CPR6200 Specification Sheet

4 ... 20 mA/HART - 2 wire/4 wire Radar sensor for continuous level measurement of non-aggressive liquids with low dielectric constant

Area of application

The CPR6200 is a radar sensor for continuous level measurement of non-aggressive liquids with low dielectric constant. It is suitable for level measurement in storage containers, reactors and process vessels. Its wide temperature and pressure range makes project planning simple.

Feature and benefit

- **Twin-chips**

With two chips, CPR6200 achieves higher processing ability.

- **Multi-Track**

Due to new Multi-Track wave tracking algorithm, CPR6200 gets highest reliability.

- **Waves Memo**

With wave management function. To help understand abnormal output, CPR6200 storages wave automatically.

Function

Measuring system operates based on the time-of-flight method (ToF). It measures the distance from the reference point (process connection) to the product surface. Radar impulses are emitted by an antenna, reflected off the product surface and received again by the radar system. The time from emission to reception of the signals is proportional to the level in the vessels. A special time stretching procedure allows reliable and precise measurement of the extremely short signal running times.

Technical data

Measuring range	0 ~ 35m
Sample frequency	54Hz
Response time	<2s
Resolution	1mm
Deviation	±3mm
Repeatability	±1.5mm
Frequency	26GHz
Ambient temperature	-40℃ ~ 70℃
Process temperature	-40℃ ~ 1000 ℃
Process pressure	-1 ~ 40 bar
Protect level	IP67

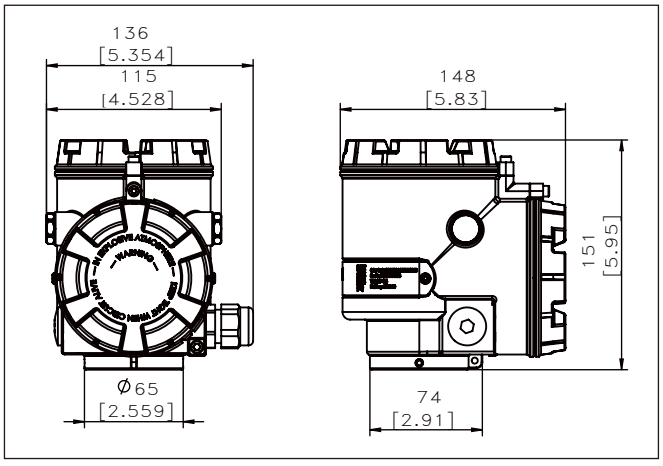
Material

The antenna is made of 316 stainless steel and the process seal is made of FKM.

Housing version

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

Double chamber housing



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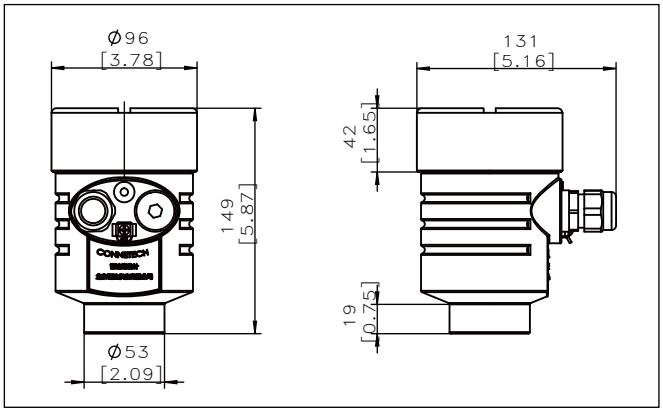
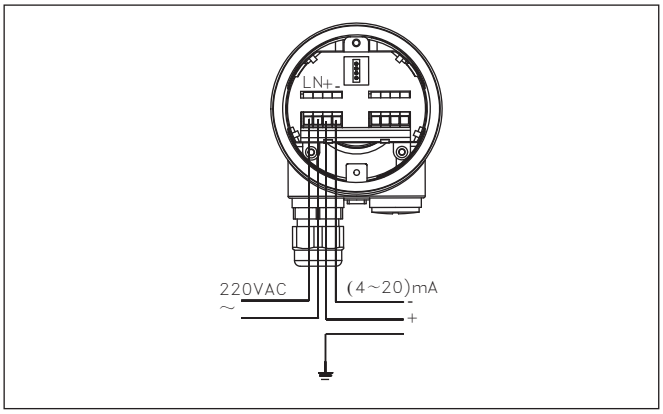
Single chamber housing



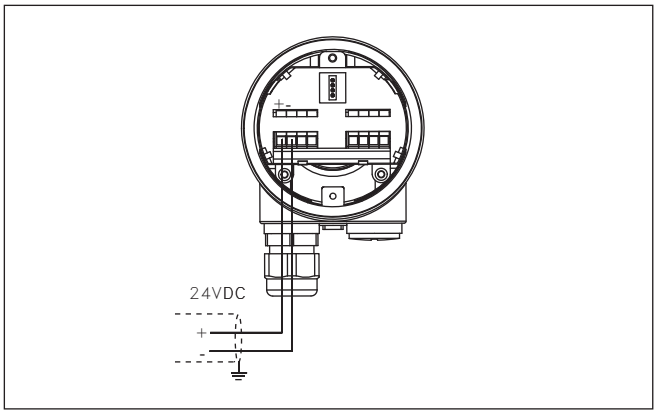
220V AC.Four-wire



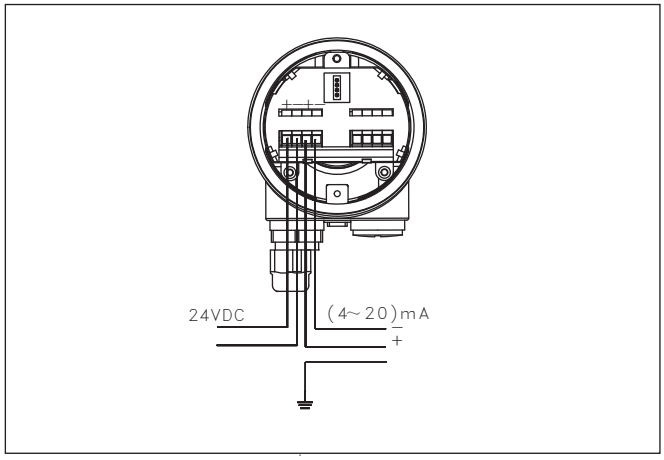
Electric connection

The instruments are available in different electronics versions. 4 … 20 mA/HART in two and four-wire version with 24 VDC and four-wire with 220VAC.

24V DC.Two-wire



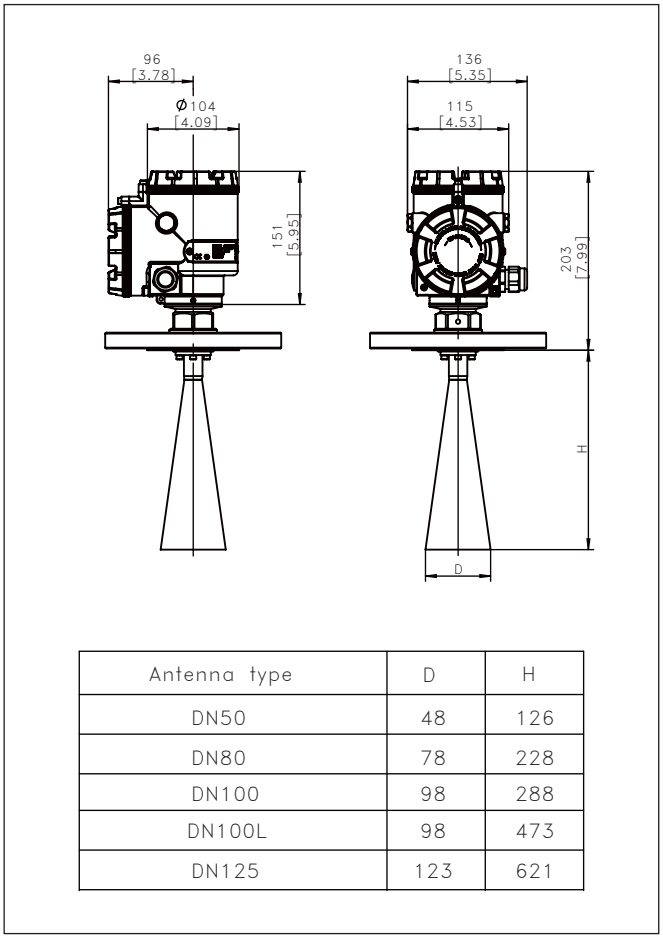
24V DC.Four-wire



Operation

The adjustment of the instrument is carried out via the - LCD display, tank side display, tank side hub and HART communicator.

Dimensions



Antenna type	D	H
DN50	48	126
DN80	78	228
DN100	98	288
DN100L	98	473
DN125	123	621

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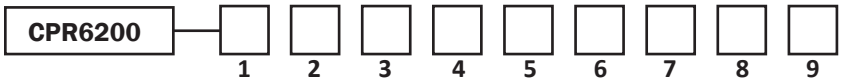
Ordering code

CPR6200 Pulse Radar Level Transmitter



1 | LANGUAGE

A	English
I	Chinese

2 | APPROVAL

XX	Standard
CX	Ex ia IIC T6 Ga
DX	Ex d ia [iaGa]IIC T6/ T2 Gb
EX	Ex iaD tD A21 IP67T80°C/ T290°C

3 | ANTENNA VERSION / MATERIAL

C	With horn antenna ø48mm / 316L
D	With horn antenna ø78mm / 316L
E	With horn antenna ø98mm / 316L
N	With horn antenna ø98mm L / 316L
L	With parabolic antenna ø195mm / 316L
K	With parabolic antenna ø245mm / 316L
T	Customized

4 | PROCESS FITTING

GD	Thread G1½A
ND	Thread 1½NPT
FC	Flange DN50 PN16
FD	Flange DN80 PN16
FE	Flange DN100 PN16
AE	Flange 3" 150lb RF
AI	Flange 3" 150lb RF
AK	Flange 4" 150lb RF
TT	Customized

5 | PROCESS SEAL / TEMPERATURE/ PRESSURE

2	FKM（Viton） / -40...150°C/ -1...40bar
3	Kalrez 6375 / -20...150°C/ -1...40bar
4	FKM（Viton） + radiator / -40...250°C / -1...3bar
5	Kalrez 6375 + radiator / -20...250°C / -1...3bar
T	Customized/Max. 1000°C / Max. 400Bar

6 | ELECTRONICS

H	Two-wire 4...20mA/ HART; 24 VDC
B	Four wire 4...20mA/ HART; 220 VAC
I	Four wire 4...20mA/ HART; 24 VDC
W	Wireless; GPRS; Wireless C Mesh
T	Customized

7 | HOUSING/PROTECTION

A	Single chamber/ Aluminum / IP67
B	Double chamber/ Aluminum / IP67
W	Double chamber/ 316L SS/ IP67

8 | CABLE ENTRY / CABLE GLAND/ CONNECT CABLE

M	M20x1.5 / with/ without
N	½NPT/ without/ without

9 | LCD DISPLAY

X	Without display
A	With display

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