



Pressure sensor pneumatic gauge PS-Light-2

Compact bubble sensor for an exact water level measurement

Short description

- Economic measuring system acc. to the bubble principle
- Highly precise and robust by drift free sensing
- Processor supported sensor linearisation
- Low energy consumption thanks to intelligent pump control
- Modular system
- Optionally with 0..1V, 0..5V, 0/4..20mA BCD-, Binary- or Gray-Code output

Pneumatic gauge



PS-Light-2



building site



simple installation



PS-Light-2 station



measuring site



application at a river



Description

The SEBA-pneumatic gauge type PS-Light-2 serves as a robust, economic and reliable measuring system for monitoring water level in surface waters. The measuring principle is the proportioning or bubbler system, based upon the other well-known SEBA instruments in the PS-series.

An integrated, highly efficient mini compressor, bubbles air through the pressure tube into the water at adjustable intervals. The resultant pressure in the tube corresponds exactly to the hydrostatic pressure above the mouthpiece. This tube pressure is then measured by a very accurate pressure sensor in the PS-Light-2. The intermittent operation of the PS-Light-2 allows low energy consumption, and enables operation with batteries or solar panels, without the need for mains power supply.

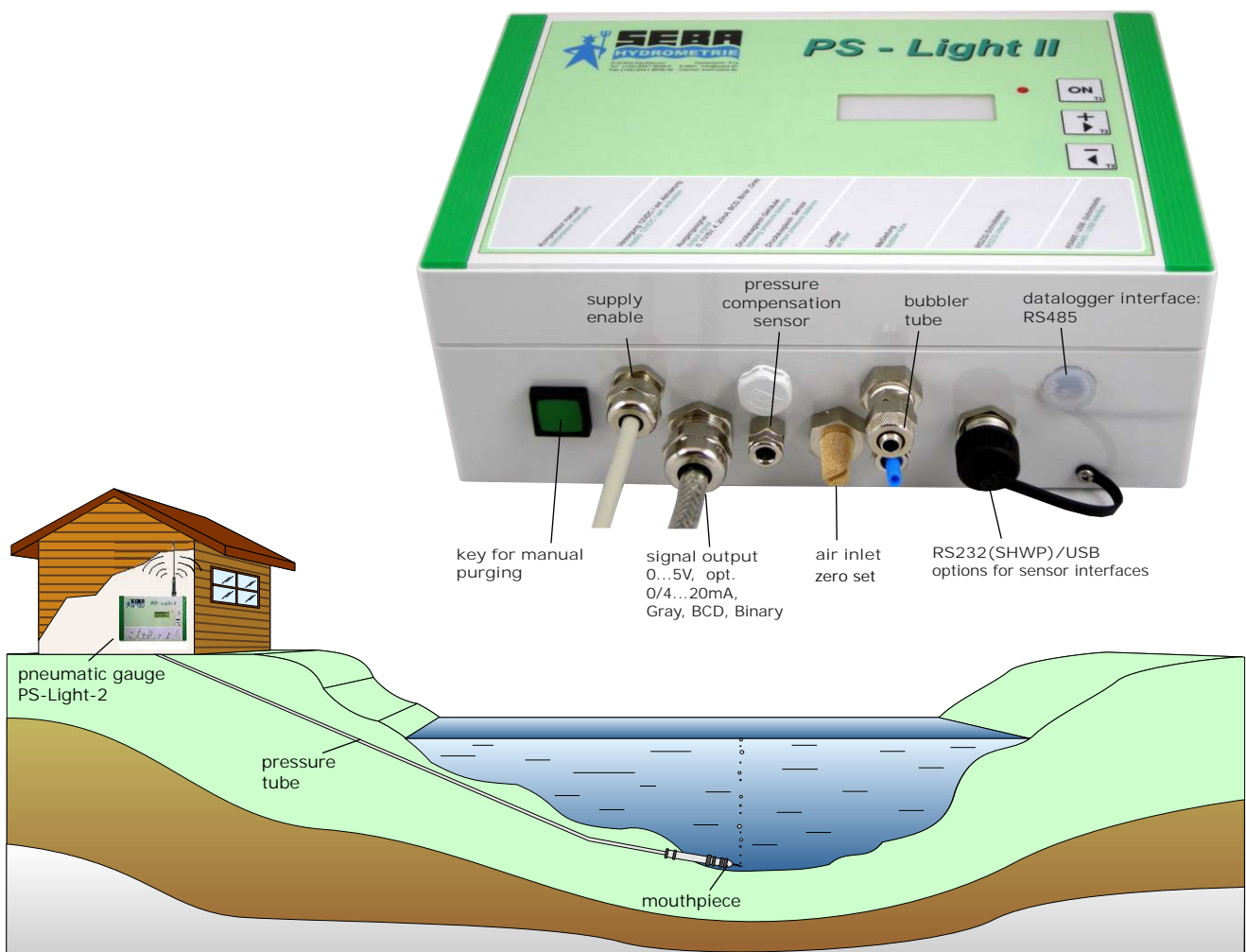
The basic version of the PS-Light-2 is a sensor with optional output. However it can be equipped with LC-display, datalogger or remote data transfer via GSM/GPRS. The basic version is delivered in a robust protective housing (IP65) suitable for wall or desk mounting. SEBA PS-Light-2 can be connected to existing pressure tubes at any time.

Individually available as:

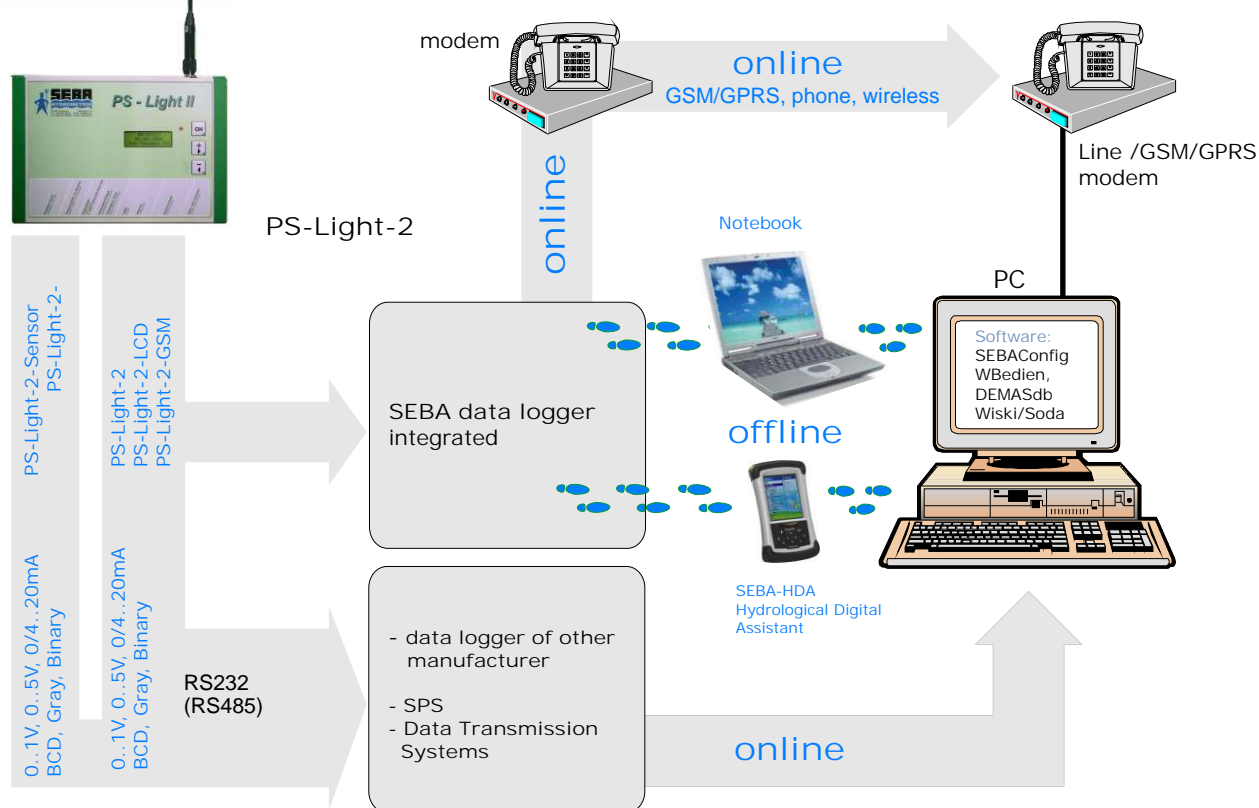
- sensor with analogue or digital output
- sensor with SEBA datalogger
- data transmission system with GSM/GPRS or telephone modem

Options:

1. LC-display
2. output signals: galvanically separated
 - 0..1V, 0..5V
 - 0/4..20mA
 - BCD-Code, Gray-Code, Binary-code



Data flow



PS-Light-2 Variations

PS-Light-2-Sensor

consisting of:

- highly accurate pressure sensor for measuring the water level
- mini compressor
- output: optional 1 from 7
- plastic protection housing

PS-Light-2-Sensor-LCD

consisting of:

- highly accurate pressure sensor for measuring the water level
- mini compressor
- output: optional 1 from 7
- plastic protection housing
- LC-display for digital indication of water level

PS-Light-2 (-Logger)

consisting of:

- highly accurate pressure sensor for measuring the water level
- mini compressor
- output: optional 1 from 7
- plastic protection housing
- datalogger with RS232 interface for online- and offline operation

PS-Light-2 (-Logger) -LCD

consisting of:

- highly accurate pressure sensor for measuring the water level
- mini compressor
- output: optional 1 from 7
- plastic protection housing
- datalogger with RS232 interface
- LC-display for digital indication of water level

PS-Light-2 GSM

consisting of:

- highly accurate pressure sensor for measuring the water level
- mini compressor
- output: optional 1 from 7
- plastic protection housing
- datalogger with RS232 interface
- LC-display for digital indication of water level
- with integrated GSM/GPRS modem

Options:

modem for PS-Light
modem for PS-Light-LCD
puck antenna
directional antenna (fixing on mast)
bubble mouth piece
pressure tube**

**Please specify length of tube when ordering!

Technical Data

	housing:	weight:
PS-Light-2:	plastic material (IP65), 240(w) x 160(h) x 94(d) mm	1,6kg
	240(w) x 160(h) x 124(d) mm	2,0kg
	250(w) x 410(h) x 100(d) mm	4,5kg

PS-Light-2

Resolution:	1mm
sensor linearity:	0,05% of the measuring range
measuring ranges:	0 - 10m, 0 - 20m, 0 - 40m, 0 - 70m
operating temperature:	-20°C up to +50°C
outputs:	standard: 0 - 5V, RS232, optional: USB, RS 485, 0/4...20mA, BCD /Gray-Code
measuring interval:	1, 2, 5, 15, 30, 60, 120 or 180 minute(s) by an internal activation in the PS-Light-2 or free programmable.
total accuracy:	linearity + hysteresis + repetition accuracy < 0,1%

SEBA-datalogger:

microprocessor:	16bit
storage of measuring values:	in real time
resolution:	12bit
Flash-memory:	1MB for approx. 80.000 measuring values (respectively 480.000 measuring values)
serial communication interface:	RS232 (RS485, USB)
power supply:	with 12V battery
mean values:	free programmable
control function:	measuring value, time mark
measuring interval:	from one minute (free programmable)
option:	LC-display for the indication of water level (option)

Transfer of measuring data to PC

offline:	via HDA handterminal with readout-software WinBedien CE / SebaConfigCE or via Notebook with readout-software WinBedien / SebaConfig
online:	analogue via 0...5V resp. 0/4...20mA output signal digital via GSM/GPRS-network or via fixed network telephone connection



SEBA-HDA

Power supply

- PS-Light-power-supply, 220VAC/12VDC
- PS-Light-power-supply, buffered with 100Ah
- PS-Light-power-supply, buffered with 7,2Ah
- Battery 100Ah
- Solar power supply is possible

Readout Software : WinBedien/WinBedien MODEM (telecontrol)/SebaConfig and DEMASdb OLE

Management Software: DEMASdb / MGMDS / MLMDS

The right is reserved to change or amend the foregoing technical specification without prior notice.



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