CPR6700 Specification Sheet

4 ... 20 mA/HART - 2 wire/4 wire Radar sensor for continuous level measurement of solid under simple process conditions



Area of application

The CPR6700 is a radar sensor for continuous measurement of bulk solids or granules. It is particularly suitable for level measurement in small silos and simple processing conditions. The CPR6700 is an economical solution thanks to the simple setup and the reliable, maintenance-free operation.

Feature and benefit

Twin-chips

With two chips, CPR6700 achieves higher processing ability.

Multi-Track

Due to new Multi-Track wave tracking algorithm, CPR6700 gets highest reliability.

Waves Memo

With wave management function. To help understand abnormal output, CPR6700 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 ~ 15m
Sample frequency	54Hz
Response time	<2s
Resolution	1mm
Deviation	±3mm
Repeatability	±1.5mm
Frequency	26GHz
Ambient temperature	-40 ℃ ~ 70 ℃
Process temperature	-40°C ~80°C
Process pressure	-1 ~ 2 bar
Protect level	IP67

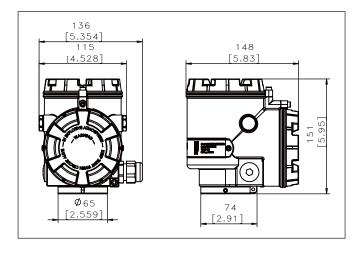
Material

The antenna is made of plastic and the process seal is made of FKM.

Housing version

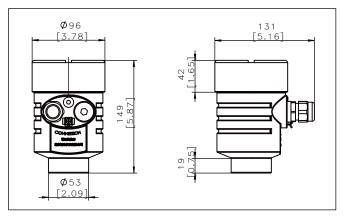
The housings are available as single chamber version and double chamber version in stainless steel or aluminium. They are available with protection ratings up to IP 67 (1 bar).

Double chamber housing



CONNETECH

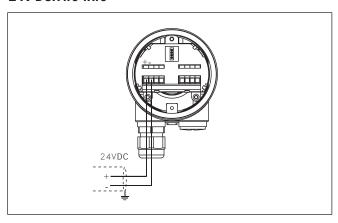
Single chamber housing



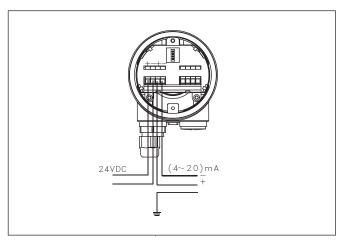
Electric connection

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.

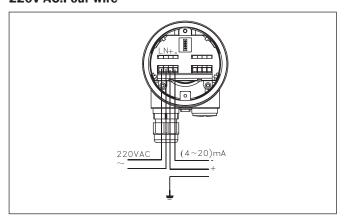
24V DC.Two-wire



24V DC.Four-wire



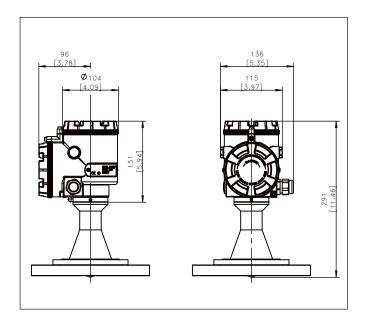
220V AC.Four-wire



Operation

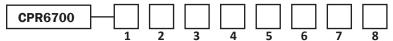
The adjustment of the instrument is carried out via the - LCD display, tank side display, tank side hub and HART communicator.

Dimensions



Ordering code

CPR6700 Pulse Radar Level Transmitter



1 | LANGUAGE

Α	English
-1	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

7 | CABLE ENTRY / CABLE GLAND / CONNECT CABLE

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

8 | LCD DISPLAY

Χ	Without display
Α	With display

3 | ANTENNA VERSION / MATERIAL/PROCESS/TEMPERATURE/ PRESSURE

С	With plastic horn antenna ø80mm / -40 ℃80 ℃ / -10.2bar
Т	Customized

4 | PROCESS FITTING

XX	Without fastening
FE	Adapter flange DN100PN16 / PPH
TT	Customized

5 | **ELECTRONICS**

Н	Two-wire 420mA/HART; 24 VDC
В	Four wire 420mA/HART; 220 VAC
ı	Four wire 420mA/HART; 24 VDC
W	Wireless; GPRS; Wireless C Mesh
Т	Customized

6 | HOUSING/PROTECTION

Α	Single chamber/ Aluminum / IP67
В	Double chamber/ Aluminum / IP67
W	Double chamber/ 316L SS/ IP67