



### Pressure sensor pneumatic gauge type PS - Light

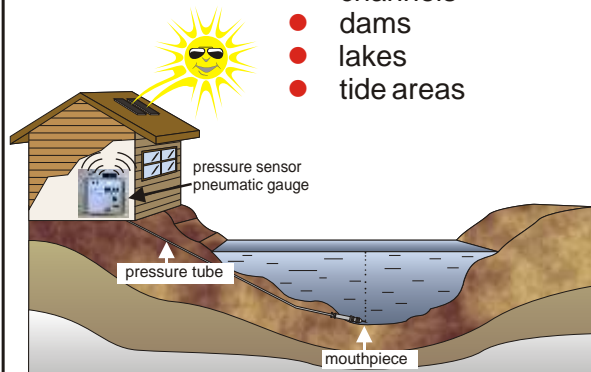


- economic, highly precise and robust measuring system acc. to the bubble principle
- drift free sensing
- simple installation
- low energy consumption with possible battery operation
- RS232 Interface
- individually available as:
  - sensor with 0...4V output
  - sensor with SEBA datalogger MDS-4
  - data transmission with GSM / telephone modem
- options
  - purging device
  - programmable display,
  - 0/4...20mA output



The **SEBA** pressure sensor pneumatic gauge **type PS - Light** serves for exact measurements of water levels.

- Application ranges:
- rivers
  - channels
  - dams
  - lakes
  - tide areas



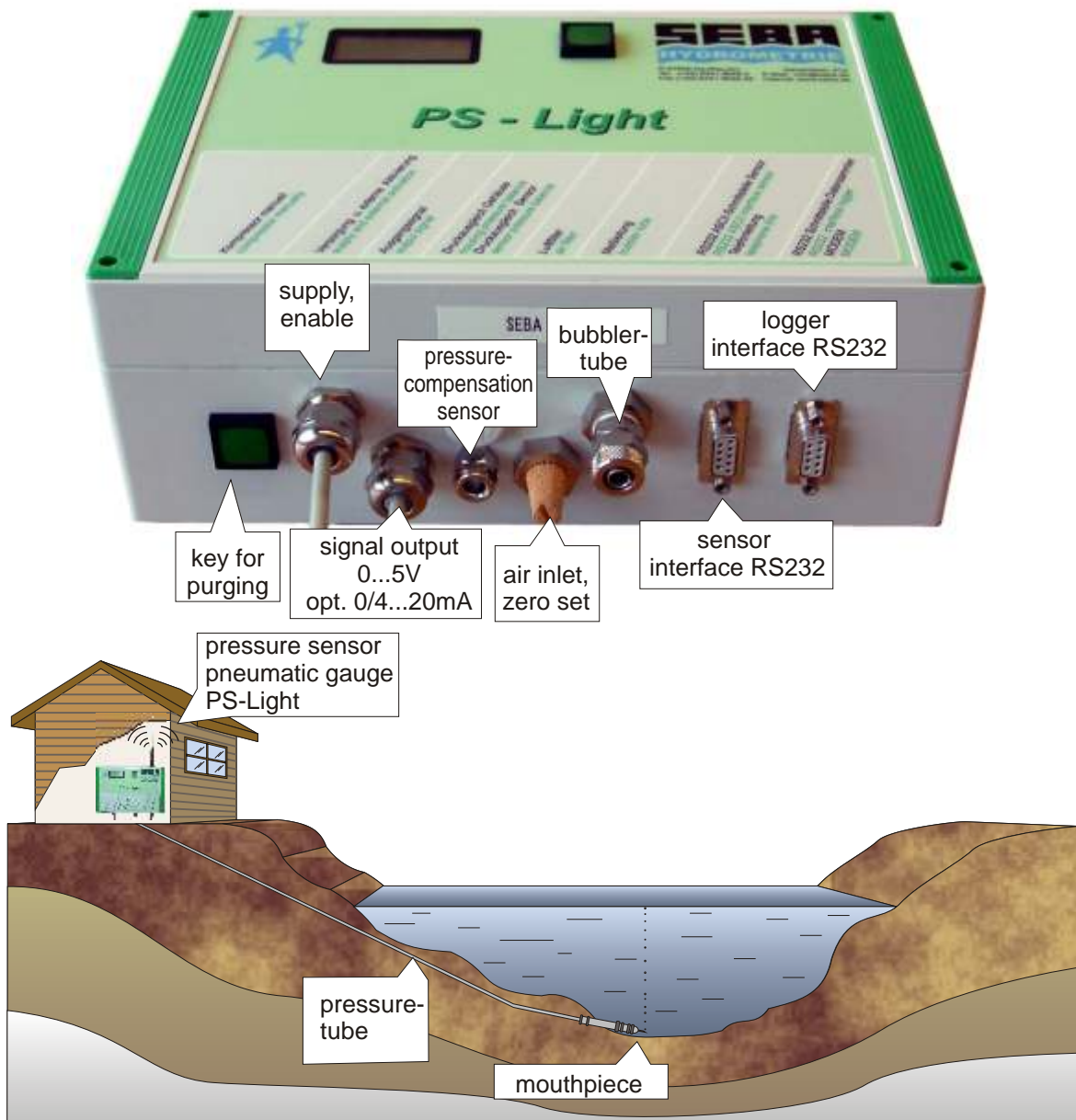
## Description

The SEBA-pneumatic gauge type "PS-Light" 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.

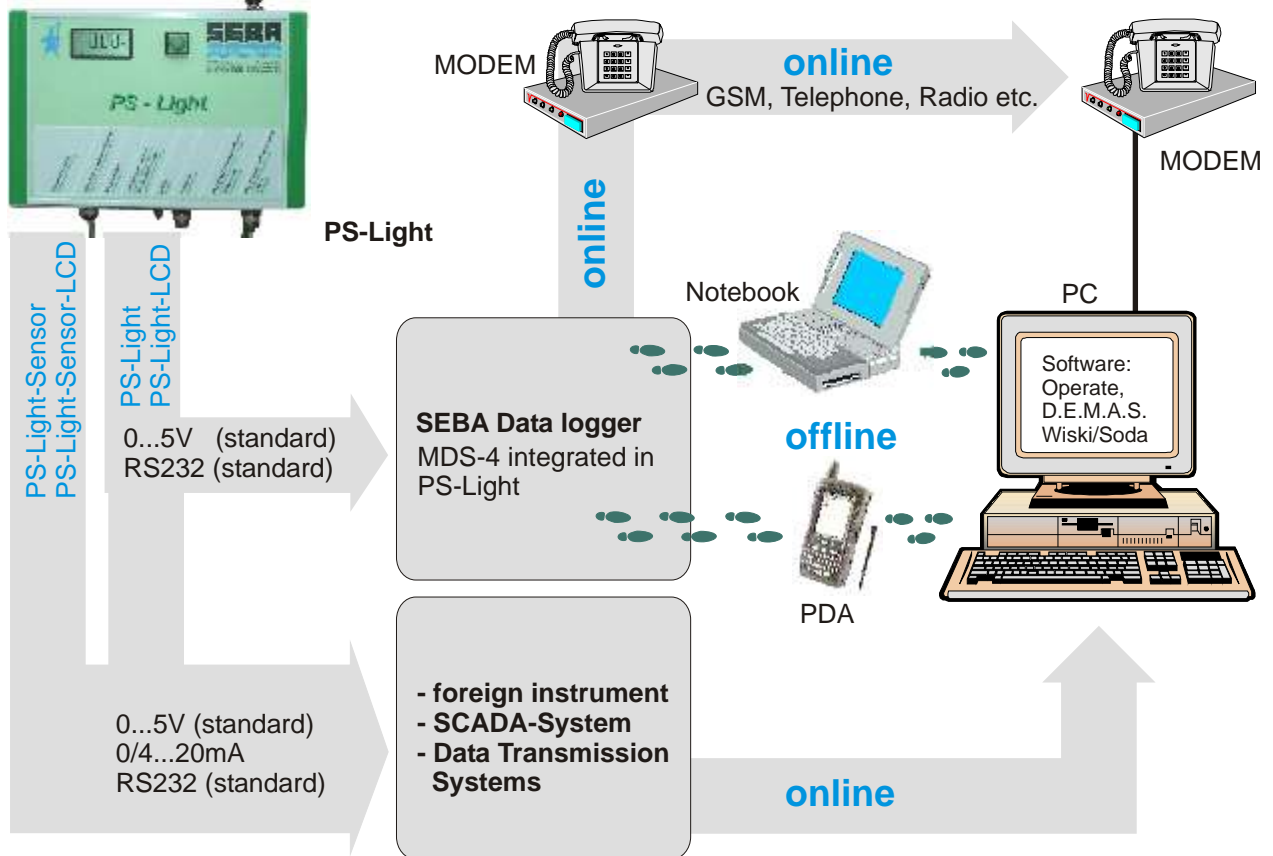
An integrated, highly efficient mini compressor, bubbles air through the pressure tube into the water at adjustable intervals. The resultant pressure in the tube corresponds exactly to the hydrostatic pressure above the mouthpiece. This tube pressure is then measured by a very accurate sensor in the PS-Light and records the water level reading at that instant.

The intermittent operation of the PS-Light allows for low energy consumption, and enables operation with batteries or solar panels, without the need for mains power supply.

The basic version provides an analogue output (0...5V), however the PS-Light can be equipped with additional data storage i.e. SEBA MDS-4 or remote data transfer via GSM or telephone line. The basic version will be delivered in a robust protective housing (IP65) suitable for wall or desk mounting. SEBA PS-Light can be connected to existing pressure tubes any time.



## Data path



## PS-Light Variations

### PS-Light-Sensor

consisting of:

- highly accurate pressure sensor for measuring the water level
- Mini Compressor
- Output: 0...5V
- Plastic Protection housing

Order Code: **PSL 53601**

### PS-Light-Sensor-LCD

consisting of:

- PS-Light-Sensor plus
- LC-Display for digital indication of water level

Order Code: **PSL 53603**

### PS-Light (- Logger)

consisting of:

- PS-Light-Sensor plus
- Data logger Typ MDS-4 with RS232 interface for online- and offline operation

Order Code: **PSL 53605**

### PS-Light (- Logger) - LCD

consisting of:

- PS-Light plus
- LC-Display for digital indication of water level

Order Code: **PSL 53609**

### Options:

Modem for PS-Light	B-Nr.: <b>PSL 53630</b>
Modem for PS-Light-LCD	B-Nr.: <b>PSL 53634</b>
GSM-Modem for PS-Light	B-Nr.: <b>PSL 53632</b>
GSM-Modem for PS-Light-LCD	B-Nr.: <b>PSL 53636</b>

rod antenna, directly plugable antenna	B-Nr.: <b>PSL 53651</b>
directional antenna(fixing on mast)	B-Nr.: <b>PSL 53652</b>
bubble mouth piece	B-Nr.: <b>O 07062</b>
transmission line	B-Nr.: <b>O 07061**</b>

\*\* Please specify lenght of cable when ordering!

## Technical Data

<b>PS-Light:</b>	<b>Housing:</b> plastic material (IP65), 240(w) x 160(h) x 94(d) mm	<b>Weight:</b> 1,6kg
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### Recording of measuring values

<b>Accuracy:</b>	<b>with microprocessor compensated high-accuracy pressure measuring cell</b> 0,1% of the measuring range (=1cm at 10m measuring range)
<b>Measuring ranges:</b>	maximal 0 up to 10m
<b>Operation Temperature:</b>	-20°C up to +50°C
<b>Output:</b>	0 - 5V (standard) 0/4...20mA (option)
<b>Measuring interval:</b>	1, 5, 15, or 60 minute(s) by internal activation in the PS-Light resp. free programmable (from one minute) in connection with SEBA dataloggers.

### Storage of measuring values

**standard: with SEBA datalogger MDS-4**, 16 Bit microprocessor, storage of measuring values in real time, 12 Bit resolution, 32kByte C-MOS-RAM-memory for approx.15000 measuring values (extendable up to 45000 measuring values), serial communication interface RS232, mean values (free programmable), observation function (control measuring value, time mark), measuring interval: from one minute (free programmable), power supply with lithium battery sufficient for more than 10 years at 15min. measuring interval.  
LC-display for indication the water level(option)

**option: with SEBA-datalogger MDS III**, up to 16 input channels  
(technical data see individual leaflet)

### Transfer of measuring data to PC

**offline: with MDS - Datalogger**

- via PDA Handterminal
- or via Notebook with readout-software WinBedien

**online:**

- **analogue**, via 0...5V resp. 0/4...20mA output signal
- **digital**, via GS M-network (D1/D2)  
or via fixed network telephone connection

**note:** By simple replacement of the PS-Light topcover an upgrade to data transmission by line modem or GSM-modem is possible any time.

**Power supply:** - PS-Light-power-supply 220VAC/12VDC  
- PS-Light-power-supply, buffered with 100Ah, 4 months \*operation  
- PS-Light-power-supply, buffered with 7.2Ah, 1 week \*operation  
- Battery 100Ah, 4 months \*operation  
- **solar power supply is possible**

Order Code: **PSL 53670**  
Order Code: **PSL 53681**  
Order Code: **PSL 53680**  
Order Code: **PSL 53673**

**Readout software:** - WinBedien / WinBedien MODEM(telecontrol)  
**Management Software:** - D.E.M.A.S. / MGMDS / MLMDS

\*without MODEM

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



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