



## Radar Sensor Type SEBAPULS

for contact free measuring of surface water level

### Special Features

- Contact free measuring system for high accuracy surface water level measurements
- Mounting at bridges, jibs and footbridges
- Measuring range 0...15 m, 35 m, 70 m
- Individually available as:
  - sensor with 4...20mA / 0.4 – 2 V output
  - remote measuring station with GSM/GPRS or telephone-modem
- Closed power supply with 12 V battery or solar panel

### Radar Sensors



SEBAPuls 15



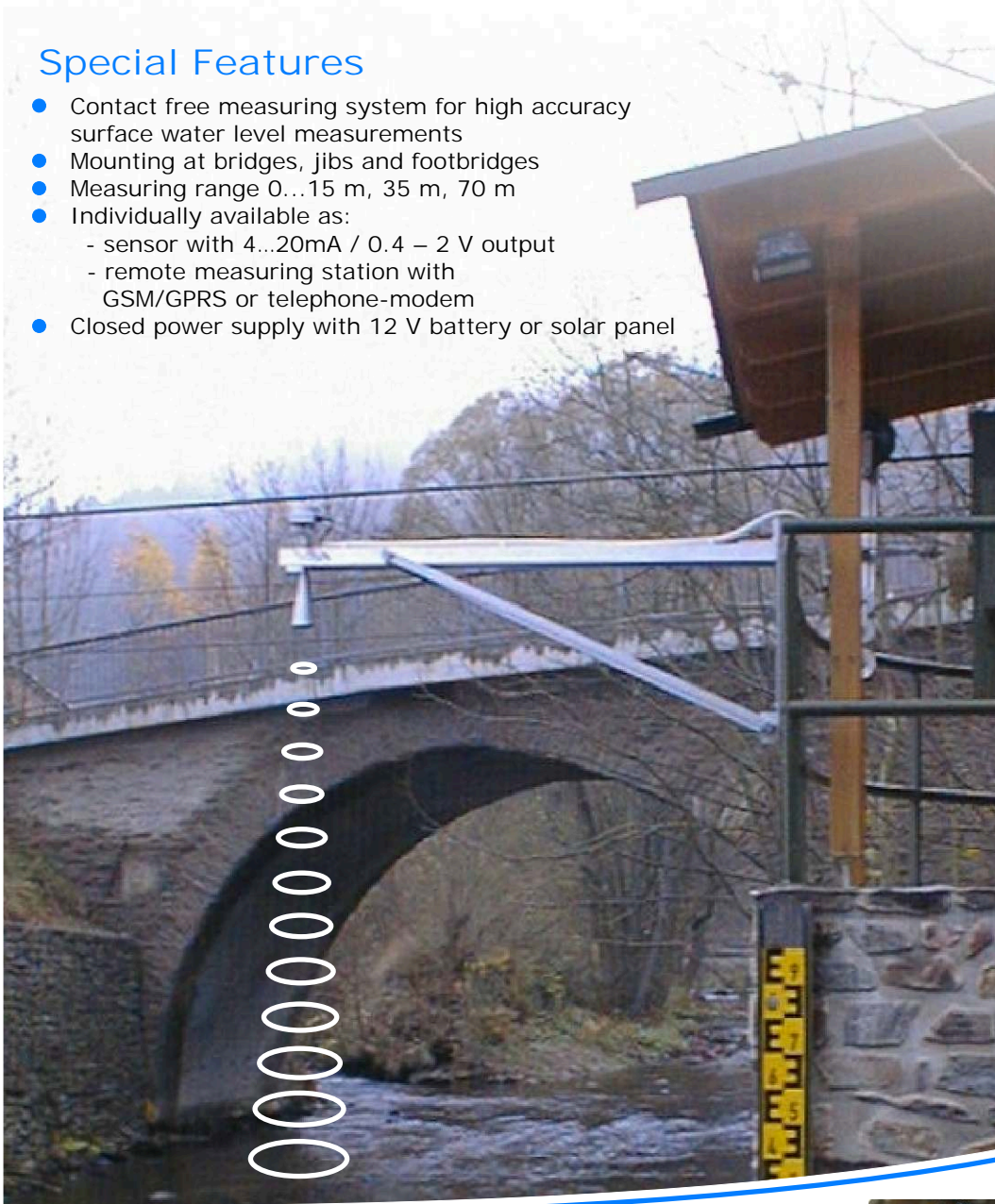
SEBAPuls 20



SEBAPuls 30



SEBAPuls 70



water level monitoring



measurement of surface water



standard fixing device



measurement in arid zone

# Radar Sensors SEBAPuls

The radar sensor **SEBAPuls** is a high accuracy measuring device for measuring the surface water level without direct contact to the medium.

**Measuring principle:** Pulse principle (26GHz-technology)

The so-called pulse procedure sends a short microwave impulse to the water surface. The transmitter has a short time lag. Within this time the water transmits the pulses to the integrated evaluation system. The run time of the impulses corresponds directly to the distance to the actual surface water level.

**Advantages:**

- unaffected by mudding, drifting materials, weedage, sewage and brackish or saline water
- low constructional efforts (e.g mounting at bridge jibs)
- no measurement cross-section reduction (hydraulic is not remolded)
- no influence in measuring accuracy caused by air humidity (fog) and air temperature fluctuations
- low energy consumption
- short measuring cycle
- non-existence of a blind angle
- short mounting distance (approx. 20...30 cm)



The basic configuration of the measuring system is a sensor with analogue output (4...20mA). According to the modular conception, the SEBAPuls can be equipped with an additional storage (e.g. SEBA Data Loggers) and a remote transmission system (via GSM-network, fix network, etc.).

## Technical Data

### Housing

Dimension SEBAPULS 15: Ø 72mm, length 300mm

Dimension SEBAPULS 20: Ø 116mm, length 245mm

Dimension SEBAPULS 30: Ø 116mm, length 392mm

Dimension SEBAPULS 70: Ø 116mm, length 606mm

### Material:

Aluminium housing, IP66

Horn antenna made of stainless steel 1.4435

### Weight:

approx. 2kg

### Registration of measuring values

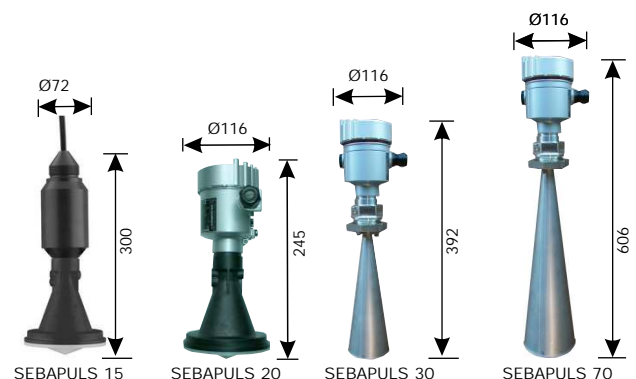
	SEBAPULS 15:	SEBAPULS 20:	SEBAPULS 30:	SEBAPULS 70:
Accuracy:	± 2mm	± 2mm	± 3mm	± 15mm
Measuring range:	0...15m	0...35m	0...35m	0...70m
Operation temperature:	-40°C up to 80°C (all types)			
Output:	4 up to 20mA or 0.4 up to 2V (all types)			

### Transmission of measuring values to PC

Offline:	with SEBA data logger
Online:	analogue with 4...20mA, digitally with GSM or telephone-modem

### Power supply

Battery:	12V or 24V
Solarpanel:	incl. charger and buffer accumulator
Mains adapter:	220V <sub>AC</sub> /12V <sub>DC</sub> /24V <sub>DC</sub>



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



**SEBA Hydrometrie GmbH**

Gewerbestr. 61a • D-87600 Kaufbeuren

Tel.: +49 (0)8341 / 9648-0

Fax: +49 (0)8341 / 9648-48

E-Mail: [info@seba.de](mailto:info@seba.de)

Internet: [www.seba.de](http://www.seba.de)

represented by: