

# PELANGI

## REMOTE MONITORING

## LightGuard Basic

The LightGuard Basic is a simple, compact, universal GSM monitoring outstation for beacons and buoys.



**LightGuard Basic Remote Monitoring Outstation**

- Provides a more reliable alternative to a radio system, where distance or interference are an issue.
- Remote control and monitoring from any pc with an internet connection, via the WebSCADA system.
- Customers SIM card is mounted inside on the circuit board - as simple as putting a new SIM card in a phone.
- Internal LED's enable immediate verification of successful communications.

The LightGuard Basic was specially designed to provide a retrofit solution to monitor any type of marine lantern up to 8A load.

- Can be connected to any manufacturer's lantern product without the need for an interface, or separate PE cell control.
- Complete with integral GSM antenna. Option for external antenna if required.
- No complicated programming is required. Just disconnect lantern cable to "LG" and reconnect a new cable to the terminals the lantern was originally connected too.
- In addition to lantern monitoring, the LightGuard Basic also provides an additional monitoring facility for other equipment on the station with:
  - One separate analogue voltage monitored
  - One separate digital voltage monitored
- For Buoy applications the LightGuard Basic is fitted with an integral tilt sensor, providing monitor data in XYZ co-ordinates. This could be used to provide an immediate warning of an impact or capsized. This may give the operator enough warning to attend to or recover the buoy before it is lost.

- Pelangi will pre-programmed the site latitude and longitude into the LightGuard Basic to set up its astronomic clock. This removes the need to fit an extra PE cell to prevent false alarms if the lanterns own PE cell is used to activate the lantern.
- No extra PE cell is required to prevent false alarms when the lanterns own PE cell switches it off.



**INDUSTRIAL MEMBER  
INTERNATIONAL  
ASSOCIATION OF  
LIGHTHOUSE  
AUTHORITIES**

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### MONITORING DETAILS

**Standard Status Message** : Text Message “TEL”

Time, Battery Voltage, Light on/off, Analogue voltage and digital voltage plus station temperature.

**Engineers Message** : Text Message “ TEL1”

Light on/off, Actual/Max /Min Current, Amp hours (consumed since power up), Operational hours (same period) actual flash code.

These texts can be sent directly to the station and station will respond to that mobile.

### Alarms

The LightGuard Basic will send an alarm upon:

Lantern failure

Low Battery Voltage

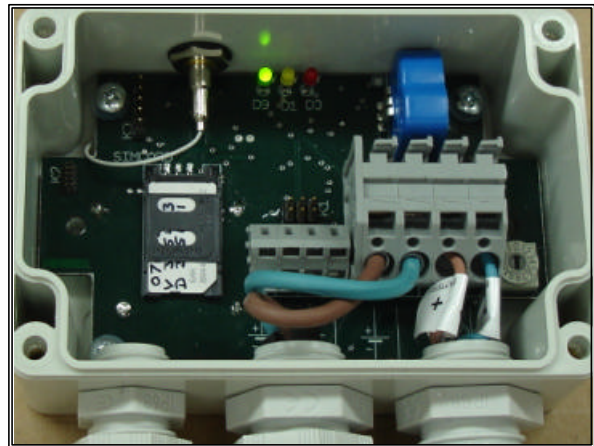
Shock Impact

This alarm can be sent to an engineer’s mobile phone or to Pelangi’s WebSCADA server which can then send up to 3 emails.

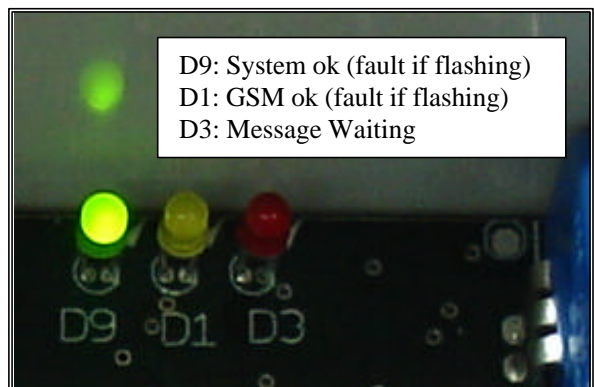
### Internet Access :

Pelangi hosts up to 5 sites free on their WebSCADA server which clients can visit. The server can be programmed to poll the station automatically once a day to create a history file of the station status enabling comparison reports, graphs of voltage and alarms if communication is lost.

Larger users with over 5 sites are expected to purchase their own WebSCADA programme . See separate leaflet for details.



LightGuard Basic - internal layout



Detail of the diagnostic LED's

### TECHNICAL SPECIFICATION (Mk 1 version)

Weight	: 250 grams
4 x 4mm Fitting Centres	: 110mm x 90mm
Overall dimensions	: 122mm x 120mm
Height	: 55mm
Max lamp current	: 5 amps per lamp
Voltage Output voltage	: 12 of 24 V DC
Switching Light levels	: 50 Lux and 100 Lux

