

# Cyclops 232

This compact sensor is unlike most other dusk to dawn switches. It uses a Micro-Controller running a complex program that takes hundreds of accurate light level readings an hour. When the correct light level is reached a solid state (Philips) triac switches the load, therefore there are no mechanical moving parts to wear out. The sensor is fitted with a surge protection device as standard and can also be fitted with a non re-settable thermal fuse.



## Unique Features

- Human Eye Response Sensor
- PIC Micro-Controlled
- Triac Switching Technology
- Very Low operating power consumption
- Wide Temperature Range
- RoHS compliant (no exempt components)

## Innovative front lens

The eye of the sensor is protected by a waterproof silicone bonded lens which is manufactured in a blue filtered polycarbonate that reduces the effects of false triggering caused by some street lamps.

## Polycarbonate construction

The main body, front lens and securing nut are all moulded from polycarbonate achieving a 94V2 rating. The body is fully threaded to M20 and is supplied with a waterproof sealing washer. The sensor fits into a standard 20mm cut out and has a clamping range of 0.5mm to 75mm.

## Voltage range 110 to 254v AC

The internal circuitry detects the incoming voltage and adjusts accordingly without affecting the On and Off levels.

## Surge protection

The electricity supplied to most signs comes from many local sources (i.e. streetlights, factory units, shops) therefore a high quality surge protection device is built into the sensor which is similar to those found in special computer extension leads. This protection device ensures any damaging voltage spikes are safely removed.

## Waterproof (when installed)

The front lens has a 7mm bonding surface and is secured with a quality silicone polymer resistant to ozone, ultra-violet radiation and temperature extremes. Once the sensor has been installed with the water seal the product becomes IP65. Care must be taken to ensure that no water penetrates the rear housing around the wire exit point as this will cause permanent damage.

## Class II

The sensor has no external metallic parts and therefore requires no earth. If being used to control Class I products a separate earth connection must be run.

## Temperature range -18 to +50C

The sensor has a wide operating range and care should be taken to keep within these parameters. It is normal for the sensor housing to produce a +15C rise above ambient, when under full load.

## Resistive/ Inductive. PF load>0.96

The sensor is suited to resistive load and inductive loads with PF (power factor) correction greater than 0.96. Most high frequency fluorescent controllers meet this requirement.

## Switching loads and levels.

The sensor can switch loads from between 1w and 300w maximum (150watts @ 110volts) (300watts @ 240volts) The switching Lux levels are programmed into the sensor during manufacture and can be set to any required level. Standard settings are (55 Lux ON) (85 Lux OFF)