



# 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, 75 m
- Individually available as:
  - sensor with 4...20mA or 0/4...2V output, SDI-12
  - remote measuring station with GSM/GPRS or telephone-modem
- Closed power supply with 12 V battery or solar panel

## Radar Sensors



SEBAPuls 15



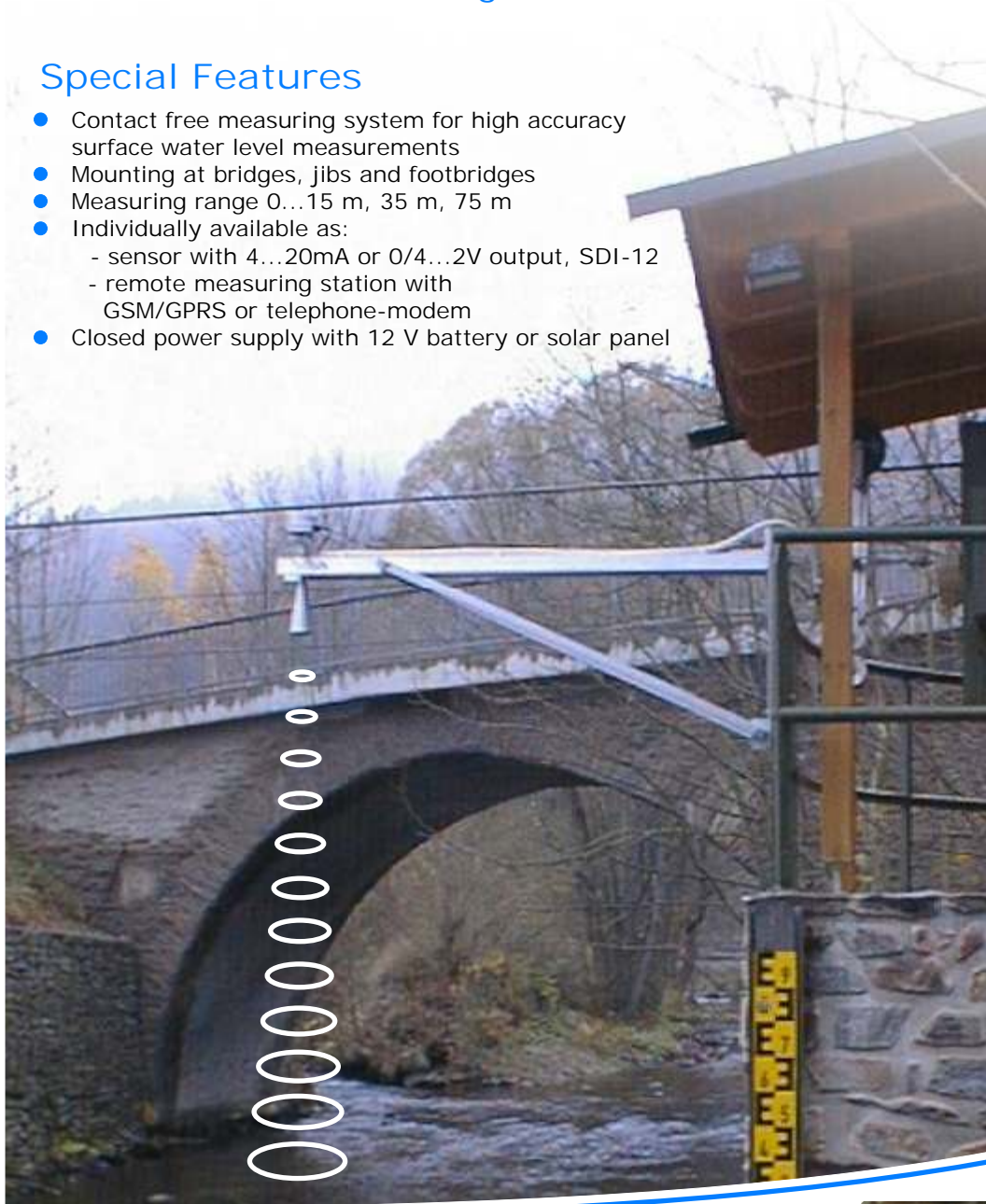
SEBAPuls 20



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
- blind angle: echo cancellation for elimination of reflection in the short range free configurable  
factory-made echo cancellation: 1 m
- 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, Valox PBT  
 Horn antenna made of stainless steel

### Weight:

approx. 2kg

### Registration of measuring values

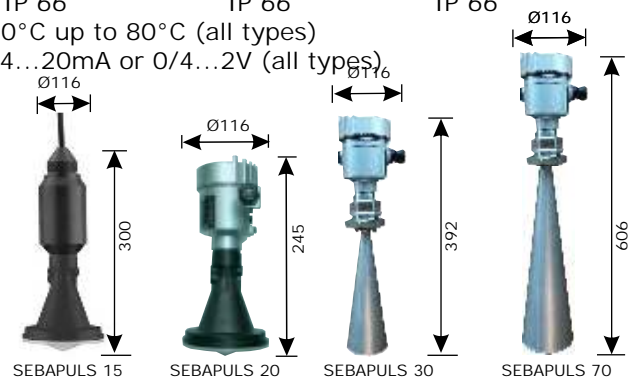
	SEBAPULS 15:	SEBAPULS 20:	SEBAPULS 30:	SEBAPULS 70:
Accuracy:	± 2mm	± 2mm	± 3mm	± 15mm
Measuring range:	0...15m	0...35m	0...35m	0...75m
Interblock space:	5cm; ex factory 1m	5cm; ex factory 1m	5cm; ex factory 1m	40cm; ex factory 1m
IP Protection Class:	IP 68	IP 66	IP 66	IP 66
Operation temperature:	-40°C up to 80°C (all types)			
Output:	SDI-12, 4...20mA or 0/4...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.



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