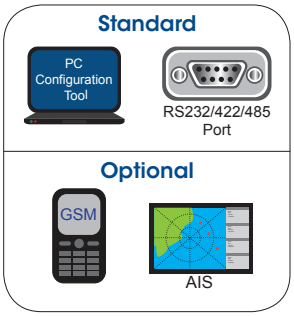
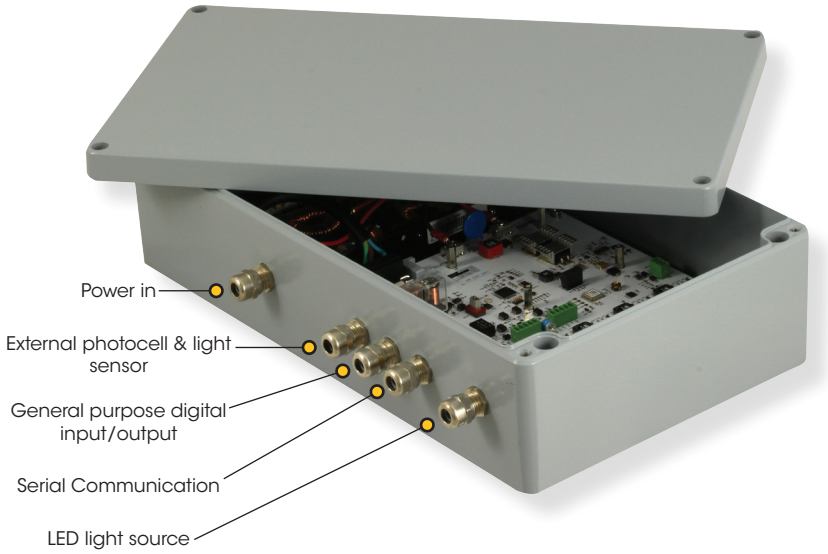
Universal LED Controller

SL-LED-CTRL Series for rotating or fixed lenses

V2_2015





The Sealite Advantage

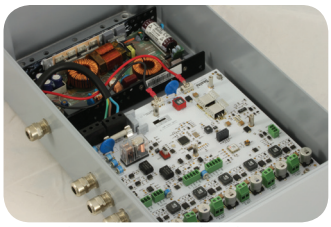
- Single driver capable of controlling Sealite's range of LED light sources
- Built-in interface for turntable lens rotation monitoring
- PC Programmer for setup, diagnostic & testing
- Built-in Interface in RS232 and RS422/485 format for third party monitoring
- AIS & GSM built-in options available removing the need to interconnect additional devices
- General purpose inputs (two) & outputs (two)
- Alarm contact for remote monitoring
- Built-in interface for external photocell connection
- Built-in temperature sensor
- Two controllers may be connected by RS485/422 for hardwired synchronisation of more than 6 LED outputs. For instance this allows redundant control of a 12 sided LED Light source
- Lighthouse can now be synchronised to breakwater or buoy channel

The Universal LED Controller is used in conjunction with Sealite's LED Light Source. The model includes a range of advanced monitoring features and can deliver power up to 270 watts.

The LED Controller is available in configurations for 6 sided and 12 sided light sources conveniently packaged into the same enclosure.

Used in conjunction with Sealite's LED Light Source

The LED Light Source is designed to replace traditional lamps in classical lighthouse optics. Their long life and high luminous efficiency makes huge savings in energy and maintenance possible, whilst retaining the heritage value of classical optical apparatus.


LED Controller with 110/240 supply

Advanced Monitoring

The LED Controller has advanced monitoring capabilities utilising alarm relay and RS232 and RS422/485 to monitor;

- LED status
- Power supply
- Temperature
- Light levels
- Internal fault conditions
- Turntable rotation speed

LED Controller works in conjunction with Sealite's SL-LED Series Light Source

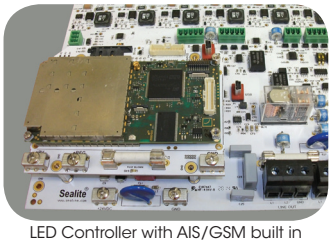
Advanced Programming

The LED Controller can be configured to suit a range of requirements including partial, phased-in or complete lighthouse modernisation. Sealite's convenient PC Configuration Tool allows a host of features to be set including;

- Multiple intensity settings
- 310 flash settings including custom character
- Adjustable on/off lux levels
- Low battery threshold
- Alarm conditions
- Speed tolerance variation

Redundant Failsafe

The LED controller includes a series of independent driver outputs, providing redundancy as each LED is controlled by a separate output driver.



LED Controller with AIS/GSM built in

Sealite
www.sealite.com
w: www.sealite.com
e: info@sealite.com

Sealite Pty Ltd
AUSTRALIA
t: +61 (0)3 5977 6128

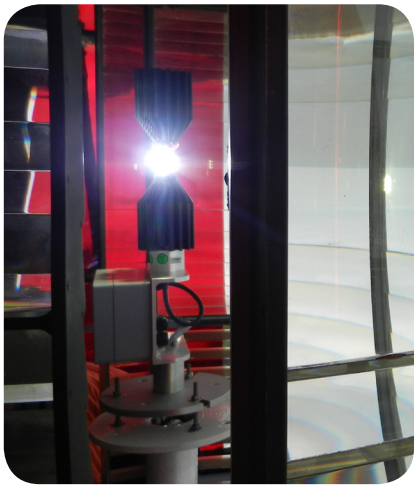
Sealite USA, LLC
USA
t: +1 (603) 737 1311

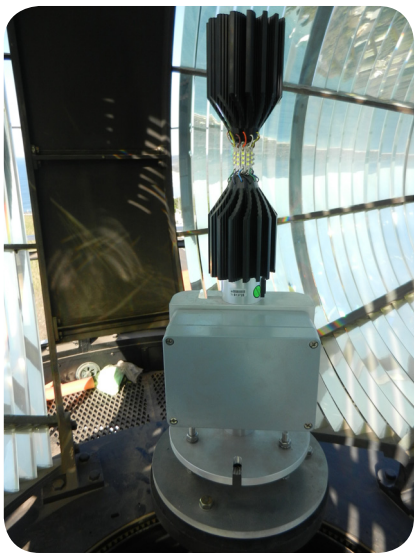
Sealite United Kingdom Ltd
United Kingdom
t: +44 (0) 1502 588026

Universal LED Controller

SL-LED-CTRL Series for rotating or fixed lenses

V2_2015





SPECIFICATIONS • *

	SL-LED-CRTL Series
Controller Characteristics	
No. LED Drivers	Single board: 6 drivers Dual board: 12 drivers
Driver output characteristics	SL-LED-CRTL-01: capable of driving up to 21V @ 1.5A SL-LED-CTRL-02: capable of driving up to 15V @ 3A
Available Flash Characteristics	Up to 310 including 256 IALA recommended, & 1 custom
Intensity Adjustments	User adjustable
Electrical Characteristics	
For single board 6-sided version:	
Current Draw (A)	VDC Model: Variable up to 11.25A @ 24VDC VAC Model: Variable up to 1A
Power (W)	VDC Model: Variable up to 270W VAC Model: Variable up to 240W
Circuit Protection	Polarity protected
Nominal Voltage	VDC Model: 18–32VDC VAC Model: 110–240VAC
Temperature Range	-40 to 60°C
External 3rd Party Monitoring	Via RS232/422/485
AIS Connection	Via RS232/422/485 (if built-in module not selected)
Alarm Contacts	1 x Volt free 250VAC @ 5A or 30VDC @ 5A
External Inputs	2 x general purpose digital inputs 3–24VDC
External Outputs	2 x general purpose digital outputs will switch up to 24VDC @ 1A
Physical Characteristics	
Body Material	Baked enamel coated aluminium
Mounting	4 x 6mm screws
Height (mm/inches)	111 / 4½
Width (mm/inches)	400 / 15¾
Depth (mm/inches)	230 / 9
Mass (kg/lbs)	5 / 11
Product Life Expectancy	Up to 12 years
Environmental Standards	
Low Temperature	MIL-STD-810G Method 502.5
High Temperature	MIL-STD-810G Method 501.5
Salt Fog	Rated to withstand continuous exposure to salt water and spray
Humidity	0 – 100%, condensing
Certifications	
CE & Electrical	FCC Part 15 Rules & ICES-003. EN61000-6-1: 2007 (IEC61000-6-1:2005) Part 6-1 Immunity. EN61000-6-3: 2007 (IEC61000-6-3: 2006) Electromagnetic compatibility (EMC) - Part 6-3 Emission. IEC61000-4-2: 2008 Ed 2 Part 4-2 Electrostatic discharge immunity test Level 4. IEC61000-4-3: 2010 Ed 3.2 Part 4-3. Radiated, radio-frequency, electromagnetic field immunity. IEC61000-4-6: 2008 Ed3. , Electromagnetic compatibility (EMC) - Part 4-6 Immunity.
Quality Assurance	ISO9001:2008
Waterproof	IP67
Intellectual Property	
Trademarks	SEALITE® is a registered trademark of Sealite Pty Ltd
Warranty *	3 years
Options Available	• AIS Type 1 or Type 3 • GSM Monitoring & Control System • Solar Power • Float charged battery standby systems • GPS antenna for synchronisation

• Specifications subject to change or variation without notice
* Subject to standard terms and conditions
† Intensity setting subject to solar availability

CE

Optional GSM Monitoring & Control

A built-in GSM module for monitoring and control is also available enabling users to access diagnostic data via cell-phone. The system can also be configured to send out alarm SMS text messages to designated cellular telephone numbers. Users can also have alarms and reports sent to designated email addresses.

Optional Type 1 or Type 3 AIS

The Universal LED Controller is available with a built-in, low-powered Type 1 or Type 3 AIS. The unit can be monitored both by GSM and AIS simultaneously.

Optional GPS Antenna

For flashing fixed lens applications the station can now be flashed in synchronisation with a buoy channel or breakwater by fitting an antenna if these channels are already fitted with GPS.

Sealite® www.sealite.com
w: www.sealite.com
e: info@sealite.com

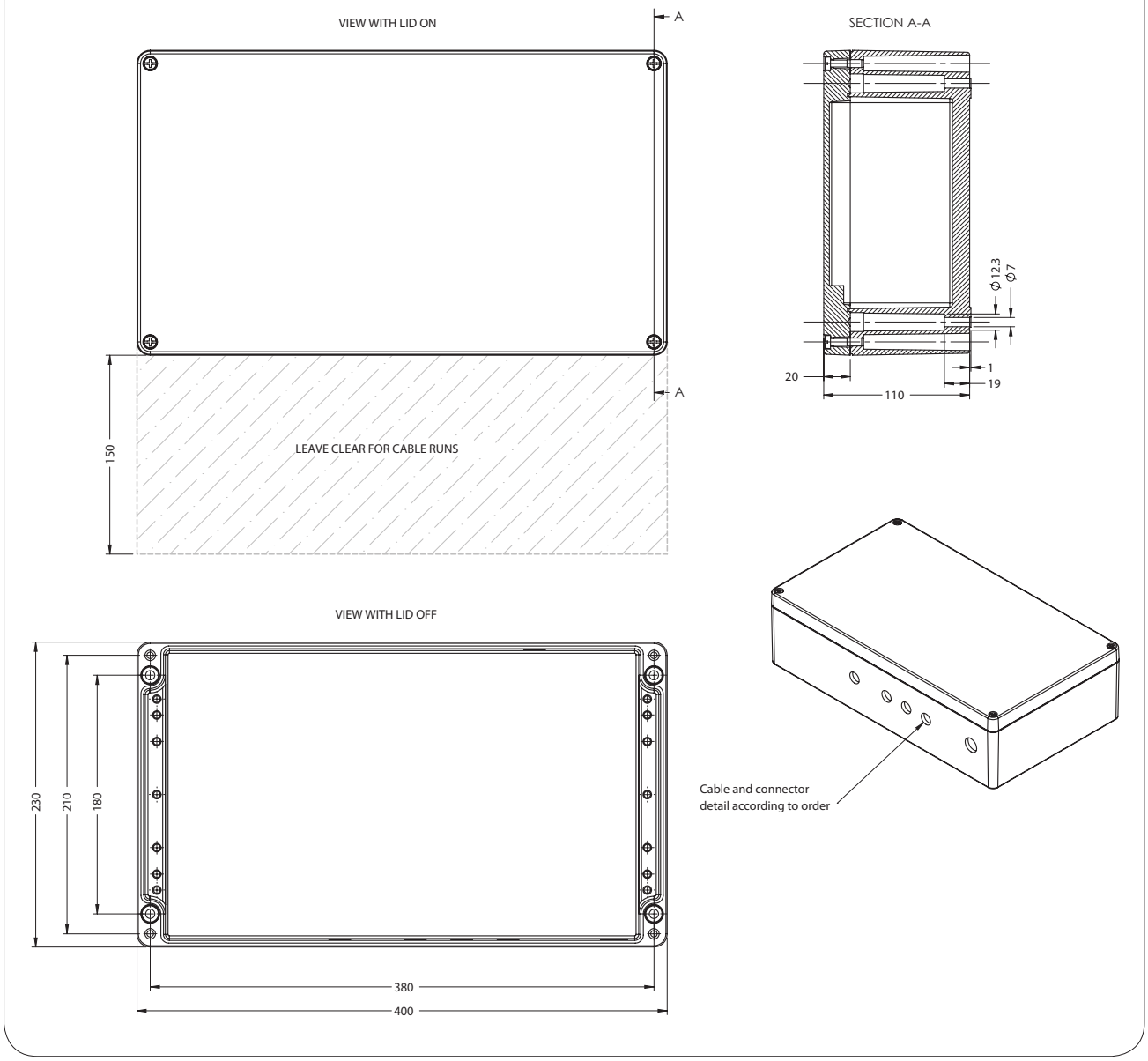
Sealite Pty Ltd
AUSTRALIA
t: +61 (0)3 5977 6128

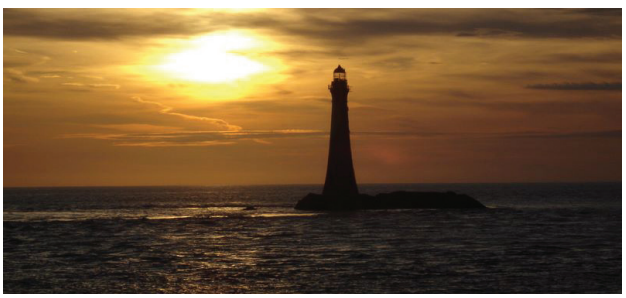
Sealite USA, LLC
USA
t: +1 (603) 737 1311

Sealite United Kingdom Ltd
United Kingdom
t: +44 (0) 1502 588026

Universal LED Controller

SL-LED-CTRL Series for rotating or fixed lenses





Sealite
www.sealite.com
w: www.sealite.com
e: info@sealite.com

Sealite Pty Ltd
AUSTRALIA
t: +61 (0)3 5977 6128

Sealite USA, LLC
USA
t: +1 (603) 737 1311

Sealite United Kingdom Ltd
United Kingdom
t: +44 (0) 1502 588026