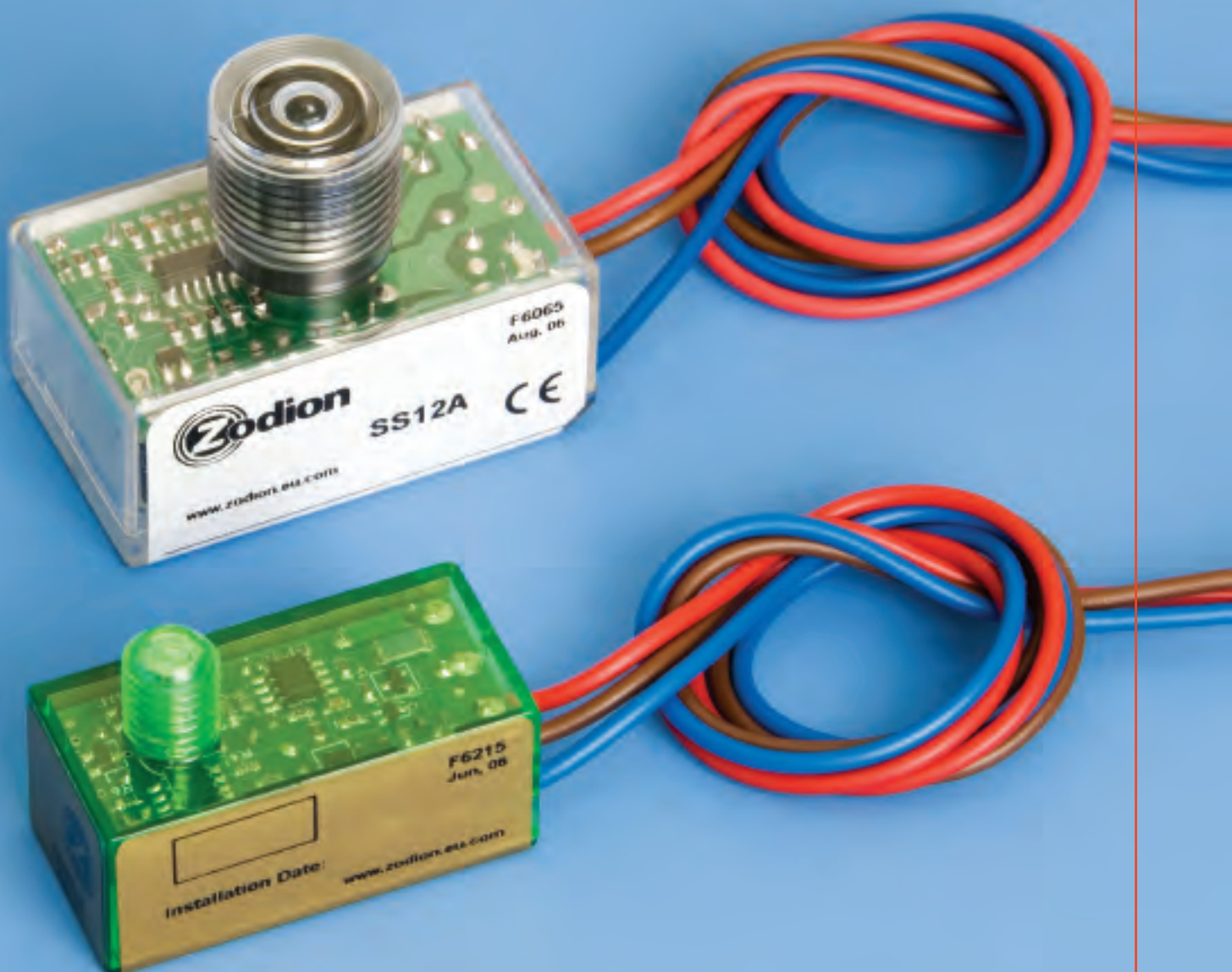




Zodion® is a Registered Trademark of Zodion Limited

## MINIATURE AND SUB-MINIATURE PHOTOCELLS



THE MOST TECHNOLOGICALLY  
ADVANCED MINIATURES AVAILABLE

# ZODION TECHNOLOGY DELIVERS SMALLER PHOTOCELL UNITS THAT COMBINE LOAD HANDLING CAPABILITY WITH ADVANCED FUNCTIONALITY

Designed to meet the ever-increasing demand for smaller photocells, the Zodion miniature range shrinks technology to fit into even the tightest of spaces.

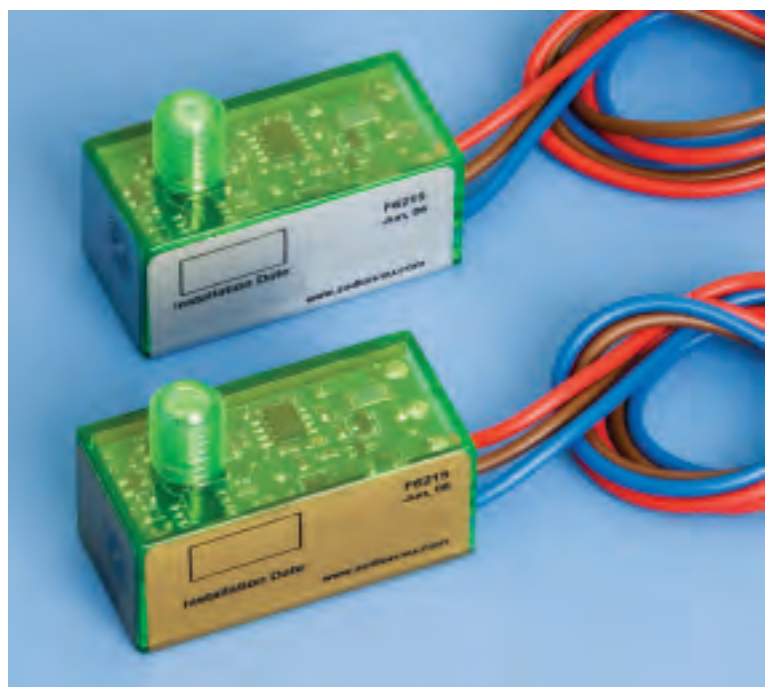
Highly cost-effective, exceptionally efficient and now including the innovative MicroMini - a photocell that's pushing back technological boundaries - Zodion miniature units save space, save money and save precious resources through ultra-precise switching.

## MicroMINI™

### Ground-breaking sub-miniature photocells

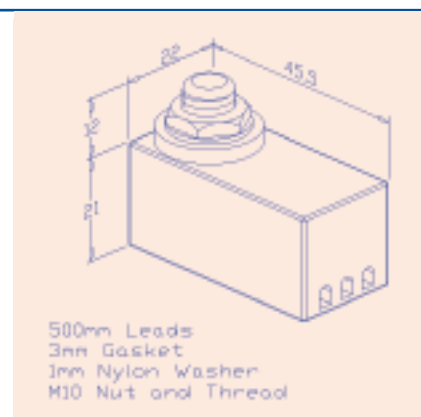
With a thread diameter of just 10mm (compared to a standard photocell's 20mm) the **MicroMINI™** will go into the most restricted areas. Because it's so small it's far easier to seal than conventional units. It's also much less obtrusive visually, leaving the lines of the lighting design uninterrupted.

There are two versions - one for a wide range of general applications, the other designed to meet the specific needs of street lighting OEMs.



## TECHNICAL SUMMARY

	<b>MicroMINI™</b>	<b>MicroMINI™ Pro</b>
Type:	Solid State	EM Relay
Sensor:	Photodiode	Filtered Photodiode
Voltage:	198 to 264VAC	198 to 264VAC
Switch on level:	35Lux	70Lux
Switching diff:	1:1.5 Positive	1:0.5 Negative
Typical load:	150W HPS subject to de-rating at higher temps	250W HPS
Operating temperature:	-20°C to +75°C	-20°C to +75°C
Max switching capacity:	1A	2.5A
Switching delay:	10 - 15 Secs	10 - 15 Secs
Enclosure material:	Polycarbonate	Polycarbonate
Power consumption:	<5W	<0.25W
Approvals:	EN 50081 - I EMISSIONS EN 50082 - I IMMUNITY	EN 50081 - I EMISSIONS EN 50082 - I IMMUNITY
IP rating:	IP 66 Correctly Fitted	IP 66 Correctly Fitted



# C-10 Cylinder Cell



## ANOTHER ZODION INNOVATION

A specialised solution developed to meet the demands of an ever-varying range of luminaire designs. The C-10 utilises the same innovative circuitry as the MicroMINI to offer the twin advantages of cylindrical body shape and tamper-resistant internal lock fixing.

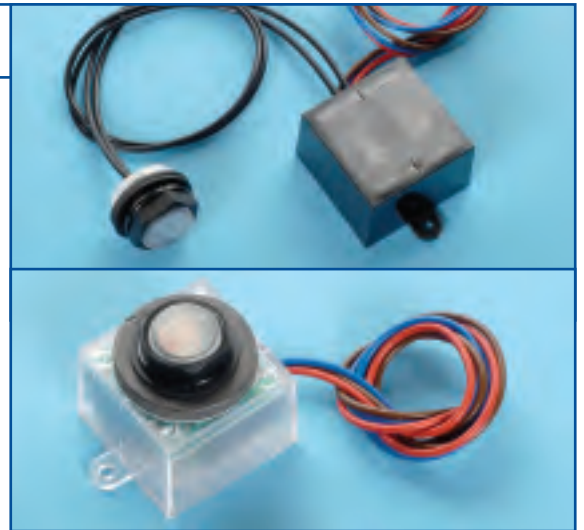
### TECHNICAL SUMMARY

Type:	Solid State
Sensor:	Photodiode
Voltage:	198 to 264V
Switch On Level:	35 Lux
Switching Diff:	1:1.5 Positive
Typical Load:	150W subject to de-rating at higher temperatures
Opening Temperature:	-20°C to +75°C
Operating Temperature:	-20°C
Max Switching Capacity:	1A
Switching Delay:	10 - 15 Secs
Enclosure Material:	Polycarbonate
Power Consumption:	<5W
Approvals:	EN 50081 - I EMISSIONS EN 50082 - I IMMUNITY
IP Rating:	IP 66 Correctly Fitted

## HL2M (One Part) HL2M/R (Two Part Remote)

### TECHNICAL SUMMARY

Type:	Solid State
Sensor:	Photodiode IC
Voltage:	198 to 264VAC
Switch On Level:	70Lux
Switching Diff:	1:0.5 Negative
Typical Load:	2 x 250W HPS
Operating Temperature:	-20°C to +70°C
Max Switching Capacity:	5A 60µF
Switching Delay:	10 - 15 Secs
Enclosure Material:	Polycarbonate
Power Consumption:	<1W
Approvals:	EN 50081 - I EMISSIONS EN 50082 - I IMMUNITY
IP Rating:	IP 66 Correctly Fitted



## HL4M (One Part) HL4M/R (Two Part Remote)



### TECHNICAL SUMMARY

Type:	EM Relay
Sensor:	Photodiode IC
Voltage:	198 to 264VAC
Switch On Level:	70Lux
Switching Diff:	1:1.5 Positive
Typical Load:	2 x 250W HPS
Operating Temperature:	-20°C to +75°C
Max Switching Capacity:	5A or 60µF
Switching Delay:	10 - 15 Secs
Enclosure Material:	Polycarbonate
Power Consumption:	<1W
Approvals:	EN 50081 - I EMISSIONS EN 50082 - I IMMUNITY
IP Rating:	IP 66 Correctly Fitted





## SS10/SS11 (One Part)

## SS10R (Two Part Remote)

**Increased life**  
Long life components

**Energy saving**  
0.5W power consumption

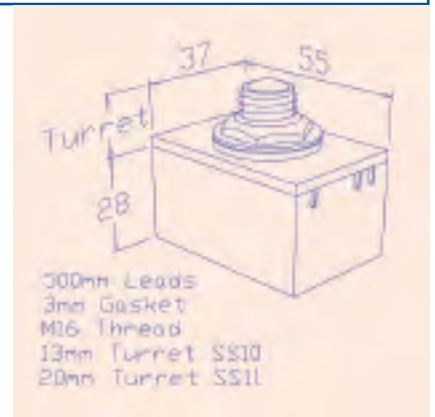
**Reduced burning hours**  
Superior grade sensor utilised

**Ease of fitting**  
Small case size and remote sensor option

**Peace of mind**  
Proven Zodion reliability and performance

### TECHNICAL SUMMARY

Type:	Fully electronic solid state
Sensor:	Photodiode IC
Voltage:	198 to 264V 50Hz
Switch on level:	70 lux
Switching diff:	1:0.5 neg 1:1.5 pos 1:3 option
Typical load:	70W
Operating temperature:	-20°C to +75°C
Max switching capacity:	0.625A or 10µF (subject to derating at higher temps)
Switching delay:	15 seconds approx
Enclosure material:	Polycarbonate
Power consumption:	<0.5W
Stud length:	SS10: 13mm SS11: 20mm
Approvals:	EN 50081 - I EMISSIONS EN 50082 - I IMMUNITY
IP rating:	IP 66 Correctly Fitted



## LOW-LIGHT

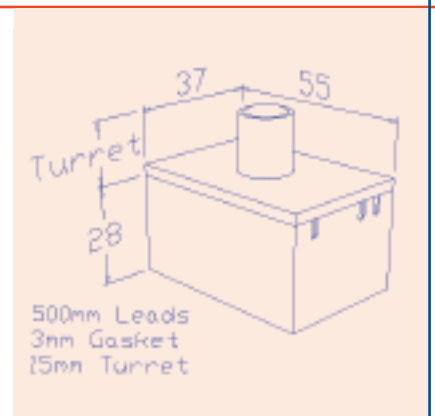
Developed for use within base-lit bollards, the Low-Light uses a discrete circuit which allows the unit to be installed into the gear tray.

When in position the sensor receives daylight from the top of the bollards and is unaffected by the fluorescent lights used within the unit.



### TECHNICAL SUMMARY

Type:	Solid state
Sensor:	Photodiode (infra red)
Voltage:	198V to 264V 50Hz
Switch on level:	Dusk
Switching diff:	Off at dawn
Typical load:	70W
Operating temperature:	-20°C to +75°C
Max switching capacity:	0.625A or 10µF (subject to derating at higher temps)
Switching delay:	15 secs
Enclosure material:	Polycarbonate
Power consumption:	<0.5W
Approvals:	EN 50081 - I EMISSIONS EN 50082 - I IMMUNITY



# SS12 (One Part) SS12/R (Two Part Remote)

## SS12HT (High Temperature)

Fitted with lens arrangement developed by Scientific Generics to maximise acceptance angle, improving accuracy and consistency of switching



### Long life

Superior quality components used throughout

Predictive load transfer switching algorithm to minimise switching stresses

### Energy saving

<0.25 W

### Reduced burning hours

High grade filtered photodiode

### Flexibility

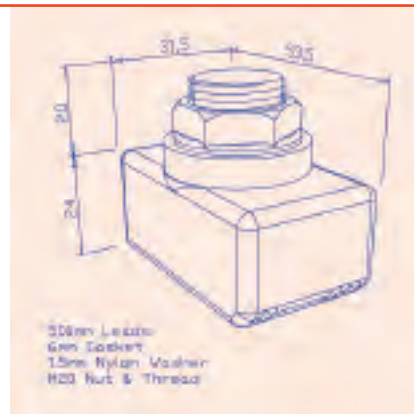
Load and temperature options available

### Peace of mind

Proven Zodion reliability and performance

## TECHNICAL SUMMARY

Type:	Electronic electro magnetic relay load switching
Sensor:	Filtered photodiode
Voltage:	198V to 264V 50Hz
Switch on level:	70 lux and 55 lux options
Switching diff:	1:0.5 neg
Typical load:	2 x 250W (3 x 400W HD and 1 x 400W HT)
Operating temperature:	-20°C +75°C (105°C high temp option)
Max switching capacity:	SS12A - 5A or 60µF SS12HD - 8A or 90µF SS12HT - 4A or 50µF
Switching delay:	15 seconds approx
Enclosure material:	Polycarbonate
Power consumption:	<0.25W
Approvals:	EN 50081 - I EMISSIONS EN 50082 - I IMMUNITY UMSUG CODE 940001 I ¼ Watt
IP rating	IP 66 Correctly Fitted





## ONE OF THE UK'S FOREMOST TECHNOLOGY SPECIALISTS

With over thirty years of experience, Zodion enjoys a worldwide reputation for the manufacture and supply of advanced electronic photo control units and lamp ballasts. These include the breakthrough SmartCELL, an outstanding development that delivers power factor correction through innovation.

Our technologies are used extensively by local authorities, utility companies, original equipment manufacturers and contractors. We also provide lighting controls for highway signage applications.



SmartCELL



Electronic Ballasts

## LUMO LIGHTING

A sister company of Zodion, Lumo Lighting is a leading supplier of interior low voltage lights that combine innovative technology with stylish design and outstanding quality.

Particularly suited for caravans, boats, motor homes, recreational, commercial and specialist vehicles, the Lumo range is available with energy-saving fluorescent, halogen and incandescent light sources for 12 and 24 volt applications.



Zodion pursue a policy of continuous product improvement and reserve the right to change technical specifications without notice.

**REF: 09/06**



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