



Area of application

The CPR6X00 series are suitable for continuous level measurement of liquids and bulk solids.

In liquids

The CPR6X00 series can measure all kinds of liquids, even under high pressure and extreme temperatures, in simple as well as difficult processing conditions.

In bulk solids

The sensors can also measure from the lightest to the heaviest bulk solids with absolute reliability, even in the presence of dust and noise, without being affected by buildup or condensation.

Measuring principle

The CPR6X00 pulse radar level transmitter is designed for continuous level measuring of liquids and solids.

ToF principle

The measuring instrument sends out short radar pulses toward the measured product via the antenna system. The product surface reflects the signal waves, which are then received back by the antenna system. The instrument calculates the level from the running time of the radar pulses and the entered tank height.

Advantages

- **Twin-chips**

With two chips, CPR6X00 achieves higher processing ability.

- **Multi-Track**

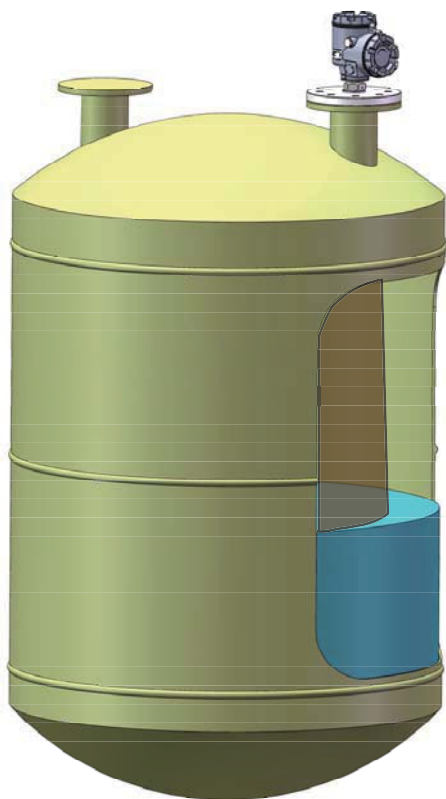
Due to new Multi-Track wave tracking algorithm, CPR6X00 gets highest reliability.

- **Waves Memo**

With wave management function. To help understand abnormal output, CPR6X00 stores wave automatically.

- **EverCheck**

Real time self-monitoring, current and chip. Output warning when abnormality present.



CPR6X00 PULSE RADAR LEVEL TRANSMITTER

CPR6100



CPR6200



Application	Applicable for continuous level measurement of aggressive liquids in small tanks and tight mounting spaces with stirrers or heating spirals.	Applicable for continuous level measurement of liquids with slightly aggressiveness in storage containers, reactors or process vessels.
Measuring range	0 ~ 30m	0 ~ 70m
Version	<ul style="list-style-type: none"> Φ 45 mm PTFE coated horn antenna Φ 45 mm PTFE coated long horn antenna Φ 75 mm PTFE coated horn antenna Φ 75mm plastic horn 	<ul style="list-style-type: none"> DN50 horn antenna (316SS, Φ48mm, H 190mm) DN80 horn antenna (316SS, Φ78mm, H 215mm) DN100 horn antenna (316SS, Φ98mm, H 295mm) DN100L horn antenna (316SS, Φ95mm, H 473mm) DN125 horn antenna (316SS, Φ123mm, H 621mm)
Power	< 0.5 W	< 0.5 W
Sample frequency	54 Hz	54 Hz
Response time	< 2 s	< 2 s
Frequency	26 GHz	26 GHz
Process fitting	Thread G1½,G3A Flange	Thread G1½,G3A Flange
Process temperature	-40 C ~ 150 C	-40 C ~ 1000 C
Process pressure	-1 bar ~ 3 bar	-1 bar ~ 40 bar
Resolution	1 mm	1 mm
Accuracy	± 3mm	± 3mm
Repeatability	± 1.5 mm	± 1.5 mm
Signal output	4 ~ 20 mA/HART	4 ~ 20 mA/HART
Display and Adjustment	LCD display, tank side display and tank side hub	LCD display, tank side display and tank side hub
Antenna material	PTFE	316L Stainless steel
Power supply	24VDC/220VAC (two wire or four wire)	24VDC/220VAC (two wire or four wire)
Protect level	IP67	IP67
Electrical connection	2 × M20*1.5(Cable diameter 9 ~ 13 mm) ½NPT	2 × M20*1.5(Cable diameter 9 ~ 13 mm) ½NPT
Ex information	EX ia IIC T6 Ga, Ex d ia [iaGa]IIC T6/T2 Gb Ex iaD tD A21 IP67T80°C/T290°C	EX ia IIC T6 Ga, Ex d ia [iaGa]IIC T6/T2 Gb Ex iaD tD A21 IP67T80°C/T290°C

CPR6X00 PULSE RADAR LEVEL TRANSMITTER

CPR6300



CPR6500



Application	Applicable for continuous level measurement of aggressive liquids under difficult process conditions in storage tanks, process vessels or standpipes.	Applicable for continuous level measurement of aggressive liquids under simple process conditions or with small process fitting.
Measuring range	0 ~ 70m	0 ~ 35m
Version	DN50 horn antenna/316L+PTFE process fitting DN80 horn antenna/316L+PTFE process fitting DN100 horn antenna/316L+PTFE process fitting	Φ30 mm PTFE Integrated solid rod antenna
Power	< 0.5 W	< 0.5 W
Sample frequency	54 Hz	54 Hz
Response time	< 2 s	< 2 s
Frequency	26 GHz	6.3 GHz
Process fitting	Flange	Flange
Process temperature	-40 °C ~ 150 °C	-40 °C ~ 150 °C
Process pressure	-1 bar ~ 16 bar	-1 bar ~ 3 bar
Resolution	1 mm	1 mm
Accuracy	± 3mm	± 10mm
Repeatability	± 1.5 mm	± 5 mm
Signal output	4 ~ 20 mA/HART	4 ~ 20 mA/HART
Display and Adjustment	LCD display, tank side display and tank side hub	LCD display, tank side display and tank side hub
Antenna material	PTFE	PTFE
Power supply	24VDC/220VAC (two wire or four wire)	24VDC/220VAC (two wire or four wire)
Protect level	IP67	IP67
Electrical connection	2 × M20*1.5(Cable diameter 9 ~ 13 mm) ½NPT	2 × M20*1.5(Cable diameter 9 ~ 13 mm) ½NPT
Ex information	EX ia IIC T6 Ga, Ex d ia [iaGa]IIC T6/T2 Gb Ex iaD tD A21 IP67T80°C/T290°C	EX ia IIC T6 Ga, Ex d ia [iaGa]IIC T6/T2 Gb Ex iaD tD A21 IP67T80°C/T290°C

CPR6X00 PULSE RADAR LEVEL TRANSMITTER

CPR6600



CPR6700



Application	Continuous level measurement of liquids under difficult process conditions. storage tanks, process vessels and standpipes are available.	Continuous level measurement of bulk solid, granules in small vessels.
Measuring range	0 ~ 70m	0 ~ 15m
Version	DN150 (316SS, Φ145 mm, H 200 mm) DN200 (316SS, Φ195 mm, H 280 mm) DN250 (316SS, Φ245 mm, H 490 mm)	Φ 75 mm plastic horn antenna
Power	< 0.5 W	< 0.5 W
Sample frequency	54 Hz	54 Hz
Response time	< 2 s	< 2 s
Frequency	6.3 GHz	26 GHz
Process fitting	Flange	Flange
Process temperature	-40 °C ~ 1000 °C	-40 °C ~ 80 °C
Process pressure	-1 bar ~ 40 bar	-1 bar ~ 2 bar
Resolution	1 mm	1 mm
Accuracy	± 10mm	± 3mm
Repeatability	± 5 mm	± 1.5 mm
Signal output	4 ~ 20 mA/HART	4 ~ 20 mA/HART
Display and Adjustment	LCD display, tank side display and tank side hub	LCD display, tank side display and tank side hub
Antenna material	316L Stainless steel (Optional: with coating)	PP, PTFE
Power supply	24VDC/220VAC (two wire or four wire)	24VDC/220VAC (two wire or four wire)
Protect level	IP67	IP67
Electrical connection	2 × M20*1.5(Cable diameter 9 ~ 13 mm) ½NPT	2 × M20*1.5(Cable diameter 9 ~ 13 mm) ½NPT
Ex information	EX ia IIC T6 Ga, Ex d ia [iaGa]IIC T6/T2 Gb Ex iaD tD A21 IP67T80°C/T290°C	EX ia IIC T6 Ga, Ex d ia [iaGa]IIC T6/T2 Gb Ex iaD tD A21 IP67T80°C/T290°C

CPR6X00 PULSE RADAR LEVEL TRANSMITTER

CPR6800



CPR6800S



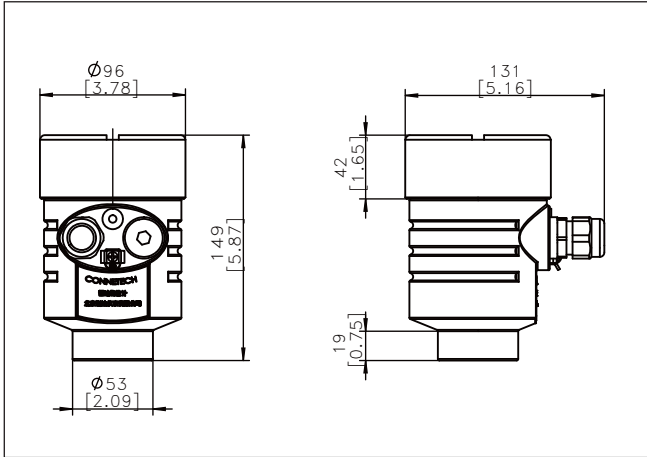
Application	Applicable for continuous level measurement of bulk solid, powder, granules in small vessels.	Applicable for continuous level measurement of bulk solid, powder, granules in big vessels or difficult conditions.
Measuring range	0 ~ 35m	0 ~ 70m
Version	DN80 horn antenna (316SS, Φ78mm, H 215mm) DN100 horn antenna (316SS, Φ98mm, H 295mm) DN100L horn antenna (316SS, Φ98mm, H 473mm) DN125 horn antenna (316SS, Φ123mm, H 621mm)	DN200 Paraboloid antenna (304SS, Φ195mm, H 117mm) DN250 Paraboloid antenna (304SS, Φ245mm, H 117mm)
Power	< 0.5 W	< 0.5 W
Sample frequency	54 Hz	54 Hz
Response time	< 2 s	< 2 s
Frequency	26 GHz	26 GHz
Process fitting	Flange	Flange
Process temperature	-40 °C ~ 1000 °C	-40 °C ~ 1000 °C
Process pressure	-1 bar ~ 40 bar	-1 bar ~ 40 bar
Resolution	1 mm	1 mm
Accuracy	± 3mm	± 3mm
Repeatability	± 1.5 mm	± 1.5 mm
Signal output	4 ~ 20 mA/HART	4 ~ 20 mA/HART
Display and Adjustment	LCD display, tank side display and tank side hub	LCD display, tank side display and tank side hub
Antenna material	316L Stainless steel	304 Stainless steel
Power supply	24VDC/220VAC (two wire or four wire)	24VDC/220VAC (two wire or four wire)
Protect level	IP67	IP67
Electrical connection	2 × M20*1.5(Cable diameter 9 ~ 13 mm) ½NPT	2 × M20*1.5(Cable diameter 9 ~ 13 mm) ½NPT
Ex information	EX ia IIC T6 Ga, Ex d ia [iaGa]IIC T6/T2 Gb Ex iaD tD A21 IP67T80°C/T290°C	EX ia IIC T6 Ga, Ex d ia [iaGa]IIC T6/T2 Gb Ex iaD tD A21 IP67T80°C/T290°C

CPR6X00 PULSE RADAR LEVEL TRANSMITTER

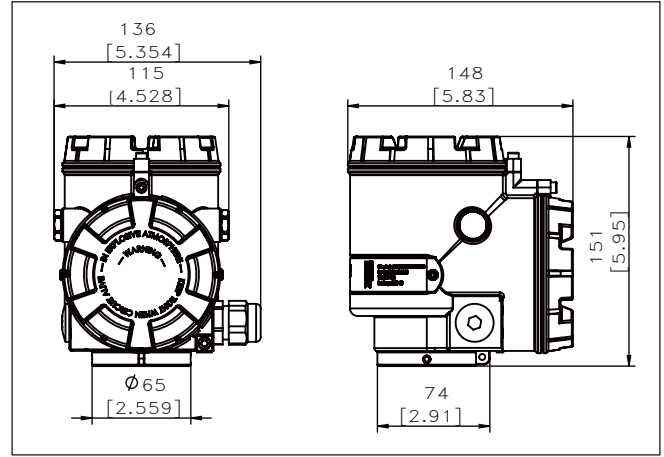
Housing version

The housings are available as double chamber version in plastic, stainless steel or aluminium. They are available with protection ratings up to IP 67 (1 bar).

Single chamber housing

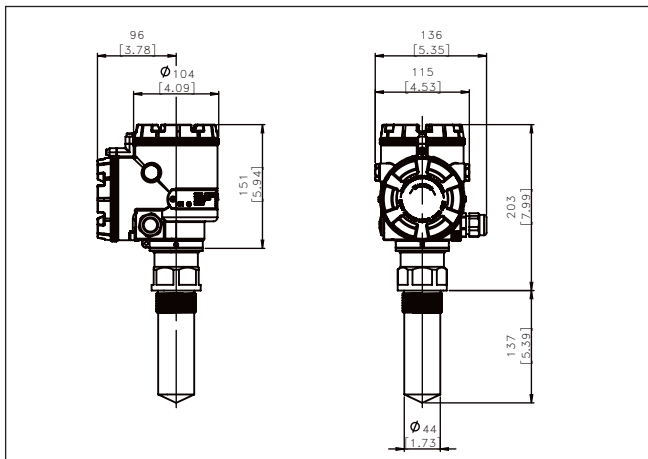


Double chamber housing

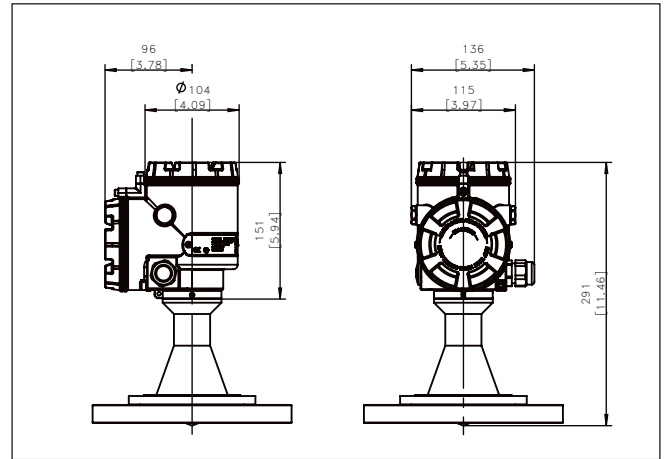


Dimensions

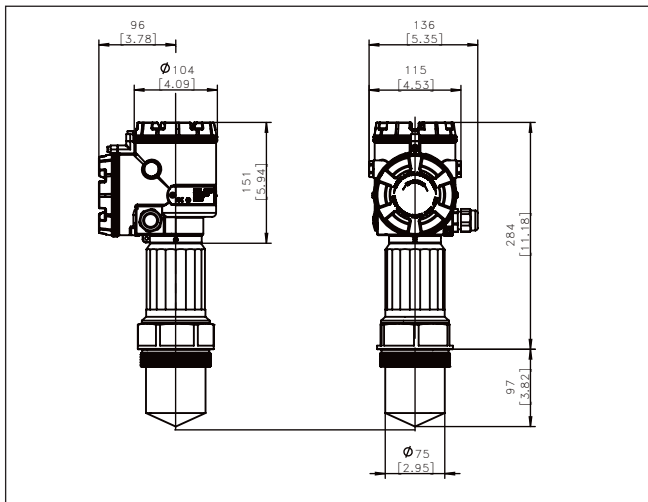
CPR6100 with 50 rod antenna



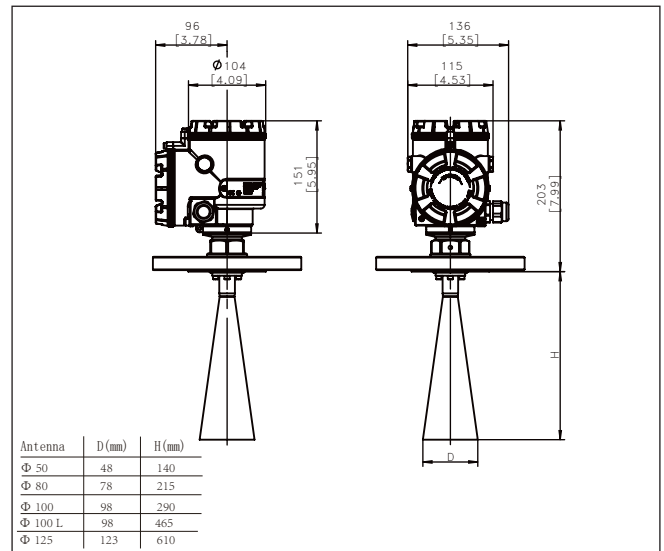
CPR6100 with plastic horn antenna



CPR6100 with 80 rod antenna

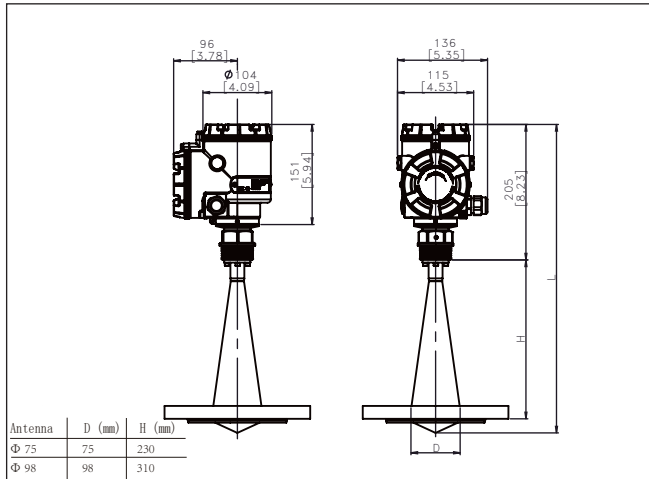


CPR6200

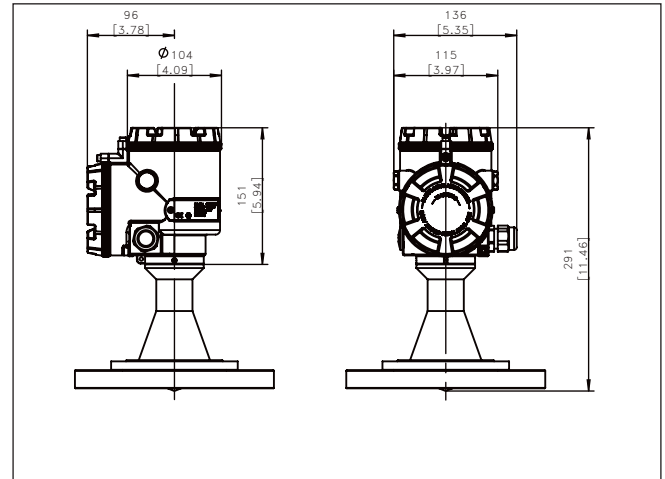


CPR6X00 PULSE RADAR LEVEL TRANSMITTER

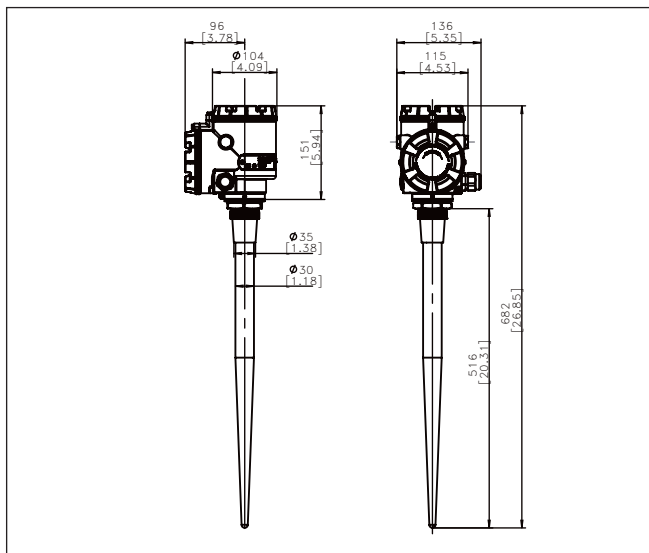
CPR6300



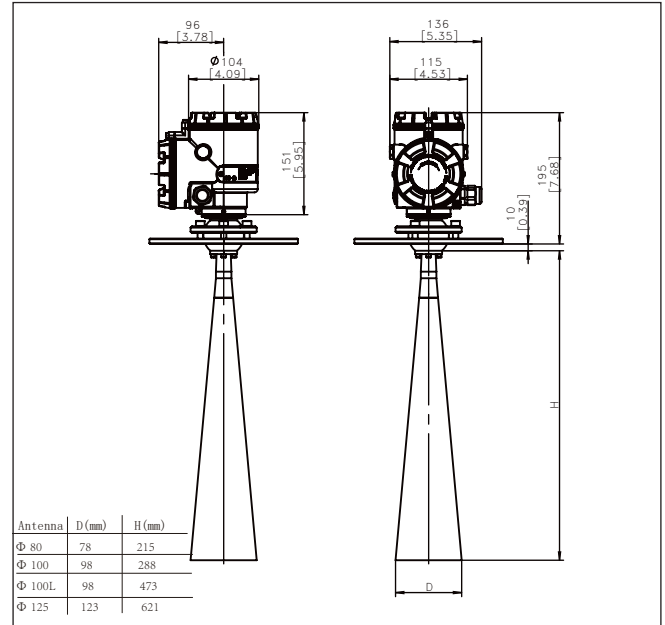
CPR6700



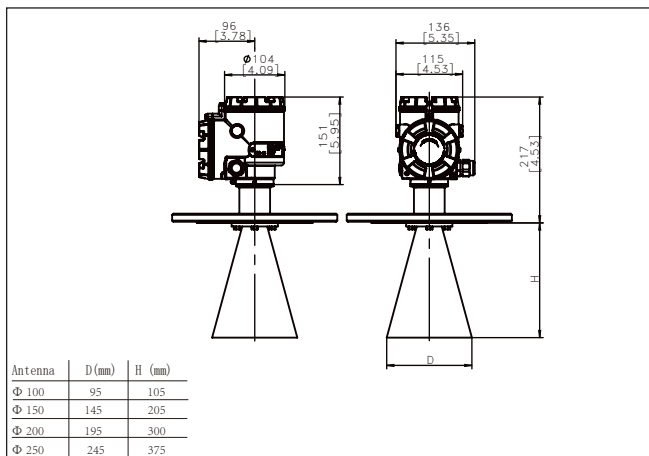
CPR6500



CPR6800



CPR6600



CPR6800S

