

## GW-226 Photocontrol (UK Series)

The GW-226 Photocontrol with integral microprocessor control is the optimum photocell available for applications where switching accuracy, reliability and long service life are critical.

Combining design excellence with high-quality components, the GW-226 photocontrol consistently delivers exceptional performance with a wide variety of street and amenity lighting applications.

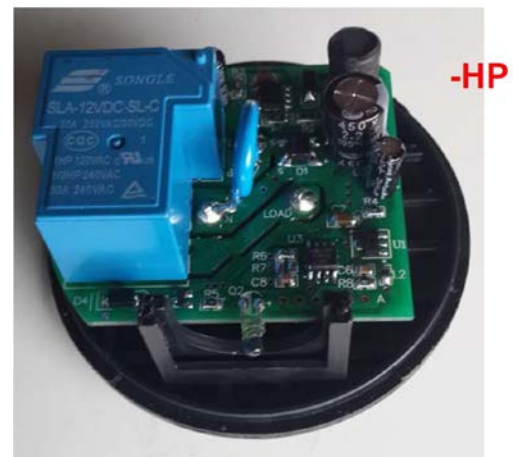
The photocontrol is securely housed within a highly durable, sealed IP-65 polycarbonate housing with a UV-stabilized, polycarbonate cone (certified by UL for (f1) outdoor installations), and has been subjected to an exhaustive test program to ensure consistent, long-term performance even after prolonged exposure to adverse weather conditions.

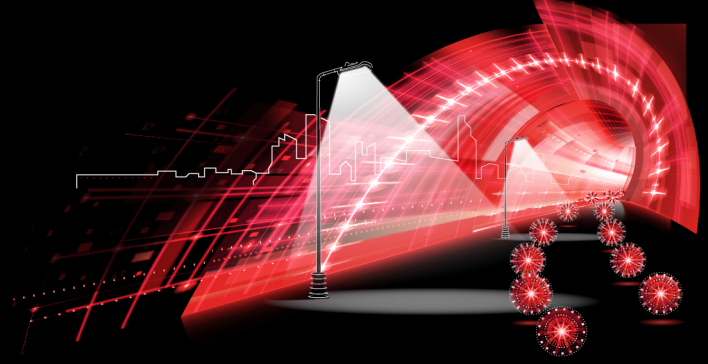
### FEATURES

- Very low power consumption
- IR-filtered phototransistor
- Accurate switching
- Zero crossover voltage switching
- Durable, polycarbonate housing
- Suitable for use with LED, halogen or discharge lighting
- IP65 /IP67
- Clear/opaque polycarbonate cover available

### APPLICATIONS

- PFI street lighting projects
- Roadway lighting
- Local authority street lighting
- Security lighting
- Footway and sign lighting
- Industrial, retail, commercial and parking lot lighting

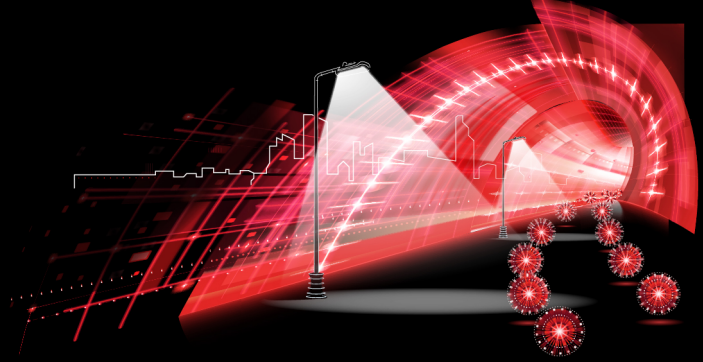




### Specifications for Photocontrol Model GW-226-1.5 CL or OP, Multivolt, RoHS Compliant

- 1) Photocontrol is a twist-lock that meets or exceeds all requirements of BS 5972-1980 Omni-directional, except as noted below.
- 2) Easy-to-install Omni-direction meeting BS 5972
- 3) Easy-to-maintain twist-lock meeting ANSI C136.10
- 4) Thermal switch providing 30-60s time delay
- 5) PCB-controlled, advanced stable thermal switch
- 6) Polycarbonate housing in opal or clear
- 7) Photodiode and DC relay switching
- 8) Line voltage 105-305 VAC @ 50/60 hertz.
- 9) Load rating shall be at least 1800 VA. Control must be able to operate incandescent, ballast, LED and lighting contractor type loads. Control must be capable of switching LED drivers that may have up to 200 amps of inrush current.
- 10) Control relay shall be sealed.
- 11) Turn ON shall be  $1.5 \pm 0.3$  ftc. Turn OFF shall be 1.5 times the turn ON level. Photo-sensor: Sealed silicon sensor. Cadmium sulphide cells are not acceptable. Light sensor shall not be sensitive to LED fixture light.
- 12) Failure mode: Control will fail ON per ANSI definition. Relay must use normally closed contacts.
- 13) Time delay: Control must have instant ON and 2 - 5 seconds "OFF" delay.
- 14) Surge protection: Shall be in the form of one or two Metal Oxide Varistor (MOV) wired line to neutral. MOV(s) shall be rated a minimum of 500 joules and 20,000 amp surge. Finished control shall not fail when subjected to 10 surges of 9500 amps applied at 1 minute intervals. Surge wave form as described in ANSI C136.10-2008 section on High Surge.
- 15) Housing: Housing of photoelectric control shall be transparent, opal and of an impact and UV resistant material. Impact resistance of housing shall be greater than 1.30 Joules at -20°C. Top and sides of cover shall be 2.54 mm or thicker, certified UL (f1) for outdoor usage.
- 16) Drop test: Control must be capable of withstanding a drop of .914 metres to a concrete floor without causing damage to the housing or changing electrical operation.
- 17) Markings: The following must appear on the control: month/year of manufacture, individual serial numbers, model description, operating voltage range and load rating.
- 18) Power consumption: Control shall consume 0.25 watts or less at 240 VAC.
- 19) Environmental: Control shall be RoHS compliant. It shall not contain lead, cadmium, mercury or hexavalent chromium. Pigments in plastic parts shall not contain bromine compounds or heavy metal pigments.
- 20) Warranty: IP-65 is 12 years, IP-67 is 15 years.

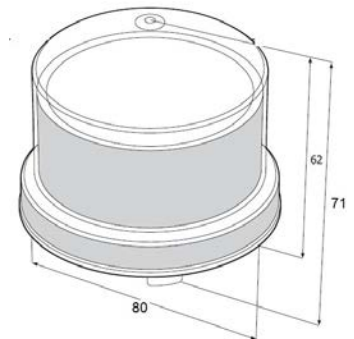
**WARRANTY** All photocontrols are marked with date of manufacture. This product is warranted to operate within its original specifications and shall be free of electrical or mechanical defects. Consult factory for the warranty time period. Manufacturer's warranty shall be limited to providing a replacement control of same type and shall not cover costs of removal, replacement or loss of service nor any consequential damages. This warranty is in lieu of and excludes all other warranties either expressed or implied. Full warranty statement is available by consulting factory.



## Technical Specifications - GW-226

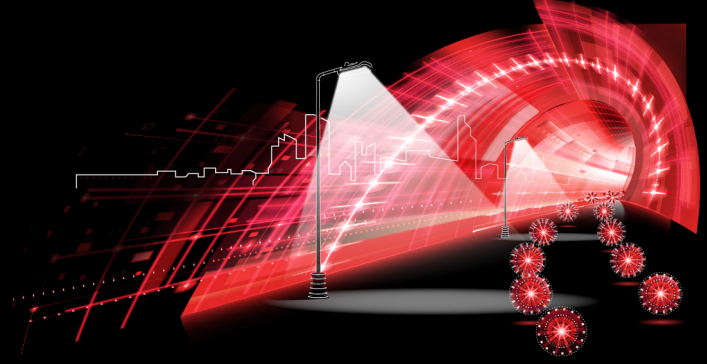
### Specifications:

<b>Sensor type</b>	Filtered Silicon Photodiode
<b>Sensor control</b>	Microprocessor
<b>Standard switching level</b>	70 lux 'On', 35 lux 'Off'. Alternative settings can be factory pre-programmed on request
<b>Switching differential</b>	1:0.5
<b>Operating voltage range</b>	110-270 Vac, 50/60 Hz
<b>Applicable voltage</b>	105-305 Vac
<b>Maximum lamp load</b>	3 x 400 W inductive (96 $\mu$ F), 10 A
<b>Power consumption</b>	< 0.25 W
<b>Operating temperature range</b>	-20 °C to + 60 °C
<b>Ingress protection</b>	IP67
<b>Surge protection</b>	2 MOV each rated for 320 + Joules
<b>Alternative switching levels</b>	Factory pre-programmable to meet customer requirements, supports inverse ratio based on its MCU program.
<b>Options</b>	Conduit base 'Reverse acting' switching differential 110 Vac units
<b>Approvals</b>	RoHS compliant. CE marked and compliant with EMC emission and immunity standards Designed to meet the requirements for UMSUG Code 95 0000 0000 100
<b>Dimensions H x D (Diameter)</b>	80 x 71 mm



### Notes:

1. GW-226 uses SMPS for much lower consumption.
2. GW-226 does not have a calibration resistor, but uses storage and comparator.
3. GW-226 uses an IR-filtered phototransistor made in Japan



## Silicon Phototransistor Spectral Response

