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 monitoring integrated in the lantern

One-way-communication

Two-way-communication

LIGHT**GUARD**
TECHNOLOGY INSIDE

Remote monitoring & control

Webbased Remote monitoring Software
- Alarming
- Light Status
- Accessable with browser

LIGHTGUARD Server
LIGHTGUARD Server

Hosting
Use a Server hosted and maintained by Sabik

LightGuard Basic for monitoring just the light function

Light Guard

Flasher

Lamp LED's

Current Sense
LightGuard measures and analyses the current to the lamp detecting the Lamp active, the Flash Code, Power, Consumption and Filament operation Time.

SABIK
a **Carmanah** company

LightGuard Functions (availability depending on LightGuard product)

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

2s+(2s)=4s
Flash Code
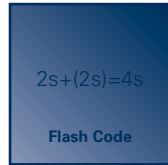
Flash Code
On flashing beacons the LightGuard can report the actual flash code running based on the measured supply current to the light

+− Ah
Energy
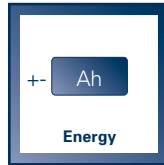
Energy
Ampere-hour counting; lantern consumption and solar system production

Voltage

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

Off Location
Alarm if the AtoN moves outside of the defined boundaries

Astronomical Clock

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

111001010001001
001001000010011
101010010010010
111101010111010
110101010001011
Binary Report

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

Light On
13.2 V
Don't worry
SMS Report
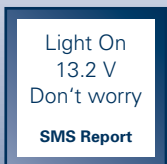
SMS Report
Receive text messages on mobile phone with AtoN status information and use the mobile phone to send commands to the AtoN

www.sabik-marine.com