

LightGuard

Remote Monitoring and Control of Aids to Navigation

LightGuard is the Carmanah/SABIK product family for remote monitoring and control of all kinds of fixed and floating Aids-to-Navigation. LightGuard is based on extensive experience with different remote monitoring technologies and approaches. The key elements in the LightGuard concept are:

- **Reliable**

Fewer interfaces, fewer problems! LightGuard monitoring is either directly integrated to the controller of the lantern or it uses current monitoring to determine the status of the light

- **Simple to Install**

LightGuard can be delivered fully integrated into most Carmanah/Sabik lights. Other manufacturers' lanterns and previous generations of Sabik lanterns can be monitored with LightGuard by monitoring the current to the lantern. No serial interfacing or communication protocols are needed

- **Simple to use**

In most cases no special configuration is necessary. If configuration is needed, it can easily be done with a user friendly Windows software. With the software it is possible to print or save documentation of the configuration made

- **Reporting**

LightGuard can report valuable information about the AtoN to e-mail addresses and to your LightGuard system

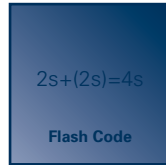


LightGuard Functions (availability depending on LightGuard product)



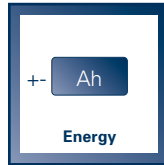
LightFunction

Basic information about the state of the light; active or inactive



Flash Code

On flashing beacons the LightGuard can report the actual flash code running based on the measured supply current to the light



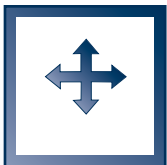
Energy

Ampere-hour counting; lantern consumption and solar system production



Voltage

Battery voltage and temperature



Position

The exact position of the AtoN is calculated with an algorithm to achieve a precision within 2 meters



Off Location

Alarm if the AtoN moves outside of the defined boundaries



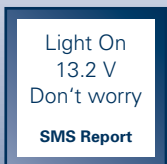
Astronomical Clock

Sunrise and sunset times of the location are used to either activate the light or to monitor the photocell



Binary Report

Binary messages including detailed status information sent to LightGuard Base station for presentation on e.g. LightGuard Monitor



SMS Report

Receive text messages on mobile phone with AtoN status information and use the mobile phone to send commands to the AtoN