

# MODEL BPR61/T61 MICROWAVE POINT LEVEL

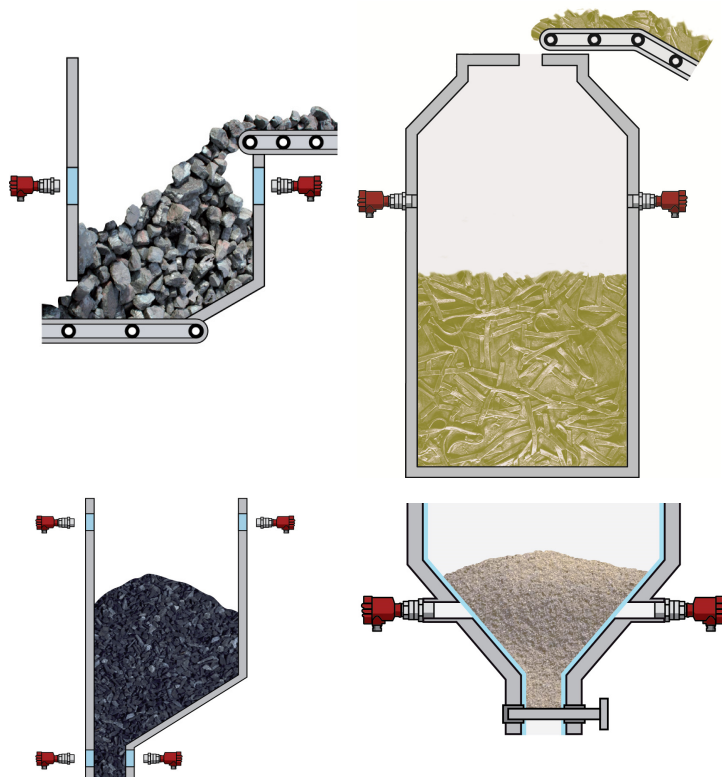


Model BPR61/T61

**Microwave Point Level (BPR61/T61)** The BPT61 is the transmitting unit, the BPR61 is the receiving unit of the microwave point level system for level detection of bulk solids and liquids. Typical applications are the detection of bulk solids in silos, bunkers and crushers as well as of liquids in pipelines and vessels. The non-contact measuring principle has no direct contact with the medium and ensures continuous wear-free and maintenance-free operation.

## Features:

- Reliable measurement even with very abrasive products
- Simple adjustment saves time and costs with setup and commissioning
- Reliable measurement even with changing product properties
- Can be adjusted to see through wall build-up
- Easy to mount using an 1-1/2" NPT half Coupling
- Stainless steel wetted parts



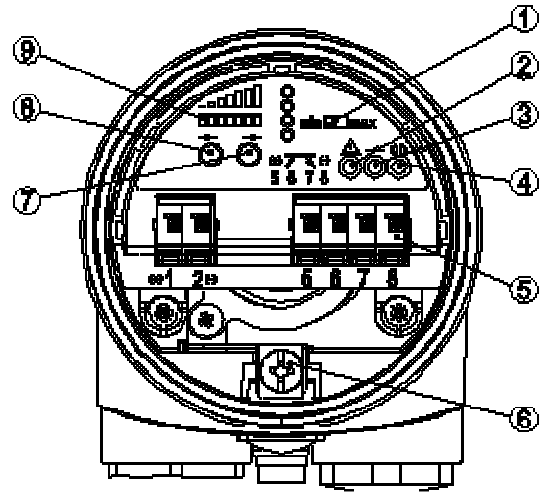
The **Microwave Point Level** measuring system consists of a microwave Transmitter **Model BPT61** and a corresponding receiver **Model BPR61**. The transmitted signal is focused by an antenna system and radiated in the direction of the receiver. A medium in the path of the beam dampens the signal. This signal damping is detected by the receiver and converted into a switching signal. The built-in sensitivity adjustment makes it easy to adapt the instrument to the local conditions and the medium.

Microwave Point Level measuring systems are typically used in applications where standard point level devices do not work. Applications that have wall build-up, dust and large falling product can wreak havoc on intrusive point level devices. The gain on Microwave Point Level measuring devices can be adjusted to see through wall build-up and non-metallic materials and still detect a high and low level and a blocked chute. Microwave Point level Detectors do not require any regulatory approval or license's like Nucleonic devices.

# SPECIFICATIONS

## Model BPR61/T61 Microwave Point Level Detector

- Rugged aluminum enclosure, with red powder coat paint
- NEMA-4X (IP-66/IP-67)
- Operating Voltage 20-253 VAC, 50/60Hz or 20-72 VDC
- Power Consumption 2 VA (AC), approx. 0.8 W (DC)
- Outputs: (1) DPDT
- 1-1/2" NPT 316L Process Connection
- Frequency Range K band, 24.085 GHz (ISM band)
- 1/2" NPT cable entry
- Ambient Storage & Transport Temperature rating: -40° to +80° C (-40° F to +176°F)
- Process Temperature rating: -40° C to +80°C (-40° F to +176°F)
- Process Pressure Rating: -14.5 to 58 PSIG
- Bean Angle: 22°
- Measuring Range: 0.1-100 m (0.33 - 328 ft)
- ATEX, FM, CSA and IEC approved units also available. (Contact Bulk Pro Systems for information on these units)
- Shipping Weight: 18lbs

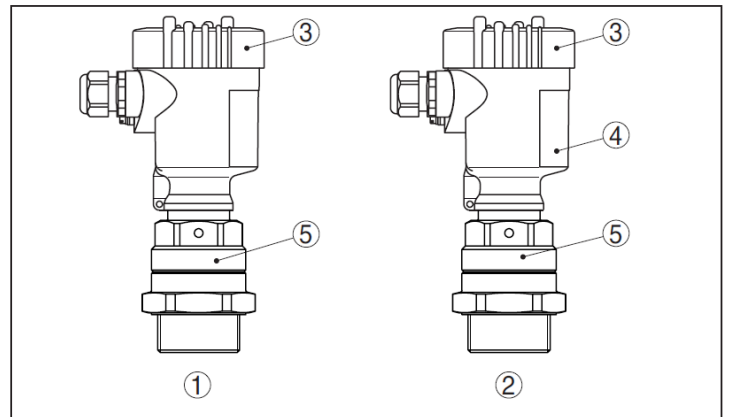
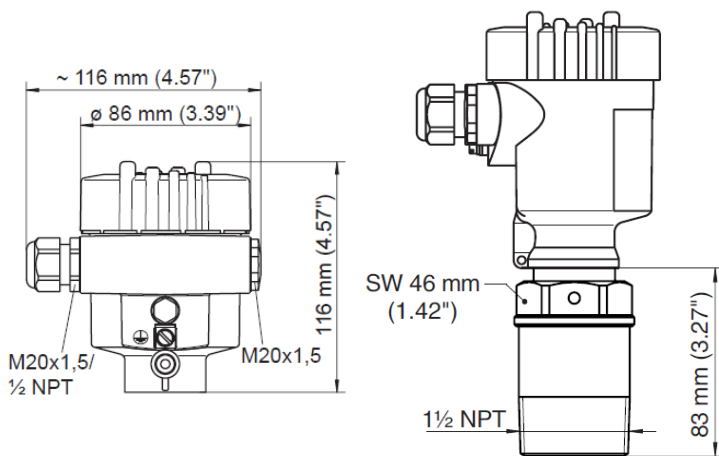


### Electronics module BPR61 receiver unit

1. Mode switch for selecting the switching behavior (min./max.)
2. Control lamp (LED) for indication of a fault (red)
3. Signal lamp (LED) for indication of the switching status (yellow)
4. Control lamp (LED) for indication of the instrumenting function (green)
5. Connection terminals
6. Ground terminal
7. Key for adjustment of the sensitivity and the switching delay (-->)
8. Key for adjustment of the sensitivity and the switching delay (<--)
9. LED indicating board for indication of reception strength (yellow)

### Outline Dimensions

#### All Dimensions in Millimeters (Inches)



### Complete System Components:

1. Transmitting Unit BPT61
2. Receiving Unit BPR61
3. Housing Lid
4. Housing Control Electronics
5. Process Fitting