



# RADAR LEVEL TRANSMITTER (RLT)

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## Principle

Level transmitter is that the microwave is transmitted to the measured object the echo wave returned from the target is compared with the wave transmitted to determine the changes of the target object. Level measurement of kinds of medium in vessels, storage tanks and feed bins. The measurement is not affected by the process pressure, temperature or the physical features of the medium. It is a kind of non contact measurement.



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### Characteristics and Advantages

- Not subject to influence of pressure change, vacuum, temperature change, inert gas, smoke and steam/vapour etc...
- Easy installation, robust and durable and free of maintenance.
- HART or PROFIBUS-PA communication protocol and foundation fieldbus protocol, simple and convenient calibration, easily realize at-site calibrating operation via digital LCD and realize simple configuration setting and program via software
- Sensitive measurement and speedy update.
- Suitable for high-temperature working condition, where the temperature can be up to 230° C.

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### Product Application

- Level measurement is applicable to non-contact continuous measurement of liquid, sizing agent and granule.
- Adopts microwave pulse measurement and is able to work normally within the range of industrial frequency waveband.
- Energy is very low and it can be mounted inside of various metal or non-metallic vessels or tubes, without harm to human body and the environment.

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### Working Principle

- Extreme short microwave pulse that emits low energy is transmitted and received via antenna system.
- Radar wave runs at a light speed
- Running time can be converted into level signal by the electronic components.
- Special way to extend time can ensure a steady and accurate measurement within very short time.

## Ordering Code

<b>Product Series</b>	RLT-902 : 26G high frequency smart radar level transmitter;
<b>License</b>	P: standard type(non-explosion proof) I: Intrinsically safe ( Exia IIC T6 Ga) G: Flameproof ( Exd IIC T6 Gb)
<b>Process connection</b>	G: Thread G1/2" A/Stainless Steel 304 N: Thread 1-1/2" NPT/ Stainless Steel 304 A: Flange DN50/ Stainless Steel 304 B: Flange DN80/ Stainless Steel 304 C: Flange DN100/ Stainless Steel 304 Y: Special size
<b>Antenna Type</b>	A: Horn Antenna OD 46mm/ Stainless Steel 316L B: Horn Antenna OD 76mm/ Stainless Steel 316L C: Horn Antenna OD 96mm/ Stainless Steel 316L Y: Special Custom
<b>Seal/Process Temperature</b>	V: Viton/(-40 ~ 130 )° C K: Kalrez/(-40 ~ 230 )° C
<b>Output</b>	3: 4-20mA/24V DC/HART 2-wire system 4: 4-20mA/220V AC/HART 4-wire system 5: RS485 Modbus/6-24V/ 4-wire system
<b>Outer Covering/Protection Grade</b>	L: Aluminum/Single Chamber/IP67 H: Aluminum/Double Chamber/IP67 G: Plastic/Single Chamber/IP65 K: Stainless Steel/Single Chamber/IP67
<b>Cable input</b>	M : M20x1.5 N : ½ inch NPT
<b>Programming devide</b>	A:With; X:Without

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