

Pulse RADAR Level Transmitter

RLT6200



Measuring range upto 35m



Response Time <2 sec



Process Pressure: (-)1 ~ 40 bar



Sensor Housing: IP67 protection

**Product
Datasheet**

ROCKSENSOR AT A GLANCE (ABOUT US)

Rocksensor is one of the global leaders specializing in Process Instrumentation, Research and Development and Designing of Industrial Automation Equipment. We provide highly precise pressure sensors and transmitters, flow metres, level transmitters and temperature transmitters with a prime focus to help our clients efficiently, safely and economically run complex industrial processes.

Rocksensor, headquartered in Switzerland, has its footprint in various geographical regions such as the US, Russia, South Korea, Italy, Germany, Singapore, Malaysia, Morocco, China, Taiwan, Australia, UAE, Brazil and India. Our clients come from some of the major industries such as Oil and Gas, Petrochemicals, Pharmaceuticals, FMCG, Automobiles, Water, Cement, Metal & Mining, and mainly from the Power Industry like Nuclear, Thermal, Hydro, and Solar.

Rocksensor deals in a wide range of highly accurate industrial automation instruments ensuring that even the complex industrial processes happen efficiently.

To fulfill the needs of our clients we make sure that our instruments work in even the harsh environmental conditions offering accurate recordings and communication.

We, at Rocksensor, believe in creating bonds that last a lifetime and create a success story for each and every client. Rocksensor aims to achieve a perfect fit in the global market landscape and establish our footprints across the globe.



CONTENTS

1. Introduction	4
2. Area of Application	4
3. Feature & Benefit	4
4. Function	4
5. Technical Specifications	4
6. Material	4
7. Housing Version	5
8. Electrical Connection	6
9. Operation	6
10. Dimensions	6
11. Model Selection Table	7

KEY APPLICATION INDUSTRIES

- Oil and Gas sector
- Cement
- Metal
- Pulp and Paper
- Agriculture
- Textiles
- Chemicals
- Power
- Water
- Pharmaceutical
- Fertilizer
- Plastics and HVAC

1. Introduction

The RLT6200 Level transmitter is suitable for continuous level measurement of different media like solid, liquid etc. with low dielectric constant.

2. Area of Application

The RLT6200 is a radar sensor for continuous measurement of bulk solids. It is particularly suitable for level measurement in high silos and large bunkers. The RLT6200 is an economical solution thanks to the simple setup and the reliable, maintenance-free operation.

3. Feature and benefit

Twin-chips

With two chips, RLT6200 achieves higher processing ability.

Multi-Track

Multi-Track Due to new Multi-Track wave tracking algorithm, RLT6200 gets highest reliability.

Waves Memo

With wave management function. To help understand abnormal output, RLT6200 stores wave automatically.

4. 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.

5. Technical data

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

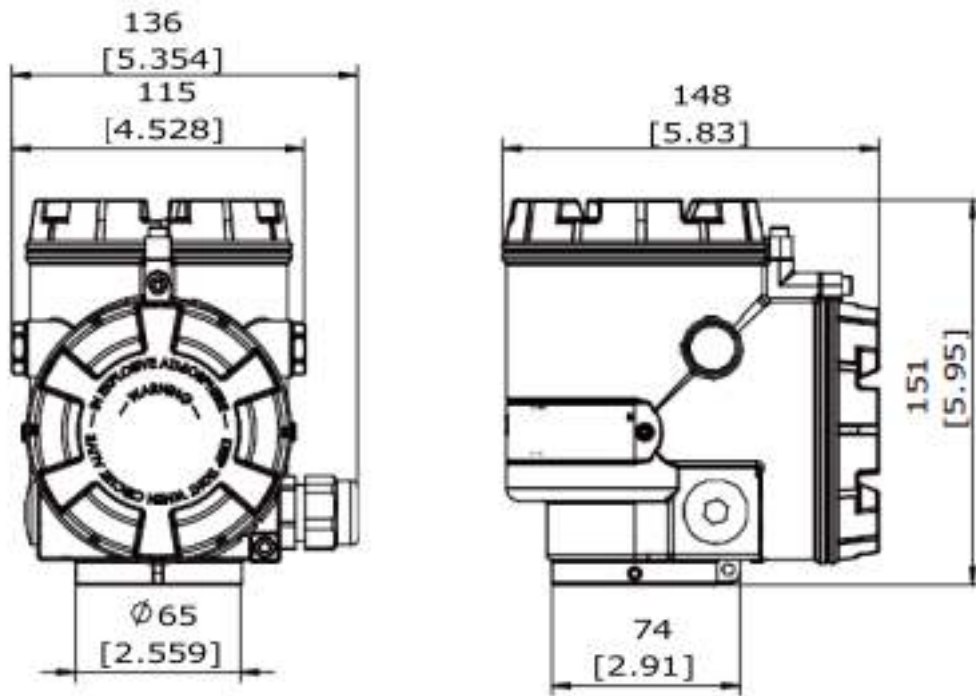
6. Material

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

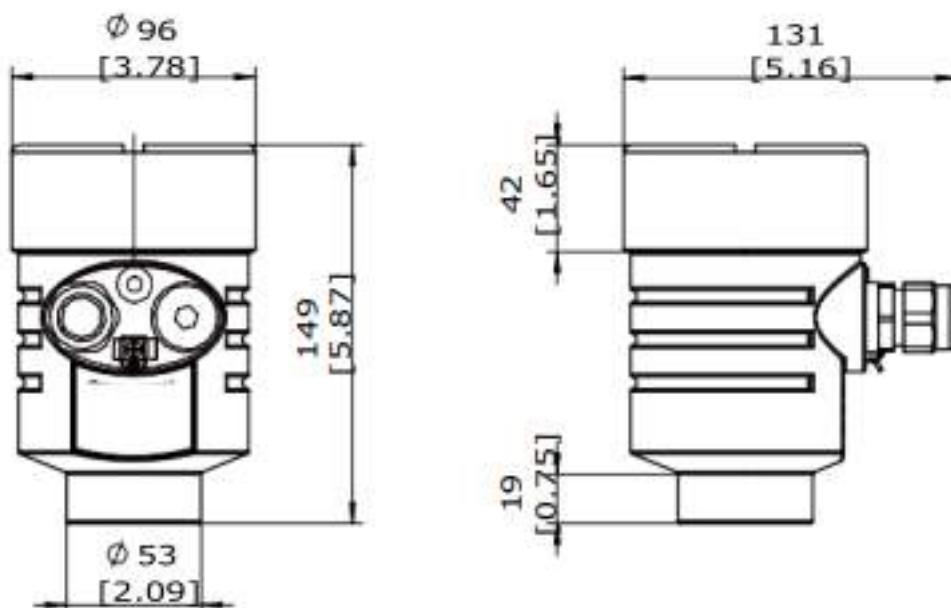
7. Housing version

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



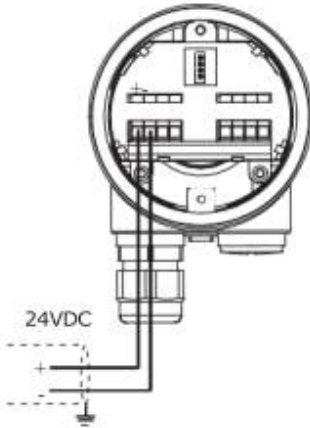
Single Chamber Housing



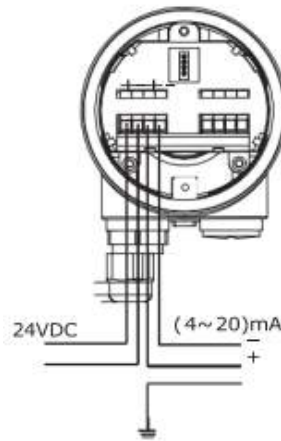
8. Electrical Connection

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.

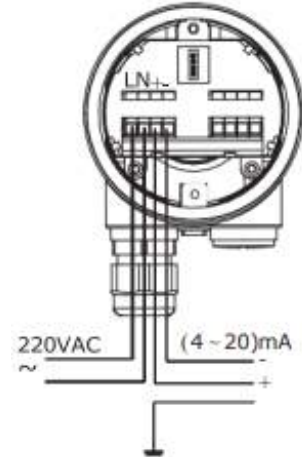
24V DC.Two-wire



24V DC.Four-wire



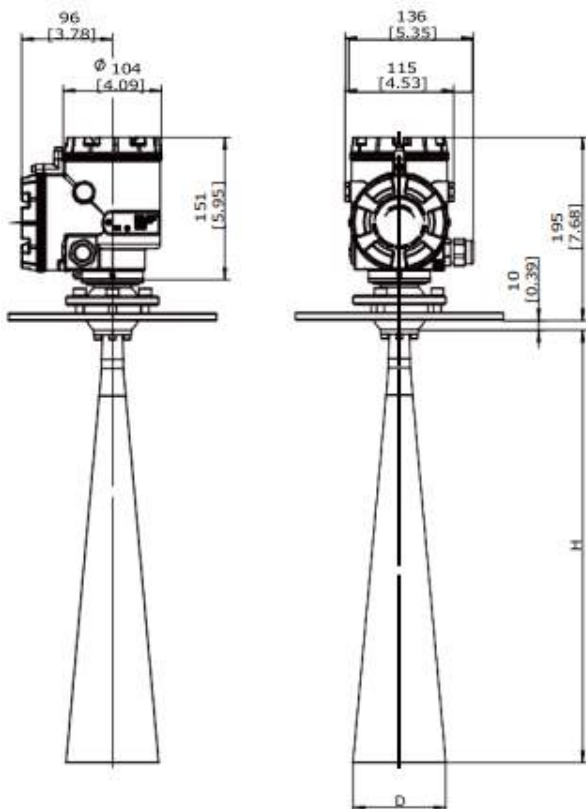
220V AC.Four-wire



9. Operation

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

10. Dimensions



Antenna type	D	H
DN80	78	228
DN100	98	288
DN100(lengthen)	98	473
DN125	123	621

11. Model Selection Table

RLT6200	Pulse Radar Level Transmitter								
Code	1	2	3	4	5	6	7	8	9

Language	
English	A

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

Antenna Version/ Material	
With horn antenna ø78 mm / SS316L	D
With horn antenna ø98mm / SS316L	E
With horn antenna ø98mm L / SS316L	F
With horn antenna ø123mm L/ SS316L	G
With horn antenna ø98mm/ SS316L+ dust cover	N
With horn antenna ø98mm L / SS316L + dust cover	R
With horn antenna ø123mm L / SS316L + dust cover	M
Customized	T

Process Fitting	
Swiveling holder with flange 4" 150lb	1F
Swiveling holder with flange 6" 150lb	1G
Swiveling holder with flange 8" 150lb	1H
Swiveling holder with flange 10" 150lb	1I
Swiveling holder with flange DN100	1E
Swiveling holder with flange DN150	1R
Swiveling holder with flange DN200	1K
Swiveling holder with flange DN250	1L
Customized	TT

Process Seal/ Temperature/ Pressure	
FKM (Viton)/ -40~150°C/ -1~40bar	2
Kalrez 6375 /-20...150°C/ -1~40bar	3
FKM (Viton)+ radiator/-40~250°C/ -1~3bar	4
Kalrez 6375 + radiator/ -20~250°C/ -1~3bar	5
Graphite and ceramic/-60~400°C/ -1~40bar	H
Customized/Max. 1000°C/ Max. 400Bar	T

LCD Display	
X	Without display
A	With display

Cable Entry/ Cable Gland/ Connection Cable	
M	M20×1.5/ with/ without
N	½NPT/ without/ without

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

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

Field Instrumentation Range



Pressure Measurement

- Smart Differential Pressure Transmitter
- Smart Gauge Pressure Transmitter
- Smart Absolute Pressure Transmitter
- Miniature Pressure Transducer without display
- Sanitary Gauge/ Absolute Pressure Transmitter

- Submersible Pressure Transmitter
- Remote Seal Differential P.T. with capillary
- Remote Seal Differential P.T. Direct Mount
- Remote Seal Gauge/Absolute P.T. with capillary
- Remote Seal Gauge/Absolute P.T. Direct Mount



Flow Measurement

- Coriolis Mass Flowmeter
- Thermal Gas Mass Flowmeter
- Positive Displacement Flowmeter
- Electromagnetic Flowmeter
- Vortex Flowmeter

- Turbine Flowmeter
- Variable Area Flowmeter
- Clamp On Ultrasonic Flowmeter
- Inline Ultrasonic Flowmeter
- Portable Ultrasonic Flowmeter



Level Measurement

- RADAR Level Transmitter Horn Antenna
- Compact RADAR Level Transmitter
- RADAR Level Transmitter Sanitary
- RADAR Level Transmitter
- Guided Wave RADAR Level Transmitter
- Guided Wave RADAR Level Transmitter
- RADAR Level Transmitter Lens Antenna

- RADAR Level Transmitter Rod Antenna
- Ultrasonic Level Transmitter
- Microwave Barrier Level Switch
- Admittance Level Switch Series
- Vibrating Rod Level Switch Series
- Tuning Fork Level Switch Series



Temperature Measurement

- Head Mount Temperature Transmitter
- Temperature Transmitter for Sanitary Applications

- DIN Rail Temperature Transmitter
- Field Mount Temperature Transmitter

Rocksensor India Pvt. Ltd.

📍: B -36, Sector 67, Noida, Uttar Pradesh - 201301

For more details, contact us on:

☎ +91 928 948 8117 | +91 1204121469

✉: info@rocksensor.in

🌐: www.rocksensor.in

Global Offices

Global HQ & R&D Centre:
Rocksensor Sàrl, Switzerland

North America:
Rocksensor Automation LLC, USA

APAC:
Rocksensor Automation Co. Ltd., Shanghai

For more updates, follow us on:

in: [Rocksensor India](#)

▶: [Rocksensor](#)

f: [Rocksensor](#)

📷: [Rocksensor](#)

🐦: [Rocksensor India](#)