

CPR6500 Specification Sheet

4 ... 20 mA/HART - 2 wire/4 wire Radar sensor for continuous level measurement of aggressive liquids



Area of application

The CPR6500 is a radar sensor for continuous level measurement of aggressive liquids. It is particularly suitable for level measurement in vessels with small process fitting and under simple process conditions. The slim rod antenna enables the installation in small vessel openings.

Feature and benefit

- Twin-chips**
 With two chips, CPR6500 achieves higher processing ability.
- Multi-Track**
 Due to new Multi-Track wave tracking algorithm, CPR6500 gets highest reliability.
- Waves Memo**
 With wave management function. To help understand abnormal output, CPR6500 stores 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	±10mm
Repeatability	±5mm
Frequency	6GHz
Ambient temperature	-40 °C ~ 70 °C
Process temperature	-40 °C ~ 150 °C
Process pressure	-1 ~ 3 bar
Protect level	IP67

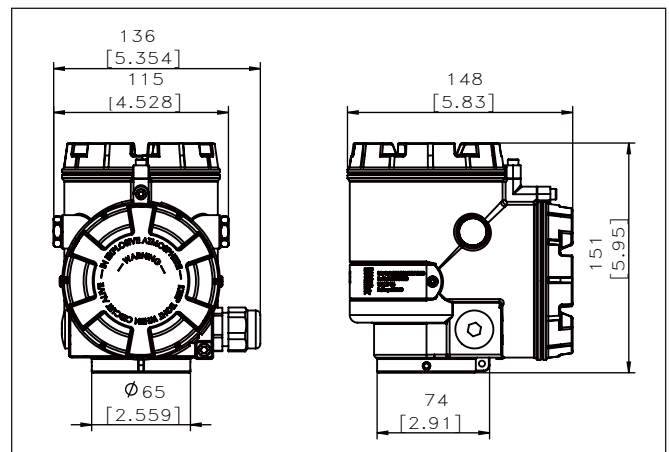
Material

The antenna is made of PTFE and the process seal is made of PTFE.

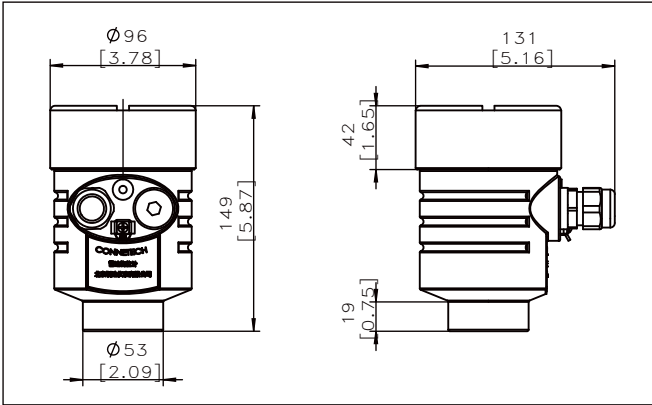
Housing version

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).

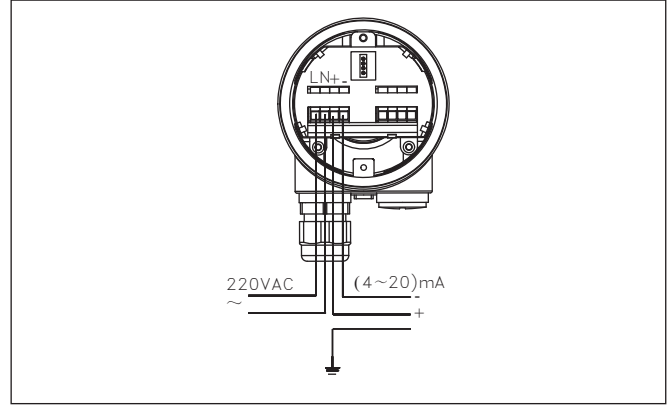
Double chamber housing



Single chamber housing



220V AC.Four-wire



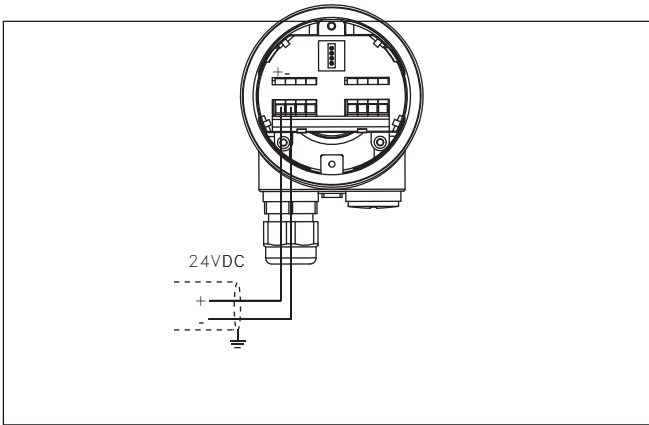
Electric connection

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.

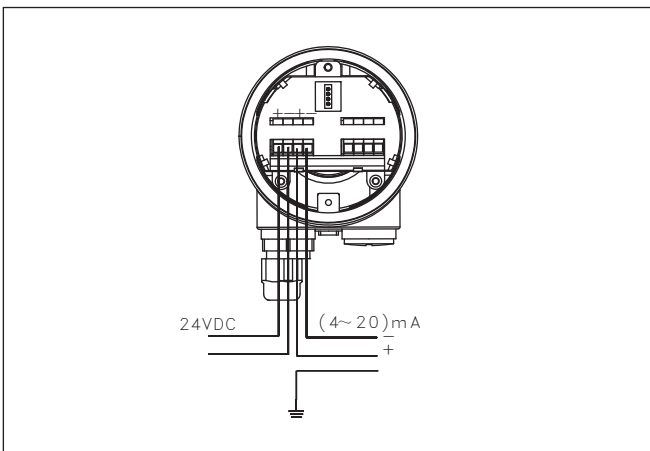
Operation

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

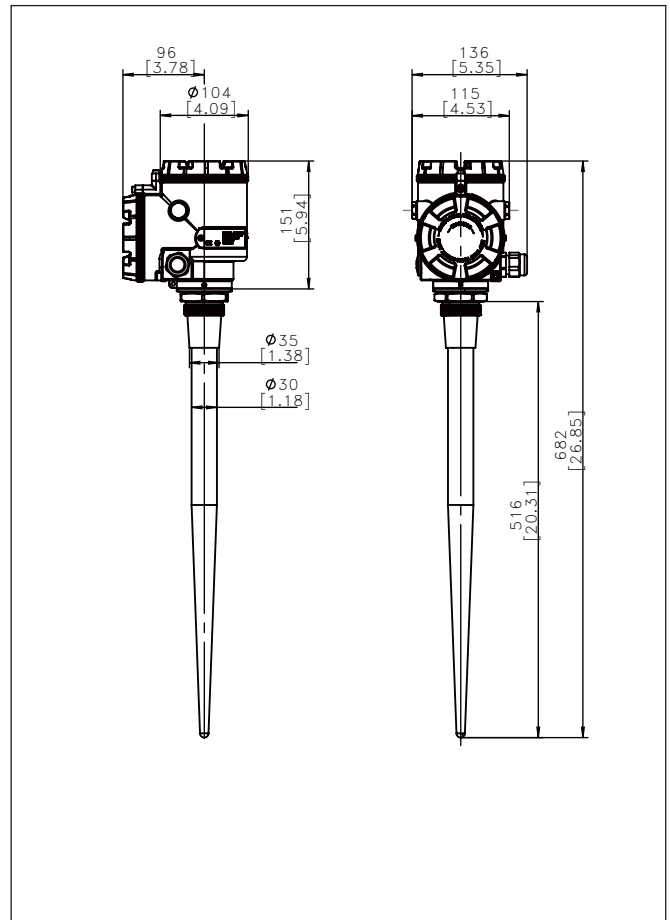
24V DC.Two-wire



24V DC.Four-wire

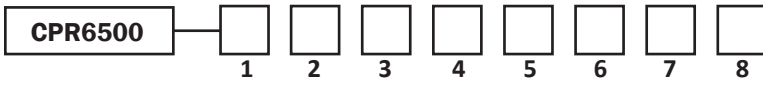


Dimensions



Ordering code

CPR6500 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/PROCESS/TEMPERATURE/PRESSURE

K	Rod antenna for sockets 50mm / PTFE / -40°C...150°C / -1...3bar
L	Rod antenna for sockets 100mm / PTFE / -40°C...150°C / -1...3bar
M	Rod antenna for sockets 250mm / PTFE / -40°C...150°C / -1...3bar
T	Customized

4 | PROCESS FITTING

GD	Thread G1½A
NP	Thread 1½NPT
FC	Flange DN50
FD	Flange DN80
FE	Flange DN100
FK	Flange DN150
FL	Flange DN200
AE	Flange 2" 150lb RF
AI	Flange 3" 150lb RF
AK	Flange 4" 150lb RF
AM	Flange 6" 150lb RF
AN	Flange 8" 150lb RF
TT	Customized

5 | 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

6 | HOUSING/PROTECTION

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

7 | CABLE ENTRY / CABLE GLAND/ CONNECT CABLE

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

8 | LCD DISPLAY

X	Without display
A	With display