

BCR-1000 W-band (EHF), 120 GHz Level/Compact Radar Gauge

Characteristics:

- Non-contact W-band radar technology is characterized by a particularly high measurement accuracy. The measurement is not affected by changing medium properties or by changing process conditions such as temperature, pressure or intense dust generation. User-friendly adjustment without vessel filling and emptying saves time and the sensors are maintenance free.
- Industrial design concept, the appearance of the product fits in natural environment



Applications:

- **BCR1000** Radar sensors are used for non-contact level measurement of liquids and bulk solids. They measure all kinds of liquids, even under high pressure and extreme temperatures, in solvents as well as aggressive liquids, they are also suitable for use in applications with stringent hygiene requirements.
- **BCR1000** can also measure the lightest to the heaviest of bulk solids with absolute reliability, even in the presence of dust and noise, without being affected by buildup or condensation. Suitable for liquids and bulk solids in simple process conditions.

Specifications:

	BCR1000-R	BCR1000-A	BCR1000-H
Measuring Range	Up to 18 m (59.06 ft)	Up to 18 m (59.06 ft)	Up to 40 m (131.24 ft)
Beam Angle (α)	5°	5°	5°
Process Connection	Thread G2-1/4, G2-1/4 NPT	Thread G2-1/4, G2-1/4 NPT	Thread G2-1/4, G2-1/4 NPT
Meas. Frequency	120GHz technology	120GHz technology	120GHz technology
Sensor Material	POM / PVDF(option)	POM / PVDF(option)	POM / PVDF(option)
Housing Material	POM / PVDF(option)	POM / PVDF(option)	POM / PVDF(option)
Ingress Protection	IP68 (3 bar) acc. to IEC 60529	IP68 (3 bar) acc. to IEC 60529	IP68 (3 bar) acc. to IEC 60529
Ambient Temp.	-40 ... +80 °C	-40 ... +80 °C	-40 ... +80 °C
Process Temp.	-40 ... +80 °C	-40 ... +80 °C	-40 ... +80 °C
Operating Pressure	-1...+3 bar (-100...+300 KPa)	-1...+3 bar (-100...+300 KPa)	-1...+3 bar (-100...+300 KPa)
Power Supply	9 ~ 38 VDC	12 ~ 38 VDC	16 ~ 40 VDC
Accuracy	±1 mm	±1 mm	±3 mm
Output	RS485, SDI-12, Modbus, Relay(option)	Two wire 4-20 mA only	Two wire 4-20mA / HART7
Display/adjustment	Tools app, <i>Radar MobileManager</i> and <i>Radar PCManager</i> (PC software)		
No. of cable entries	1 PVC Insulated cable		
Bluetooth Standard	Bluetooth 5.0 (downward compatible to Bluetooth 4.0 LE), range 40 m (131.24 ft)		

BCR1000 (Dimensions):

