



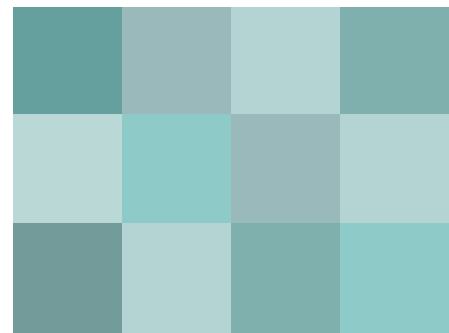
ROHEVEL-PRT SERIES



Level measurement made easy

USE ROCKHILL'S LEVEL MEASUREMENT TECHNOLOGIES TO OPTIMIZE PROCESS PLAN FOR MAINTENANCE AND ANTICIPATE AND CORRECT ISSUES BEFORE THEY BECOME PROBLEMS.

ROCKHILL AUTOMATION, INC.





Area of application

Radar sensors of the ROHEVEL-PRT series are used for non-contact level measurement of liquids and bulk solids.

In liquids

They measure all kinds of liquids, even under high pressure and extreme temperatures, in simple as well as aggressive liquids.

In bulk solids

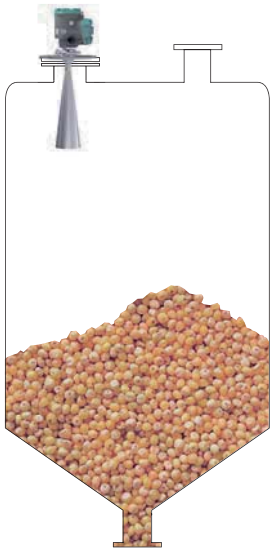
The sensors can also measure from the lightest to the heaviest bulk solids with absolute reliability, even in the presence of dust and noise, without being affected by buildup or condensation.

Measuring principle

The ROHEVEL-PRT pulse radar transmitter is designed for continuous level measuring of liquids and solids.

ToF principle

The measuring instrument sends out short radar pulses toward the measured product via the antenna system. The product surface reflects the signal waves, which are then received back by the antenna system. The instrument calculates the level from the running time of the radar pulses and the entered tank height.



Advantages

Twin-chips

With two MCU, ROHEVEL-PRT achieves higher processing ability.

Multi-Track

Due to new Multi-Track wave tracking algorithm, ROHEVEL-PRT get highest reliability.

Waves Memo

Wave management concept. To help understand abnormal output, ROHEVEL-PRT storages wave automatically.

Level | Pulse Radar

ROHEVEL-PRT3201



ROHEVEL-PRT3202



Application	Continuous level measurement of aggressive liquids with small process fitting under simple process conditions.	Continuous level measurement of liquids under difficult process conditions. storage tanks, process vessels and standpipes are available.
Measuring range	0 ~ 35 m	0 ~ 70 m
Version	Φ30 mm PTFE Integrated solid rod antenna	D150 (316, Φ145 mm, height 200 mm, liquids) D200 (316, Φ195 mm, height 280 mm, liquids) D250 (316, Φ245 mm, height 490 mm, liquids)
Power	< 0.5 W	< 0.5 W
Sample frequency	54 Hz	54 Hz
Response time	< 2 s	< 2 s
Frequency	6.3 GHz	6.3 GHz
Process fitting	Flange	Flange
Process temperature	-40 °C ~ 150 °C	-40 °C ~ 350 °C
Process pressure	-1.0 kgf/cm ² ~ 3 kgf/cm ²	-1.0 kgf/cm ² ~ 40 kgf/cm ²
Resolution	1 mm	1 mm
Accuracy	± 10 mm	± 10 mm
Repeatability	± 5 mm	± 5 mm
Signal output	4 ~ 20 mA HART	4 ~ 20 mA HART
Display and Adjustment	Lcd display, Tank side display and Tank side hub.	Lcd display, Tank side display and Tank side hub.
Antenna material	PTFE	316
Protect level	IP67	IP67
Electrical connection	2 × M20*1.5(Cable diameter 9 ~ 13 mm) 2 × M16*1.5(Cable diameter 6 ~ 9 mm)	2 × M20*1.5(Cable diameter 9 ~ 13 mm) 2 × M16*1.5(Cable diameter 6 ~ 9 mm)
Ex information	Ex ia IIC T6 Ga Ex d ia [ia Ga] IIC T6 Gb	Ex ia IIC T6 Ga Ex d ia [ia Ga] IIC T6 Gb

ROHEVEL-PRT3203



ROHEVEL-PRT3205



Application	Continuous level measurement of aggressive liquids under difficult process conditions. Apply in storage tanks, dosing vessels or reactors.	Continuous level measurement of liquids. Use in small tanks and tight mounting spaces with stirrers and heating spirals.
Measuring range	0 ~ 70 m	0 ~ 20 m
Version	D150 (316, Φ 145 mm, height 200 mm, liquids)	Φ 45 mm PTFE coated horn antenna Φ 45 mm PTFE coated extend horn antenna Φ 75 mm PTFE coated horn antenna Φ 75mm plastic horn
Power	< 0.5 W	< 0.5 W
Sample frequency	54 Hz	54 Hz
Response time	< 2 s	< 2 s
Frequency	6.3 GHz	26 GHz
Process fitting	Flange	thread G1½ thread G3A flange
Process temperature	-40 C ~ 150 C	-40 C ~ 150 C
Process pressure	-1.0 kgf/cm ² ~ 2kgf/cm ²	-1.0 kgf/cm ² ~ 3 kgf/cm ²
Resolution	1 mm	1 mm
Accuracy	± 10 mm	± 10 mm
Repeatability	± 5 mm	± 5 mm
Signal output	4 ~ 20 mA HART	4 ~ 20 mA HART
Display and Adjustment	Lcd display, Tank side display and Tank side hub.	Lcd display, Tank side display and Tank side hub.
Antenna material	316+PTFE	PTFE, PVDF
Protect level	IP67	IP67
Electrical connection	2 × M20*1.5(Cable diameter 9 ~ 13 mm) 2 × M16*1.5(Cable diameter 6 ~ 9 mm)	2 × M20*1.5(Cable diameter 9 ~ 13 mm) 2 × M16*1.5(Cable diameter 6 ~ 9 mm)
Ex information	Ex ia IIC T6 Ga Ex d ia [ia Ga] IIC T6 Gb	Ex ia IIC T6 Ga Ex d ia [ia Ga] IIC T6 Gb

Level | Pulse Radar

ROHEVEL-PRT3206



ROHEVEL-PRT3207



Application	Continuous level measurement of liquids with slightly aggressiveness. Use in storage containers, reactors and process vessels.	Continuous level measurement of liquids under difficult process conditions. storage tanks, process vessels and standpipes are available.
Measuring range	0 ~ 35 m	0 ~ 35 m
Version	D50 horn antenna(316, Φ48mm, height 190mm) D80 horn antenna(316, Φ78mm, height 215mm) D100 horn antenna(316, Φ98mm, height 295mm) D100 Extended horn antenna(316, Φ95mm, 473mm) D125 horn antenna(316, Φ123mm, 621mm)	D50 horn antenna/316L+PTFE process fitting D80 horn antenna/316L+PTFE process fitting D100 horn antenna/316L+PTFE process fitting
Power	< 0.5 W	< 0.5 W
Sample frequency	54 Hz	54 Hz
Response time	< 2 s	< 2 s
Frequency	26 GHz	26 GHz
Process fitting	thread G1½ thread G3A flange	Flange
Process temperature	-40 C ~ 400 C	-40 C ~ 150 C
Process pressure	-1.0 kgf/cm ² ~ 40 kgf/cm ²	-1.0 kgf/cm ² ~ 16 kgf/cm ²
Resolution	1 mm	1 mm
Accuracy	± 10 mm	± 10 mm
Repeatability	± 5 mm	± 5 mm
Signal output	4 ~ 20 mA HART	4 ~ 20 mA HART
Display and Adjustment	Lcd display, Tank side display and Tank side hub.	Lcd display, Tank side display and Tank side hub.
Antenna material	316	316+PTFE
Protect level	IP67	IP67
Electrical connection	2 × M20*1.5(Cable diameter 9 ~ 13 mm) 2 × M16*1.5(Cable diameter 6 ~ 9 mm)	2 × M20*1.5(Cable diameter 9 ~ 13 mm) 2 × M16*1.5(Cable diameter 6 ~ 9 mm)
Ex information	Ex ia IIC T6 Ga Ex d ia [ia Ga] IIC T6 Gb	Ex ia IIC T6 Ga Ex d ia [ia Ga] IIC T6 Gb

ROHEVEL-PRT3208



ROHEVEL-PRT3209



Application	Continuous level measurement of aggressive liquids under difficult process conditions. Apply in storage tanks, dosing vessels or reactors.	Continuous level measurement of liquids. Use in small tanks and tight mounting spaces with stirrers and heating spirals.
Measuring range	0 ~ 35 m	0 ~ 70 m
Version	Advise D150(316, Φ145 mm, height 200 mm, liquids) Advise D200(316, Φ195 mm, height 280 mm, liquids) D250(316, Φ245mm, height 490mm, liquids)	D150(316, Φ145 mm, height 200 mm, liquids) D200(316, Φ195 mm, height 280 mm, liquids) D250(316, Φ245 mm, height 490 mm, liquids)
Power	< 0.5 W	< 0.5 W
Sample frequency	54 Hz	54 Hz
Response time	< 2 s	< 2 s
Frequency	6.3 GHz	26 GHz
Process fitting	Flange	thread G1½ thread G3A flange
Process temperature	-40 C ~400 C	-40 C ~ 400 C
Process pressure	-1.0 kgf/cm ² ~ 40 kgf/cm ²	-1.0 kgf/cm ² ~ 40 kgf/cm ²
Resolution	1 mm	1 mm
Accuracy	± 10 mm	± 10 mm
Repeatability	± 5 mm	± 5 mm
Signal output	4 ~ 20 mA HART	4 ~ 20 mA HART
Display and Adjustment	Lcd display, Tank side display and Tank side hub.	Lcd display, Tank side display and Tank side hub.
Antenna material	316	316
Protect level	IP67	IP67
Electrical connection	2 × M20*1.5(Cable diameter 9 ~ 13 mm) 2 × M16*1.5(Cable diameter 6 ~ 9 mm)	2 × M20*1.5(Cable diameter 9 ~ 13 mm) 2 × M16*1.5(Cable diameter 6 ~ 9 mm)
Ex information	Ex ia IIC T6 Ga Ex d ia [ia Ga] IIC T6 Gb	Ex ia IIC T6 Ga Ex d ia [ia Ga] IIC T6 Gb