



Use ROCKHILL's level measurement technologies to optimize process plan for maintenance and anticipate and correct issues before they become problems.

ROCKHILL AUTOMATION, INC.



Level | Guided Wave Radar





Area of application

The ROHEVEL-GRT series are suitable for level measurement in liquids and bulk solids.

In liquids

They can detect the interface between two products. The measurement result are reliable, even under extremely hard conditions and aggressive liquids.

In bulk solids

The result can be absolutely reliable, even in the presence of dust and noise, and without being affected by buildup or condensation.

Measuring principle

The ROHEVEL-GRT guided wave radar transmitter is designed for continuous level measuring of conductive or nonconductive liquids and solids.

TDR principle

High frequency microwave impulses are guided along a steel cable or rod. When they reach the product surface, the microwave pulses are reflected and received by the processing electronics.Level distance is directly proportional to the flight time of the pulse.

Advantages

Twin-chips

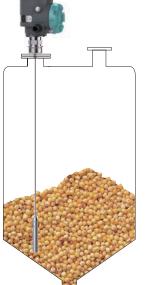
With two MCU, ROHEVEL-GRT achieves higher processing ability.

Multi-Track

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

Waves Memo

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



Level | Guided Wave Radar

ROHEVEL-GRT2201



ROHEVEL-GRT2202



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Application	All kinds of liquids, applications with steam, buildup, foam generation or condensation.	All kinds of light-weight and heavy bulk solids. applica- tions with strong steam generation, condensation and buildup.
Measuring range	Cable probe up to 30 m Rod probe up to 6 m Coax probe up to 3 m	Cable probe up to 30 m Rod probe up to 6 m Coax probe up to 3 m
Version	Single cable(Φ 2, Φ 4) Single rod(Φ 10, Φ 16) Double cable(Φ 4) Double rod(Φ 10) Coax(Φ 25)	Single cable(Φ8) Single rod(Φ24)
Power	< 0.5 W	< 0.5 W
Sample frequency	16 Hz	16 Hz
Response time	< 2 s	< 2 s
Frequency	100MHz ~ 1.8GHz	100MHz ~ 1.8GHz
Process fitting	Thread G1½ Flange	Thread G1½ Flange
Process temperature	-40 °C ~ 200 °C	-40°C ~ 200°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	± 2mm	± 2mm
Repeatability	± 1 mm	± 1 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

ROHEVEL-GRT2203

ROHEVEL-GRT2206





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Application	Aggressive liquids, applications with steam, buildup, foam generation or condensation.	All kinds of bulk solids and liquids under extreme pressure and temperature conditions, applications with buildup, foam generation or condensation.
Measuring range	Cable probe up to 30 m Rod probe up to 6 m Coax probe up to 3 m	Cable probe up to 30 m Rod probe up to 6 m Coax probe up to 3 m
Version	Single cable(Φ 2, Φ 4) Single rod(Φ 10, Φ 16) Double cable(Φ 4) Double rod(Φ 10) Coax(Φ 25)	Single cable(Φ8) Single rod(Φ24)
Power	< 0.5 W	< 0.5 W
Sample frequency	16 Hz	16 Hz
Response time	< 2 s	< 2 s
Frequency	100MHz ~ 1.8GHz	100MHz ~ 1.8GHz
Process fitting	Thread G1½ Flange	Thread G1½ Flange
Process temperature	-40 °C ~150 °C	-40°C ~ 450°C
Process pressure	-1.0 kgf/cm ² ~ 16kgf/cm ²	-1.0 kgf/cm ² ~ 400 kgf/cm ²
Resolution	1 mm	1 mm
Accuracy	± 2mm	± 2mm
Repeatability	± 1 mm	± 1 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/PFA	316/Ceramics
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