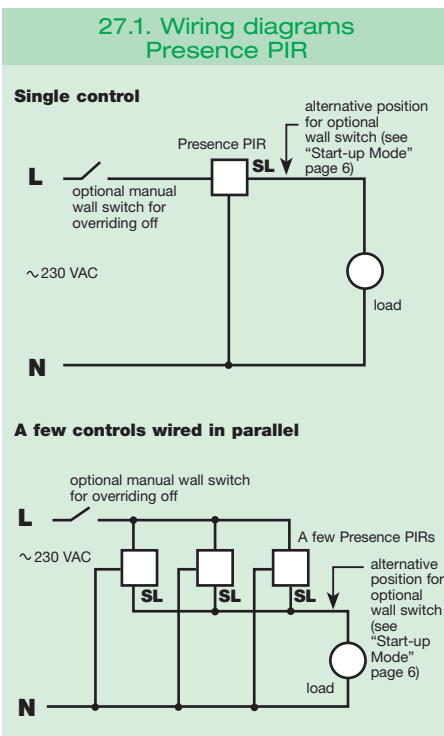


### Several PIR occupancy switches



# CEILING SURFACE PIR OCCUPANCY SWITCHES

DANLERS PRODUCT ORDER CODE	DETECTION TYPE	PHOTOCELL LUX RANGE	ADDITIONAL PRODUCT DESCRIPTION	WIRING DIAGRAMS	DIMENSION DIAGRAMS
<b>CESR PIR</b>	Presence	30-1000 & inactive	Ceiling surface mounted PIR occupancy switch.	27.1	A
<b>CESR PIRSV</b>	Presence	30-1000 & inactive	As CESR PIR, but with short visit and courtesy exit modes.	27.2	A
<b>CESRA PIR</b>	Absence	30-1000 & inactive	As CESR PIR, but with absence detection.	27.2	A
<b>CESR PIRSD</b>	Absence	30-1000 & inactive	Absence detection, with manual switching and dimming. For controlling Switch/Dim ballasts.	27.3	A
<b>VARIANTS</b>	-	-	DANLERS can also supply many variants, including low voltage versions of standard products, to special order. Please contact us to discuss your requirements.	-	-



# CEILING SURFACE PIR OCCUPANCY SWITCHES WITH DIMMING



This range of energy saving products is designed for controlling DALI, DSI and 1-10V dimmable ballasts for lighting loads.

These products are hard wired and can be mounted directly onto solid ceilings or onto a range of different mounting boxes. They can switch on when area is occupied and maintain a chosen lux level in the area by dimming the lights in response to changes in the ambient daylight level. There is also an adjustable "Run-on" timer, which allows the light to be returned to a minimum background level following a period of occupancy. This can either be for a chosen time period, or as a permanent background light.

## Product options include:

- Presence or absence detection versions for DALI ballasts
- Presence or absence detection versions for 1-10VDC ballasts
- Presence or absence detection versions for DSI ballasts.

## SPECIFICATION

Detection zone:	360°
Max. detection area:	7m diameter at 2.4m mounting height
Max. mounting height:	5m
Photocell range:	30-1000 lux and inactive
Time lag range:	10 seconds to 40 minutes in 9 steps
Run-on time:	0, 1, 2, 5, 10, 15, 20, 30 mins and infinite (always ON at minimum)
Dimensions:	91mm diameter x 45mm

## LOADING - DIMMING

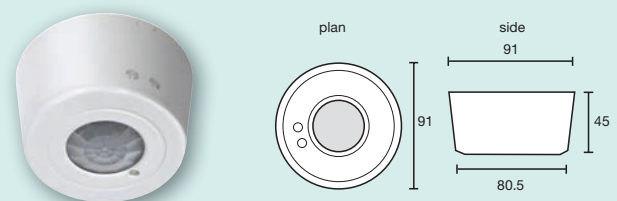
'DALIP' range:	INTERNAL DALI POWER SUPPLY: Suitable for up to 12 ballasts* at 2mA
'DALI' range:	EXTERNAL DALI POWER SUPPLY: Suitable for up to 20 ballasts* at 2mA
1-10V range:	Suitable for up to 20 ballasts* at 2mA
'DSIP' range:	INTERNAL DALI POWER SUPPLY: Suitable for up to 12 ballasts* at 2mA
'DSI' range:	EXTERNAL DALI POWER SUPPLY: Suitable for up to 20 ballasts* at 2mA

## LOADING - SWITCHING

All products listed opposite have a relay capable of switching the following loads: 6 amps (1500W) of fluorescent load. 2 amps (500W) of CFL, LED Drivers and LED lamps and fittings.

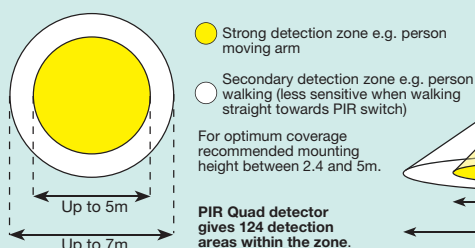
**5 YEAR WARRANTY - MADE IN THE U.K.**

## A - Dimensions in mm

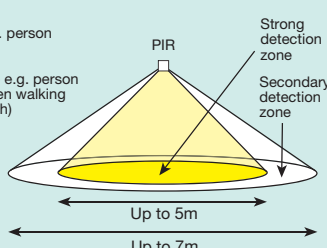


## Detection diagrams

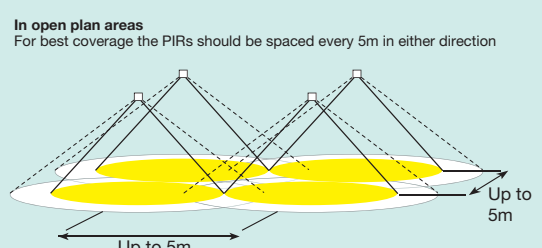
### Plan view of detection zone



### Perspective view of detection zone



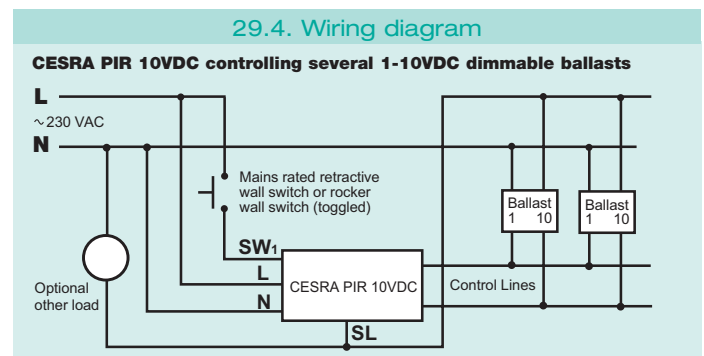
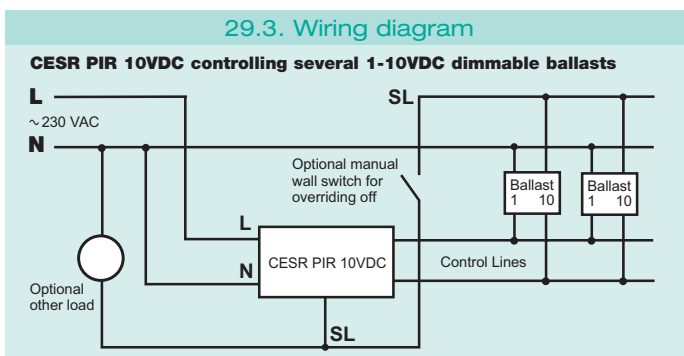
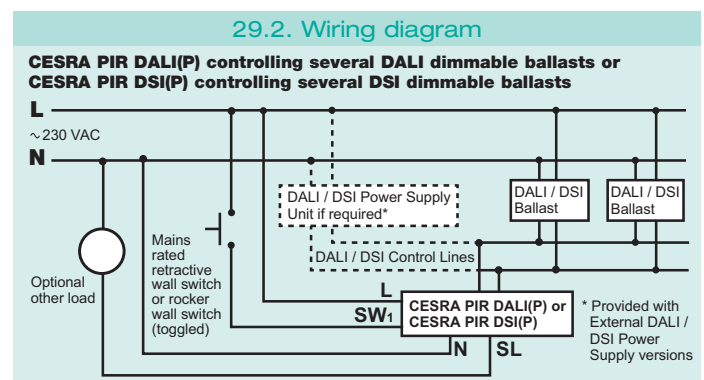
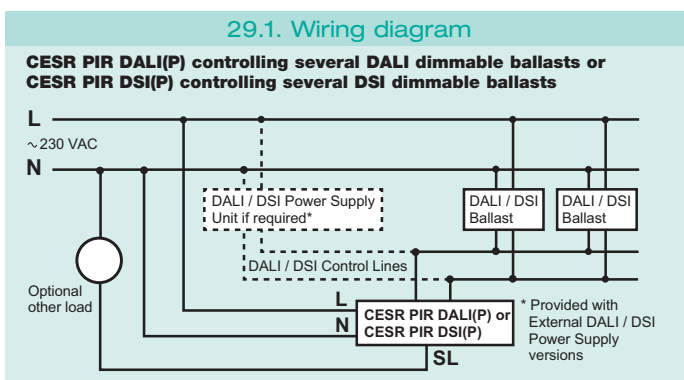
### Several PIR occupancy switches



# CEILING SURFACE PIR OCCUPANCY SWITCHES WITH DIMMING

DANLERS PRODUCT ORDER CODE	DETECTION TYPE	ADDITIONAL PRODUCT DESCRIPTION	WIRING DIAGRAMS	DIMENSION DIAGRAMS
<b>CESR PIR DALIP</b>	Presence	Daylight linked dimming control with occupancy switching. Adjustable sensitivity control. Exit function with reduced lux level for 0-30 minutes and infinite (adjustable). Integral DALI power supply (12 DALI ballasts maximum*).	29.1	A
<b>CESRA PIR DALIP</b>	Absence	As CESR PIR DALI, but with absence detection.	27.2	A
<b>CESR PIR DALI</b>	Presence	Daylight linked dimming control with occupancy switching. Adjustable sensitivity control. Exit function with reduced lux level for 0-30 minutes and infinite (adjustable). One external DALI power supply provided (20 DALI ballasts maximum*).	29.1	A
<b>CESRA PIR DALI</b>	Absence	As CESR PIR DALI, but with absence detection.	29.2	A
<b>CESR PIR 10VDC</b>	Presence	Daylight linked dimming with occupancy switching. For controlling 1-10VDC dimmable ballasts. Controls up to 20mA, e.g. 20 ballasts at 2mA.*	29.3	A
<b>CESRA PIR 10VDC</b>	Absence	As CESR PIR 10VDC, but with absence detection.	29.4	A
<b>CESR PIR DSIP</b>	Presence	Daylight linked dimming control with occupancy switching. Adjustable sensitivity control. Exit function with reduced lux level for 0-30 minutes and infinite (adjustable). Integral DSI power supply (12 DSI ballasts maximum*).	29.1	A
<b>CESRA PIR DSIP</b>	Absence	As CESR PIR DSIP, but with absence detection.	29.2	A
<b>CESR PIR DSI</b>	Presence	Daylight linked dimming control with occupancy switching. Adjustable sensitivity control. Exit function with reduced lux level for 0-30 minutes and infinite (adjustable). One external DALI power supply provided (20 DALI ballasts maximum*).	29.1	A
<b>CESRA PIR DSI</b>	Absence	As CESR PIR DSI, but with absence detection.	29.2	A

\*May vary according to ballast make and model.



# CEILING SURFACE REMOTELY PROGRAMMABLE CONTROLS



This range of programmable energy saving products includes versions for on/off switching only, and versions for controlling dimmable lighting loads.

These products are hard wired and can be mounted directly onto solid ceilings or onto a range of different mounting boxes.

- Programmable by Android (4.3 or later) phone or tablet via Bluetooth
- Bluetooth signal range up to 100m
- Password protection
- Patented 'intelligent' photocell for additional savings (GB Patent No. 2 502 847).

**ControlZAPP:** These products feature sophisticated functions and real time scheduling. They also include a person detector and an adjustable photocell override.

**EasyZAPP:** These products feature remote adjustment and batch programming. They also include a person detector and an adjustable photocell override.

**ScheduleZAPP:** These products feature remote adjustment and timed ON /OFF control. They also include an adjustable photocell override.

For a more comprehensive explanation of functions, please see pages 14-15.

## SPECIFICATION

Voltage:	Suitable for mains voltage 100 - 260Vac, 50/60Hz (switch mode).
Photocell range:	Enabled: 30 to 1000 lux. Disabled: Photocell inactive.
Dimensions:	Device: 91mm diameter x 45mm. Power Supply: 120 x 50 x 32mm. Telejack Connector: 180mm in length.

## LOADING (SWITCHING)

All standard ControlZAPP, EasyZAPP and ScheduleZAPP products can switch the following loads:

10 amps (2500W)	Resistive
6 amps (1500W)	Fluorescent
3 amps (750W)	Electronic or wire wound transformer
2 amps (500W)	LED Drivers and LED lamps and fittings
2 amps (500W)	CFL or 2D lamps
Minimum Load:	2W resistive.

## LOADING (DIMMING)

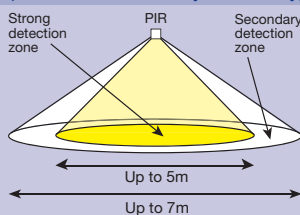
Please refer to the table opposite

## ControlZAPP and EasyZAPP products only

Detection zone:	360°
Max. detection area:	7m diameter at 2.4m mounting height
Max. mounting height:	5m
Time lag range:	Adjusted by APP from 10 seconds to 24 hours.
Short Visit Time:	Adjusted by APP from 10 seconds to 24 hours.
Sensitivity:	Adjustable via APP.

**5 YEAR WARRANTY - MADE IN THE U.K.**

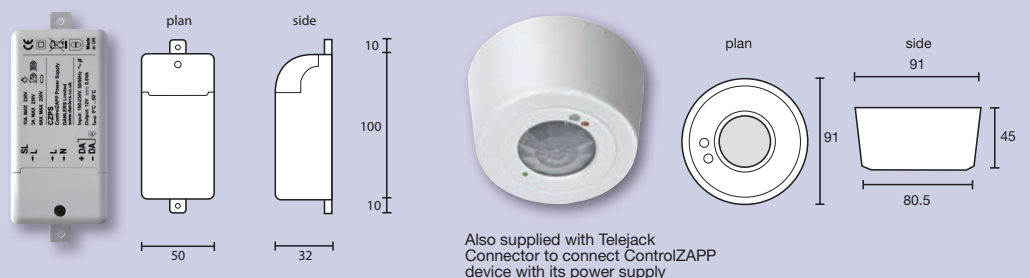
### Detection diagrams (ControlZAPP & EasyZAPP only)



For optimum coverage recommended mounting height between 2.4 and 5m.

PIR Quad detector gives 124 detection areas within the zone.

### A. Power Supply and Device dimensions in mm



# CEILING SURFACE REMOTELY PROGRAMMABLE CONTROLS

DANLERS PRODUCT ORDER CODE	LOADING INFORMATION AND ADDITIONAL PRODUCT DESCRIPTION	SCHEDULING	WIRING DIAGRAMS	DIMENSION DIAGRAMS
<b>CZCESR</b>	10 amp (2500W) Resistive. 6 amp (1500W) Fluorescent. 3 amp (750W) Transformer. 2 amp (500W) CFL, 2D, LED drivers & LED lamps.	✓	31.1	A
<b>CZCESR DALI</b>	Suitable for switching and dimming DALI ballasts (broadcast only). Can control up to 40mA, eg. 20 ballasts at 2mA (varies according to ballast type).	✓	31.2	A
<b>CZCESR 10VDC</b>	Total load of ballast, lamps plus other load not more than 6 amps, including fluorescent. Can control up to 20mA, eg. 20 ballasts at 1mA. (varies according to ballast type).	✓	31.3	A
<b>EZCESR</b>	10 amp (2500W) Resistive. 6 amp (1500W) Fluorescent. 3 amp (750W) Transformer. 2 amp (500W) CFL, 2D, LED drivers & LED lamps.	✗	31.1	A
<b>EZCESR DALI</b>	Suitable for switching and dimming DALI ballasts (broadcast only). Can control up to 40mA, eg. 20 ballasts at 2mA (varies according to ballast type).	✗	31.2	A
<b>EZCESR 10VDC</b>	Total load of ballast, lamps plus other load not more than 6 amps including fluorescent. Can control up to 20mA, eg. 20 ballasts at 1mA (varies according to ballast type).	✗	31.3	A
<b>SZCESR</b>	Switching photocell - no person detection. 10 amp (2500W) Resistive. 6 amp (1500W) Fluorescent. 3 amp (750W) Transformer. 2 amp (500W) CFL, 2D, LED drivers & LED lamps.	✓	31.1	A
<b>VOLT FREE VARIANTS</b>	Versions of the above ControlZAPP, EasyZAPP and ScheduleZAPP products are available with a volt free output, for switching a secondary signal rather than the supply voltage.	ControlZAPP and ScheduleZAPP variants only	Not illustrated	A
ANCILLARY ITEMS				
<b>DBPSU</b>	DALI / DSI power supply unit for use with DANLERS DALI / DSI controls and third party DALI / DSI control solutions. Rated at 40mA.	Not applicable	31.2	A (Power supply)
<b>WAOSW</b>	Wall override switch with AUTOMATIC / OFF control option and a temporary timed override ON switch (adjustable 1-120 minutes). For 230VAC supply only.	Not applicable	31.4	86 x 86 x 10mm

