

GW-150-GPS-SMT (UK) Wireless Photocontrol

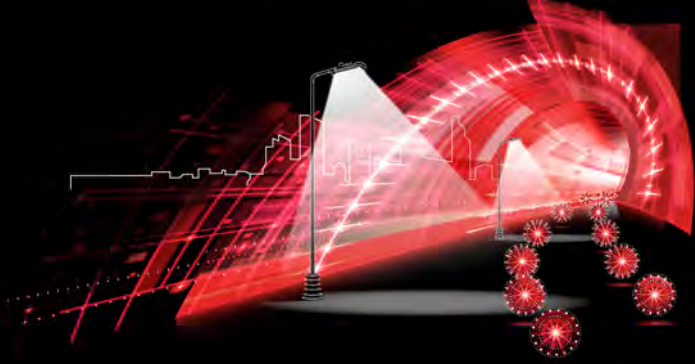
DESCRIPTION

The GW-150-GPS-SMT wireless photocontrol is designed for roadway and area lighting. Basic functions include on/off and dimming, while advanced functions include ambient-light-level detection, current and voltage monitoring and positioning by internal GPS.

KEY FEATURES

- Wide input voltage: 105-305VAC
- Security: AES128 encryption
- Built-in GPS
- Dimming by time schedule or ambient light with a SMT phototransistor
- ZigBee® communication, auto-mesh
- Standard NEMA 5 lines interface
- Voltage, current, power, power factor, temperature and operating time reading
- Remote switch on/off, maximum internal 16A relay outputs
- Dimming interface: 0-10V (PWM could be customized)
- LED luminaire-failure detection
- Lightning protection
- IP Rating: IP65 (SGS certified), optional IP67 available
- 5-pin configuration

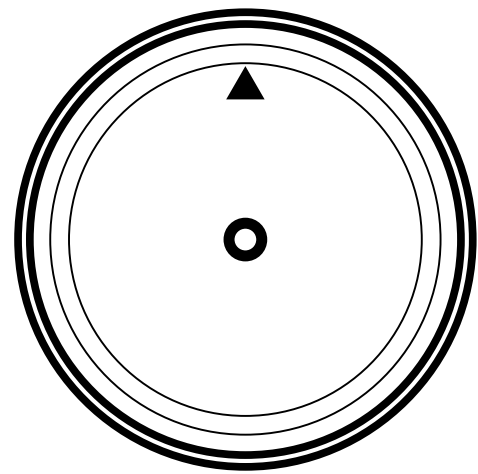
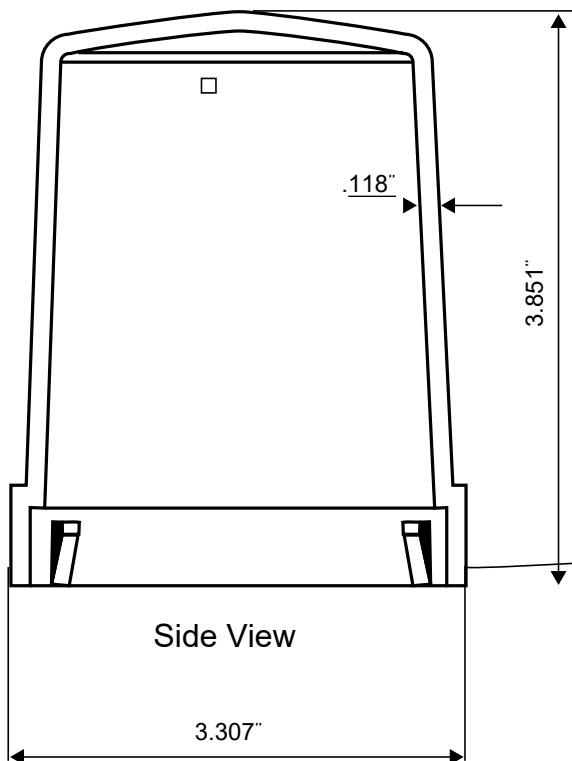




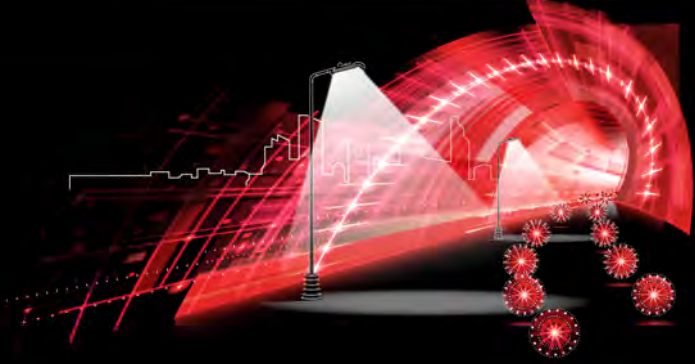
BASIC SPECIFICATIONS

- Luminaire load: up to 1100W LED
- Maximum load in rush current: 100A.
- Surge Protection: 10KV, 5KA additional protection available in 10KV increments up to 60KV
- Operating temperature: -40 to 70C
- Static power consumption: <2W
- Power consumption with luminaire off: <0.4W(120V); <0.5W(230V)
- Radio frequency: 2.4GHz ISM Band -- Meets IEEE802.15.4
- Security: AES128 encryption
- GPS: Accuracy \pm 6 meters
- Failure mode: Fail OFF (Optional Fail ON)
- Complies with ANSI C136.10, C136.41 and C136.2
- Complies with FCC Part 15 and UL773
- Warranty: 5-year standard

Cover



Top
View

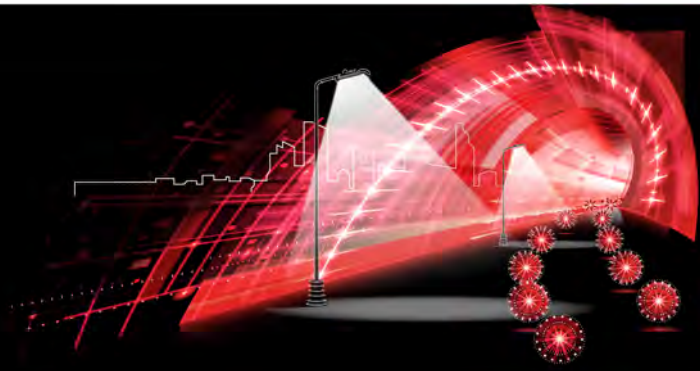


CHARACTERISTICS

PARAMETER	TEST CONDITIONS	MIN	TYP	MAX	UNIT
AC input voltage		105	/	305	VAC
Frequency range		50		60	Hertz
Power consumption		0.4	/	2	W
Dimming voltage		0	/	11	V
Dimming current	10V output	0	1	5	mA
Dimming accuracy		-1	/	+1	%
Metering voltage range		105	/	305	VAC
Metering current range*		0	/	5	A
Metering voltage accuracy		-2	/	+2	%
Metering current accuracy		-2	/	+2	%
RF transmission distance	Internal antenna	500	/	/	m
RF transmission rate		/	250	/	Kbps
RF band		2400	/	2483	MHz
RF receiver sensitivity		98.8	/	/	dBm
RF transmitter		/	/	20	dBm
GPS sensitivity		/	-160	/	dBm

*At load currents above 5 amps, metering accuracy may be reduced. Consult factory for details.

PARAMETER	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Operating temperature		-40	/	70	C
Storage temperature	Indoor dry, well-ventilated place	-40	/	85	C
Relative humidity	Non-condensing	/	/	98	%
Vibration	C136.31	/	/	1.5	G
Warranty			5		years
Ingress	Not installed	/	IP53	/	
Ingress	Protection while mounted to luminaire		IP64		
Impact	Drop to concrete floor	/	1	/	meters
Flammability		UL94-V0			



SAFETY

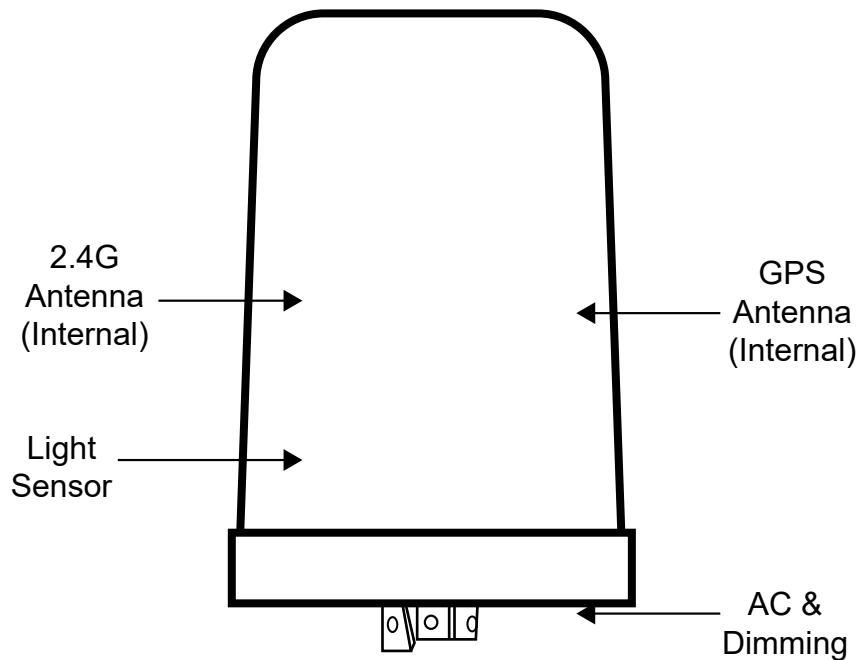
TYPE	Test level	
Isolation voltage	AC to dimming terminals	3kVac,10mA,1min
Certification	UL773/EN61010-1/EN61347	

ELECTROMAGNETIC CAPABILITY

TYPE	Standard	Test level
Electrostatic discharge immunity	IEC61000-4-2	Level 4
RFEMS	IEC61000-4-3	Level 2
Electrical fast-transient burst immunity	IEC61000-4-4	Level 4
Surge immunity	IEC61000-4-5 ANSI C136.2	Level X 10KV,5KA
Conducted disturbances induced by RF field immunity	IEC61000-4-6	Level 2
Power-frequency, magnetic-field immunity	IEC61000-4-8	
Electromagnetic-disturbance characteristics	FCC PART15 Class B / EN55015	
Electromagnetic compatibility and Radio spectrum Matters (ERM)	EN300328/EN301489-1/EN301489-17/EN300440-2/ EN62479/EN61326-2-1	



PARTS DESCRIPTION



WIRELESS PHOTOCONTROL

The wireless photocontrol communicates with the gateway, receiving commands for on/off switching and dimming, while transmitting power data, temperature, operating hours and GPS location back to the gateway.

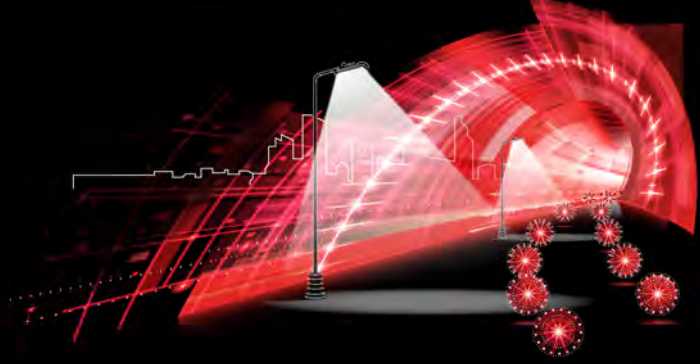
GPS MODULE

Automatically obtains its own location and time.

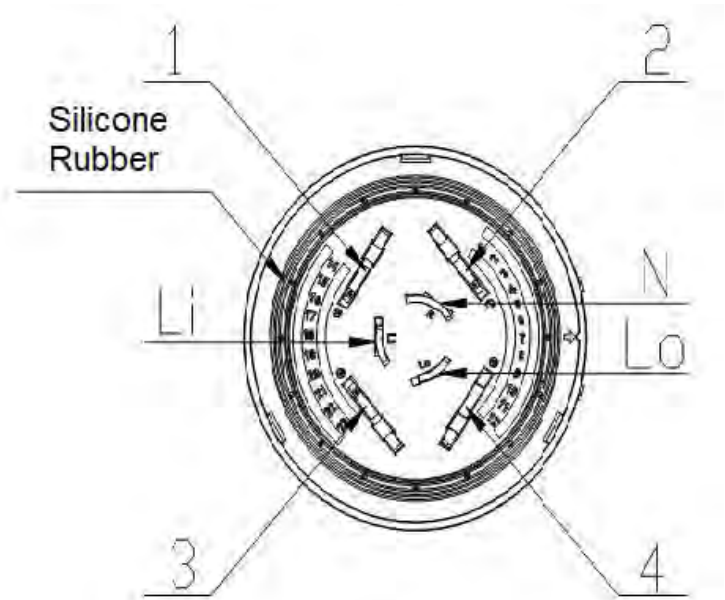
LIGHT SENSOR

The light sensor is a SMT Silicone Phototransistor, with a spectral range of sensitivity:350~970nm

The GW-150-GPS-PR wireless photocontrol functions as a stand-alone photocontrol without network presence, turning the luminaire on at 16(±6) lux, and off at 50(±6) lux(default).

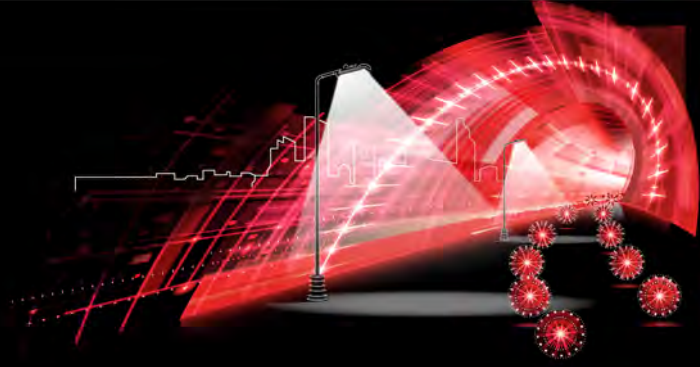


INTERFACE



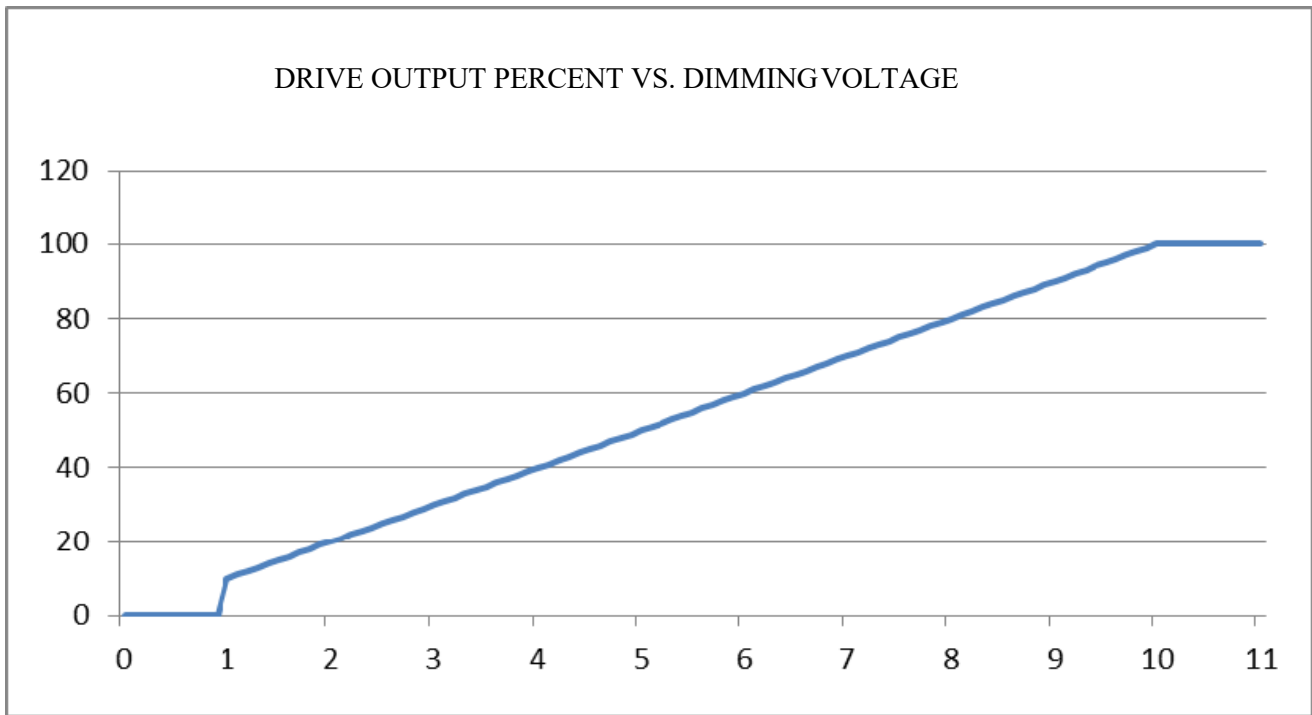
- PIN Li: AC line input**
- PIN Lo: AC line output (to luminaire)**
- PIN N: Neutral line**
- PIN 1: CH1 Dim+**
- PIN 2: CH1 Dim-**
- PIN 3: open**

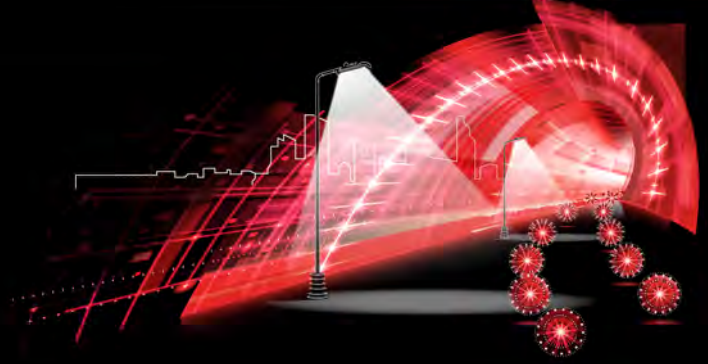
- **A rubber seal ensures IP65 ingress protection**
- **Complies with ANSI C136.41-2013**



DIMMING

DEFAULT DIMMING CURVE as shown below.





RECEPTACLE



Use with TWIST-LOCK PHOTOCONTROL RECEPTACLE. (Conforms to ANSI C136.41)

