

## CPR6600 Specification Sheet

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



### Area of application

The CPR6600 is a sensor for continuous level measurement of liquids under difficult process conditions. It is suitable for storage tanks, process vessels or standpipes. It can be used universally by changing different versions of antenna.

### Feature and benefit

- **Twin-chips**  
With two chips, CPR6600 achieves higher processing ability.
- **Multi-Track**  
Due to new Multi-Track wave tracking algorithm, CPR6600 gets highest reliability.
- **Waves Memo**  
With wave management function. To help understand abnormal output, CPR6600 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 ~ 70m
Sample frequency	54Hz
Response time	<2s
Resolution	1mm
Deviation	±10mm
Repeatability	±3mm
Frequency	6GHz
Ambient temperature	-40 °C ~ 70 °C
Process temperature	-40 °C ~ 1000 °C
Process pressure	-1 ~ 40 bar
Protect level	IP67

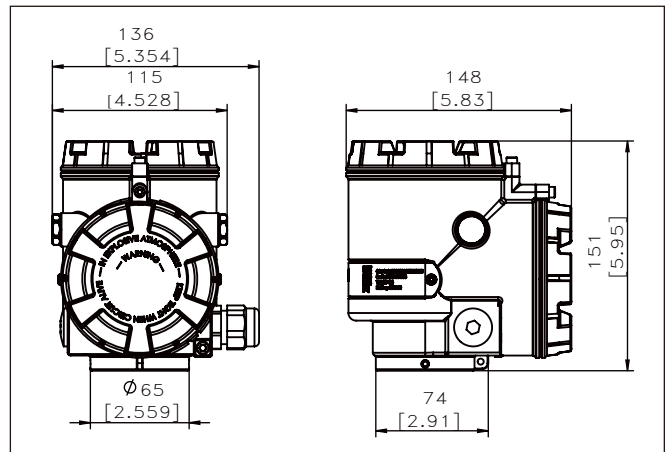
### Material

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

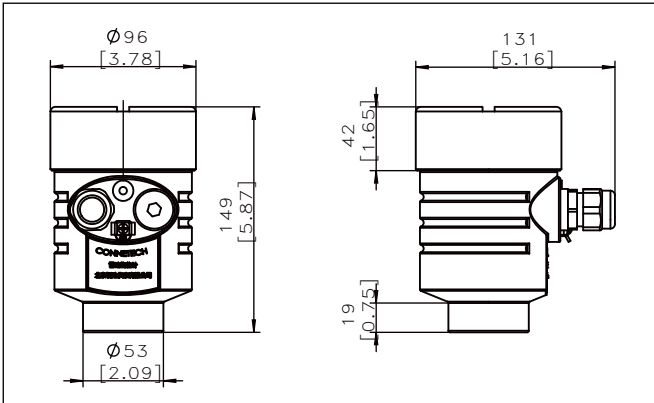
### Housing version

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).

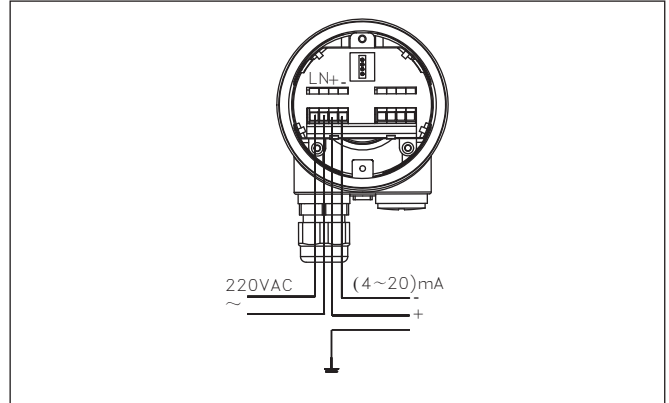
### Double chamber housing



## Single chamber housing



## 220V AC.Four-wire



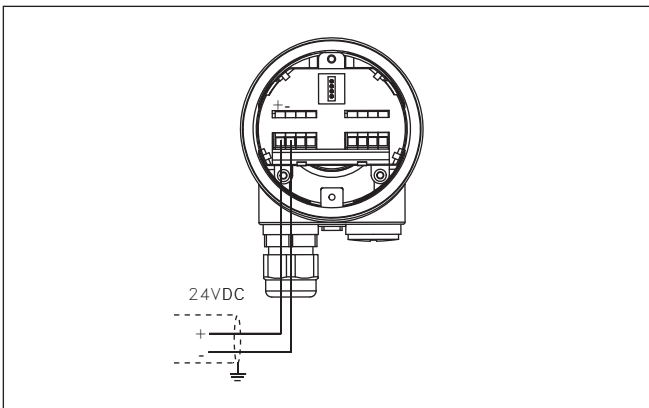
## Electric connection

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.

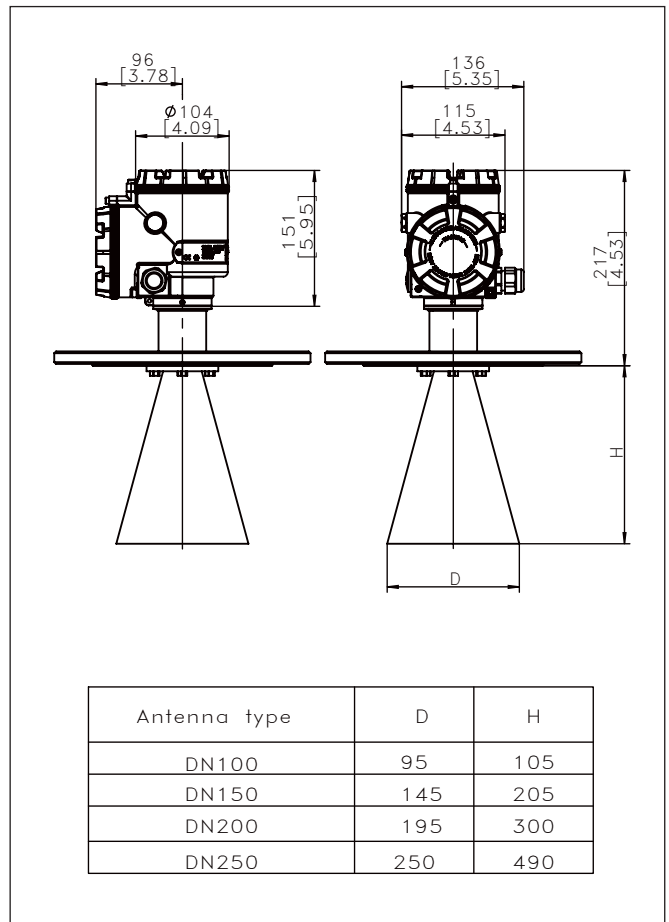
## Operation

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

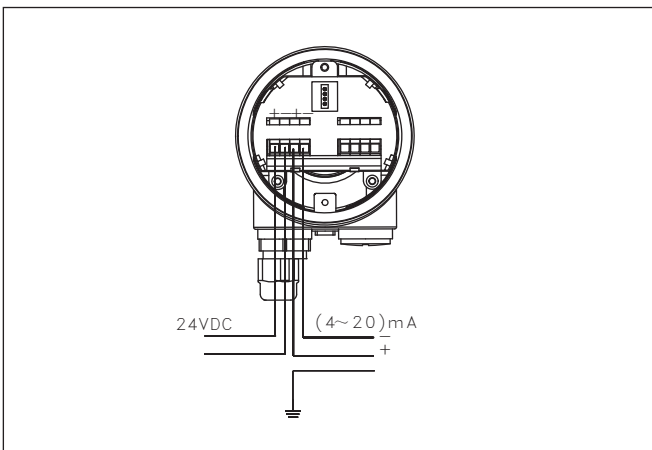
## 24V DC.Two-wire



## Dimensions

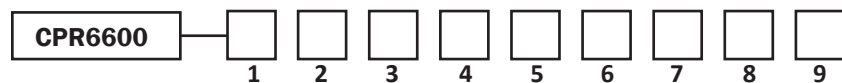


## 24V DC.Four-wire



## Ordering code

### CPR6600 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

A	Without horn antenna for waveguide tube
D	With horn antenna $\varnothing 75$ mm / 316L
E	With horn antenna $\varnothing 95$ mm / 316L
H	With horn antenna $\varnothing 145$ mm /
I	With horn antenna $\varnothing 195$ mm / 316L
J	With horn antenna $\varnothing 245$ mm / 316L
F	With waveguide tube $\varnothing 50$ mm / 316L
T	Customized

#### 4 | PROCESS FITTING

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
AP	Flange 10" 150lb RF
TT	Customized

#### 5 | PROCESS SEAL / TEMPERATURE / PRESSURE

2	FKM (Viton) / -40...150°C / -1...40bar
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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
H	Graphite and ceramic / -60...400°C / -1...40bar
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	1/2NPT/ without/ without

#### 9 | LCD DISPLAY

X	Without display
A	With display