

# Level Measurement Radar 26GHz

RD-2100

# Level measurement under certain pressure temperature limit and easy process condition

## **GENERAL**

The extremely narrow microwave pulse emitted by the antenna on radar level instrument can travel at the speed of light andpart of its energy, which is reflected offthe surface of target medium, is received by the very same antenna. The time lapse between pulse emission and reception by the antenna is proportional to the distance between the surface of target medium and the reference point on antenna. However, due to the fact that the electromagnetic wave is transmitted at extremely high speed, which leads to the tiny time lapse (nanosecond level) and makes it difficult to be identified, RD series of radar level instrument have adopted a special demodulation technology, enabling itself to detect the time lapse between pulse emission and reception correctly, and eventually generate accurate measurement result.



### SPECIFICATION

Measurement Range: 0-10m Measurement Accuracy: 3 mm

Resolution: 1 mm

Process Temperature : -40 - 150 C° Frequency Range: 26GHz(K Band) Process Pressure : -1.0 - 3 bar

Signal Output: 4-20mA(DC24V)/HART (2-Wire)

4-20mA(22.8 - 26.4VDC)/HART(4-Wire) 4-20mA(90 - 260VAC)/HART(4-Wire)

Effective Beam Angle : 22° Display:LCD Adjustment Module

Antenna Material : PTFE, PVDF, PFA

Housing/Protection: Plastic/IP66

Aluminium/IP67

Aluminium(two Chamber)/IP67 Stainless steel 316L/IP67

Process Connection: Threaded Version G1-1/2A,1-1/2NPT,

Flange DN50(PTFE) and Special Specification

Approval : Standard(without Approval)

Intrinsically Safe(Exia IIC T6)

Intrinsically Safe+Ship Approval(Exia IIC T6)

Intrinsically Safe+Flameproof Approval(Exia IIC T6)

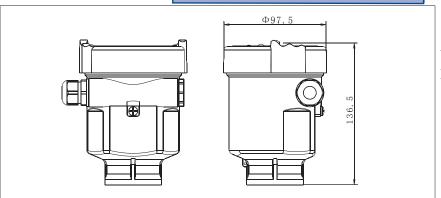






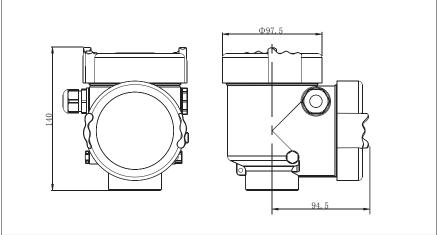
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# Dimensional Specifications

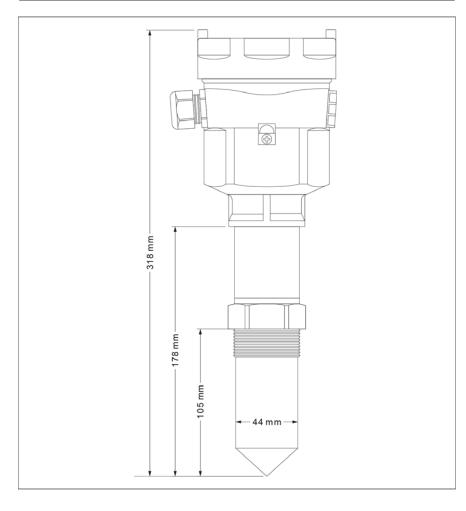


A/B/D Type:Housing

Material :PBT/Aluminium/316L



C Type:Aluminium(two chamber)



Threaded Version



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#### **MODEL SELECTION GUIDE**

#### RD-2100-X-X-XX-X-X-X-X

#### **Explosion Proof Approval**

- P Standard(without Approval)
- I Intrinsically Safe(Exia IIC T6)
- C Intrinsically Safe+Ship Approval(Exia IIC T6)
- G Intrinsically Safe+Flameproof Approval(Exd ia IIC T6)

#### Shape of Antenna/Material/Process Temperature

- A (R Type) PFA(-40~150°C)
- B (R Type) PTFE(-40~150°C)
- C (R Type) PVDF(-40~150°C)

#### **Process Connection/Material**

- GP (F)Thread G1-1/2 A
- NP (F)Thread 1-1/2 NPT
- FA (L)Flange DN50/PTFE
- **FX Special Specification**

#### Antenna/Length

A 107mm

#### **Electronic**

- B 4-20mA(DC24V)/HART 2-Wire
- C 4-20mA/(22.8~26.4)V DC/HART 4-Wire
- D 4-20mA/(90~260)V DC/HART 4-Wire

#### Housing/General Safety Level/Antenna Safety Level

- A Aluminium/IP67
- B Plastic(PBT)/IP66
- D Aluminium(two chamber)/IP67
- G Stainless steel 316L/IP67

#### **Cable Entry**

- M M20x1.5
- N 1/2NPT

#### **Display/Programming**

- A YES(LCD)
- X NO



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# **RD2100- Accessories**

Description	S/N:	Image
Radar Transmitter	RD21MB24HE	
Aluminum Housing	RD21HSA67	COMES, JOHN VIOLE VIOLENCE VIO
Display & Programmer	RD21D4P	ACTSONIC.
Probe Antenna Sensor Material:A.(PFA)B.(PTFE) C.(PVDF) Connection:M.(1-1/2"G) N.(1-/2 "NPT)	RD21APE M:(1-1/2"G) N:(1-1/2"NPT)	