

# **GW-130 Wireless Node**

### DESCRIPTION

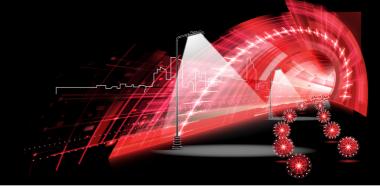
The GW-130 wireless node control is designed for roadway and area lighting. Basic functions include on/off and dimming control, as well as remote monitoring of current, voltage, power, power factor, operating time reading and electric energy.



- Wide input voltage: 105-305VAC
- Security: AES128 encryption
- IEEE 802.15.4 communication, auto-mesh
- Standard NEMA interface for easy installation
- Voltage, current, power, power factor, temperature and operating time reading
- Remote switch on/off
- Maximum internal 16A relay outputs
- Dimming interface: 0-10V (PWM available)
- LED lamp failure detection
- Fault detection and reporting
- Surge protection
- IP Rating: IP65 (SGS certified), Optional IP67 available
- 5/7-pin configuration

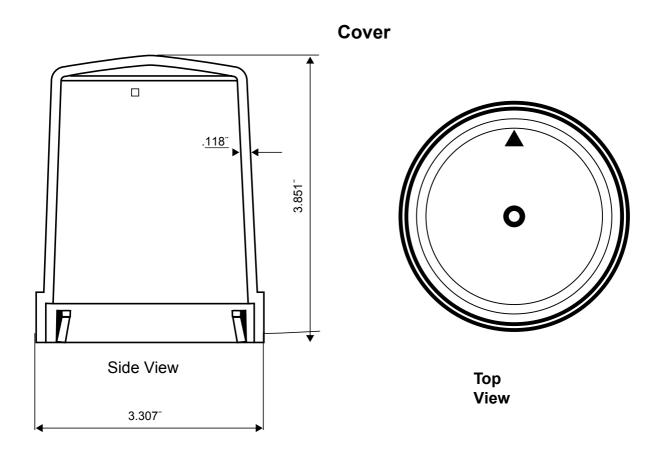


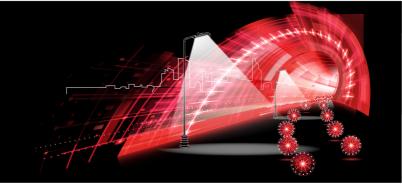




#### **BASIC SPECIFICATIONS**

- Luminaire load: up to 1100W LED
- Maximum load inrush current: 100A
- Surge protection: 10KV, 5KA
- Operating temperature: -40° to 85°C
- Static power consumption: <2W
- Power consumption with luminaire off: <0.4W(120V); <0.5W(230V)
- Radio frequency: 2.4GHz ISM Band. Meets IEEE 802.15.4 standard.
- Security: AES128 encryption
- Failure mode: Fail OFF (Optional Fail ON)
- Complies with ANSI C136.10, C136.41 & C136.2
- Complies with FCC Part 15. Complies with UL773
- Warranty: 5-year standard





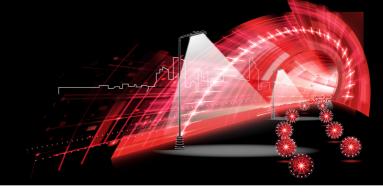
## **CHARACTERISTICS**

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 input	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

<sup>\*</sup>At load current above 5 amps metering, accuracy may be reduced. Consult factory for details.

PARAMETER	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Operating temperature		-40	/	70	С
Storage temperature	Indoor dry, well-ventilated place	-40	/	85	С
Relative humidity	Non-condensing	/	/	98	%
Vibration	C136.31	/	/	1.5	G
Warranty			5		years
Ingress	Not installed	/	IP54	/	
Ingress	Protection while mounted to luminaire		IP65		
Impact	Drop to concrete floor	/	1	/	meters
Flammability		UL94-V0			





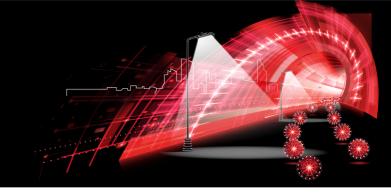
## **SAFETY**

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

## **ELECTROMAGNETIC CAPABILITY**

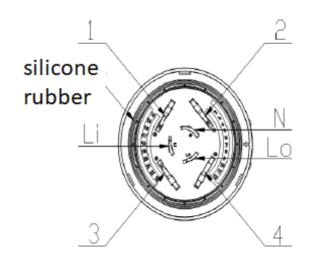
ТҮРЕ	Standard	Test level	
Electrostatic discharge immunity	IEC61000-4-2	Level 4	
RFEMS	IEC61000-4-3	Level 2	
Electrical fast-transient burst immunity	IEC61000-4-4	Level 4	
Surge immunity	IEC61000-4-5 ANSI C136.2	Level X 10KV,5KA	
Conducted disturbances induced by RF field immunity	IEC61000-4-6	Level 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		





#### **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

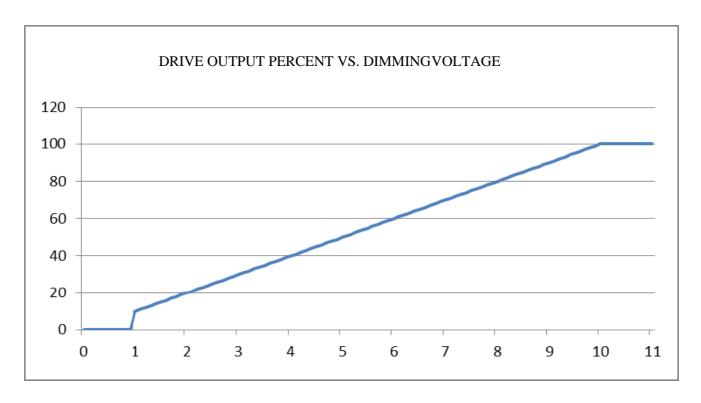
• A silicone rubber seal ensures IP65 ingress protection

• Complies with ANSI C136.41-2013

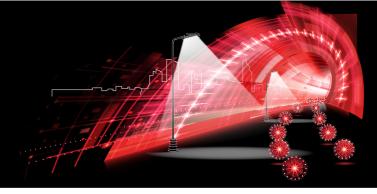


## **DIMMING**

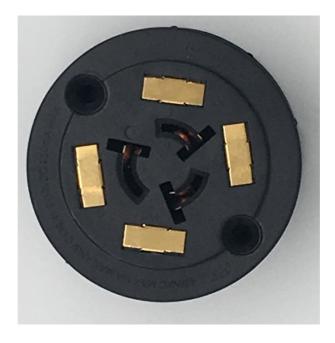
DEFAULT DIMMING CURVE as shown below.







## **RECEPTACLE**



Use with TWIST-LOCK (ANSI C136.41) PHOTOCONTROL RECEPTACLE. (Conforms with 7-Pin Dimming & Standard 3- 5 Pin)

