Sabik Marine Controller Functionality

LED Current Output

Sabik PDA Programmer
or Sabik USB Interface

SABIK MARINE CONTROLLER

IR

Event Log

Bluetooth®

LEDDriver

Programmable
Flash Code

Flasher

Illumination h

Photocell

Solar Charger
PWM, 16 A

1-Wire
Synchronization

Production Ah

Load Ah

Battery Management

Voltage, Avg/max/
Min

Main
Battery

SECONDARY BATTERY INTERFACE

Used Ah

Used Ah

Battery Switch

Primary
Battery

AUXILIARY BOARD

DO

DI

RS485 Interface

GPS/GSM BOARD

Acceleration
Sensor

GPS

LIGHTGUARD
TECHNOLOGY INSIDE
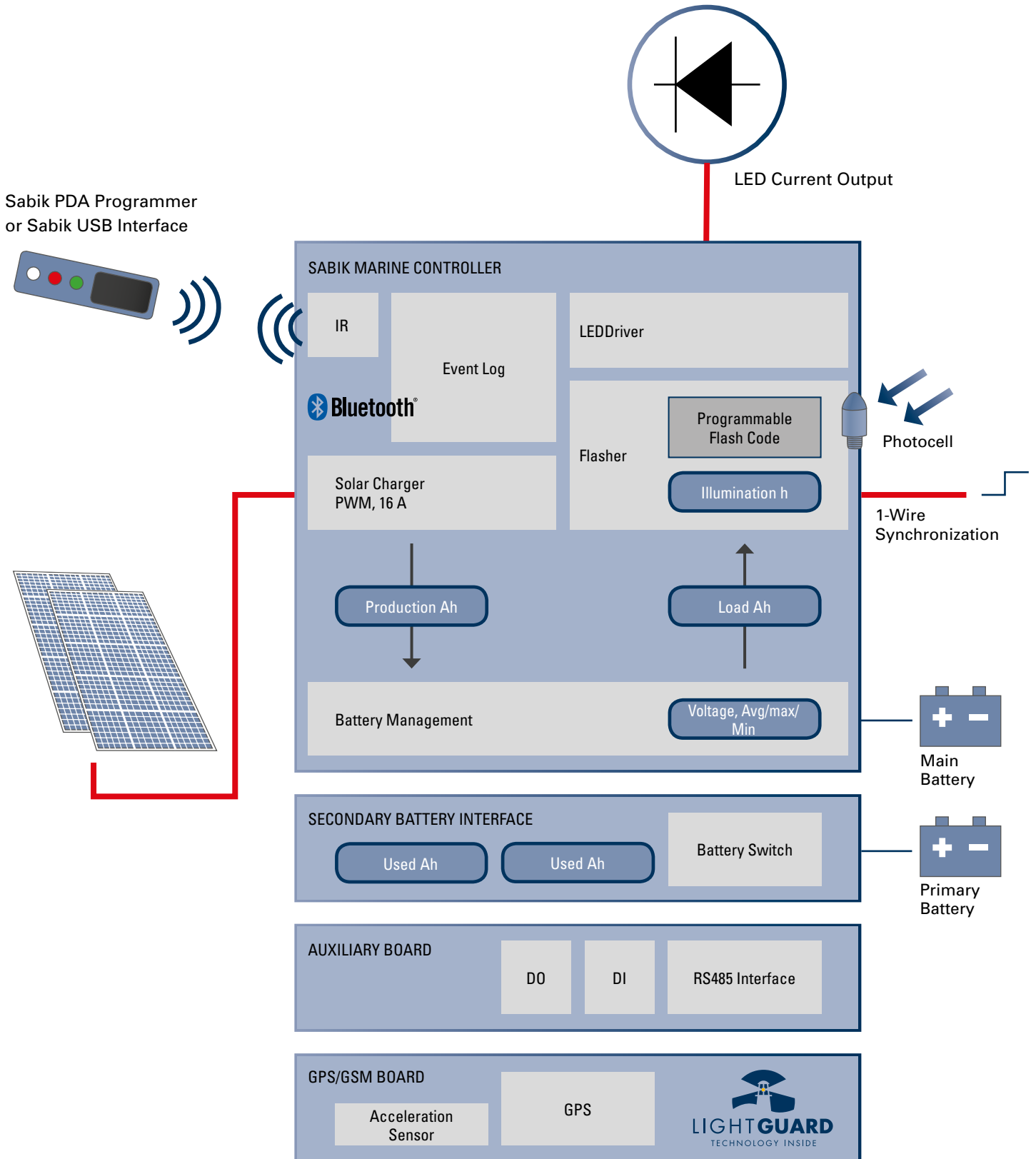
Lantern Technology

Sabik Marine Controller (SMC) is the lantern integrated controller (flasher). The SMC comes with all the proven solutions invented by Sabik for the previous generation controllers. A wide range of innovative functions are included and we are setting a new standard for efficiency of flashers.

SMC is a versatile controller with a whole range of functions integrated as standard and a variety of add-on options.

Key features include:

- Low energy consumption in all operating stages (daytime idle, night-time active and between flashes). Consumption never exceeds 12 mW (1 mA @ 12VDC)

- Intensity dynamics from 5% to 100%

- Wireless infrared communication link for configuration and maintenance

- Daytime sensor calibrated in lux with user configurable levels

- 16 A PWM solar panel charger with temperature sensor and user configurable levels

- Event log/black box that logs and stores all status changes in the lantern

- Power output to LEDs measured, enabling accurate power management of light

Options include:

- GSM monitoring with integrated GPS receiver as plug-in units

- Power consumption of GSM monitoring less than 25 mW (2 mA) in average

- Optical Feedback system for most of the Sabik lanterns

- Tilt switch

- Secondary battery switch enables lantern to run on two battery sources, one acting as hot standby.

User interfaces:

- New Bluetooth® Control app available for android and IOS mobile phones

- Easy Programmer for configuration. Collected data can be uploaded to a PC.

- Windows based software for configuration and maintenance

www.sabik-marine.com

Sabik Marine Controller Feature	Standard	Option
Wide input voltage range – range of up to 10 - 32 V enables operation with all kinds of DC power supplies – stable output intensity within the whole input voltage range	✔	
Pulse Width Modulated (PWM) solar panel charger – 16 ampere (200 watts) charging current	✔	
Solar panel production Ampere Hour meter – measures and logs the total solar panel production and daily min/max current	✔	
Event log – stores all main events in memory – events include lantern start/stop, errors, change of setting, power failure – protected by a four week back up battery (capacitor)	✔	
Black box – same unit as the Event log, events stored in a non volatile Flash memory		✔
Secondary battery interface – an auxiliary board enabling hot switch to a standby battery if the main battery fails		✔
Cable sync – one wire cable sync, where all lanterns are masters and/or slaves		✔
Output power measurement – measurement of power output to LED load is recorded	✔	
Operating hours counter – stores the lantern »mileage« in a non volatile memory	✔	
Wireless infrared communication port – IR port with secured two-way communication protocol – programming with Windows software or Windows Mobile device (PDA)	✔	
Intensity setting – Can be adjusted from 5 % to 100 %	✔	
Optical Feedback Monitoring – auxiliary OFBS sensor card that monitors LED degradation over time – available to most lanterns		✔
Auxiliary card – enables connection of two external I/O's – can be used as a digital alarm output – RS 485 port integrated for connection to host system (MODBUS)		✔
Tilt switch – switches off the light when the lantern is tilted over in close to horizontal position (buoy in storage or under the ice)		✔

www.sabik-marine.com

Bluetooth® Control

- **Programming range up to 50m @50µA**
- **Connected within one second, no pairing required**
- **Lantern settings PIN-code protected**
- **Requires BLE 4.0 (Android 4.3+ or iPhone)**
- **Available for Android and iOS**

Sabik Easy Programmer

- **User friendly and compact in size**
- **Integrated infrared port**
- **Two-way communication**
- **Lantern data can be downloaded to a PC**

Product code

Sabik Easy programmer
980332

Sabik IR interface and Windows program

- **USB to IR interface for Windows computer with USB port**
- **Lantern configuration**
- **Delivered as a set with a one meter long USB extension cable and software on memory stick**

Product code

Sabik IR interface and Windows program
980336