

Guided Wave Radar Level Transmitter



Features

- Measures accurately on materials with dielectric (dK) as low as 1.4
- Guided wave radar measurement for up to 3.0 mm accuracy
- Measures level and interface on challenging applications including foam
- Trouble-free operation since the transmitter is virtually unaffected by dust, vapor, interfering obstacles, and turbulence. It is even suitable for small or oddly shaped tanks

* Please contact us before order for detailed certificate

Applications

- Oil, gas and refining
- Chemical and petrochemical
- Power
- Pulp and paper
- Water and sewage treatment
- Food and beverage
- Pharmaceutical
- Interface

Probe Type

- **Single Flexible Rod Probe**
0.15~20.0m (0.5 to 75 ft)
- **Single Rigid Rod Probe**
0.6~6.0m (2 to 20 ft)
- **Twin Flexible Rod Probe**
0.6~6.0m (2 to 20 ft)
- **Twin Rigid Rod Probe**
0.6~6.0m (2 to 20 ft)
- **Coaxial Probe**
0.6~6.0m (2 to 20 ft)

Specification

Measuring range	0.15~20m	
Output	Type	Analog 4 to 20mA with Hart digital signal
	Loop Resistance	250~360Ω (@ 24 Vdc)
	Diagnostic Alarm	Adjustable 3.78, 21.1mA
Power	16~45VDC	
Operation temperature	-40 to +80°C	
Accuracy	+/- 3mm	
Response Time	< 1second	
Warm-up Time	< 5 seconds	
Process Condition	Temperature: -40~165°C (-40~400°C optional)	
	Pressure: -1~70 bar (200bar optional)	

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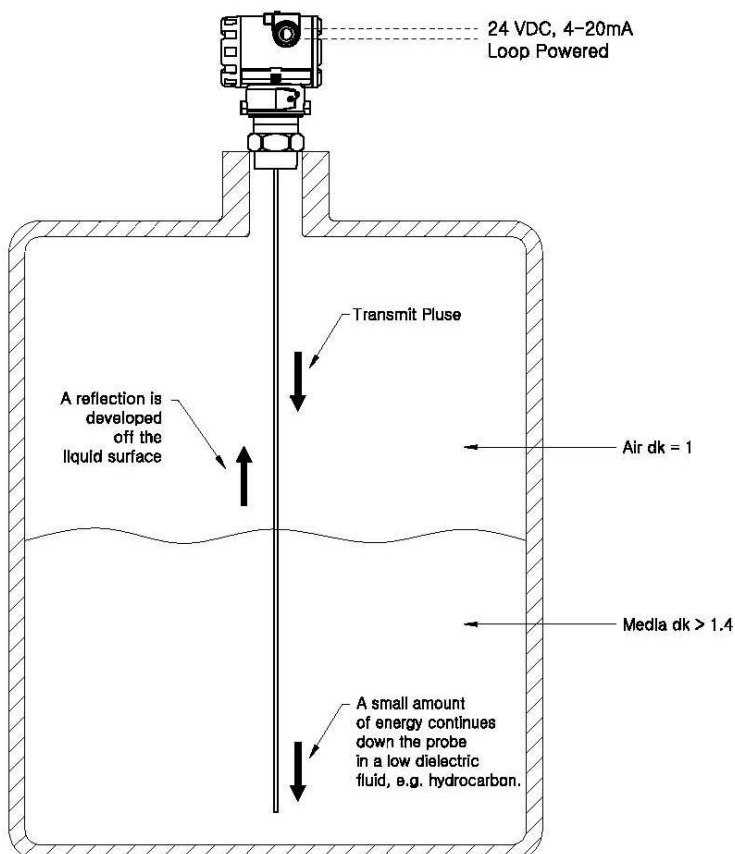
Smart Guided Wave Radar Level Transmitter

ALT-6100

Overview

The ALT-6100 is a time domain reflectometer (TDR) configured for level sensing. It measures the round-trip time for a pulse to propagate along a transmission line (or probe) to the surface of a liquid and reflect back. The propagation time is independent of air temperature, pressure and humidity, and the precise location of the pulse reflection depends only on the location of the liquid's surface, independent of the liquid's dielectric constant.

Basic Configuration



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Duon System Co., Ltd.

ALT-6100 Guided Wave Radar Level Transmitter

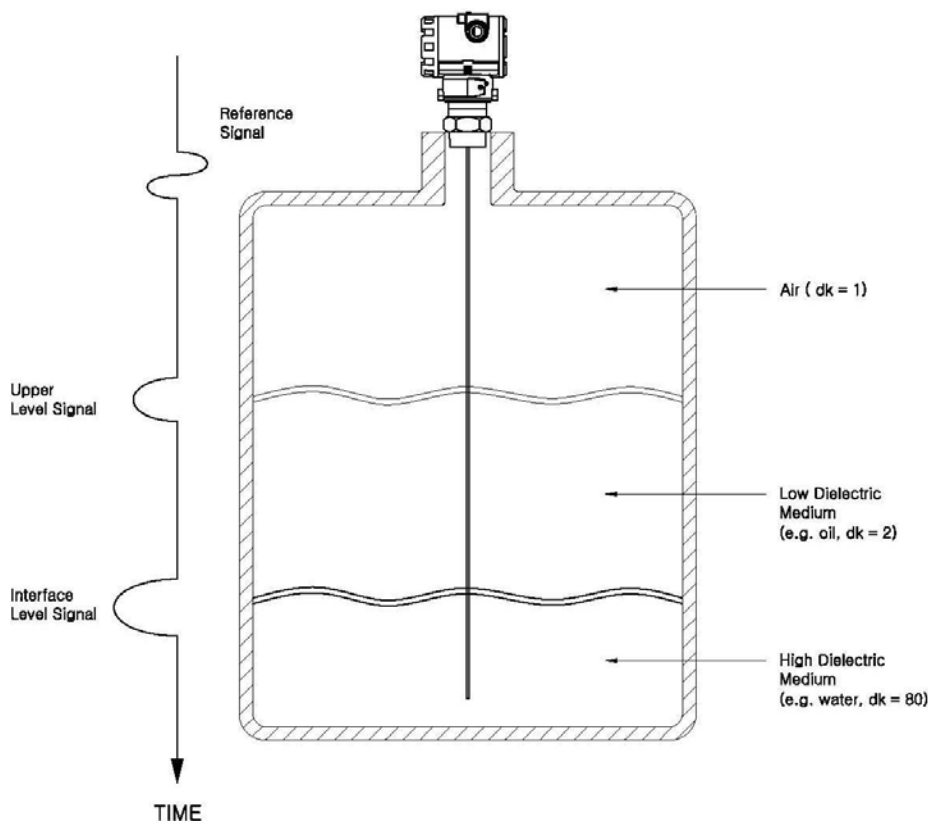
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Interface Detection



Specification

Measuring range	0.15~22.86m(0.5 to 75 ft)	
Output	Type	Analog 4 to 20mA with Hart digital signal
	Loop Resistance	250~550 Ω
	Diagnostic Alarm	Adjustable 3.78, 21.1mA
Power	11.9~45VDC	
Operation temperature	-40 to + 80 o C	
Accuracy	+/- 3mm	
Response Time	< 1second	
Warm-up Time	< 5 seconds	
Process Dielectric Effect	< 0.3 inch within selected range	

1 Ordering Information

Model	Description		
ALT6100	Guided Wave Radar Level Transmitter		
Code	Measurement		
-L	Level		
Code	Probe Type		
1F	Single Flexible Rod Probe	0.15~20m	
1R	Single Rigid Rod Probe	0.6~6m	
2F	Twin Flexible Rod Probe	0.6~6m	
2R	Twin Rigid Rod Probe	0.6~6m	
CX	Coaxial Probe	0.6~6m	
Code	Process Connection		
A21	2" ANSI, #150	Flange	
A23	2" ANSI, #300		
A26	2" ANSI, #600		
A29	2" ANSI, #900		
A31	3" ANSI, #150		
A33	3" ANSI, #300		
A36	3" ANSI, #600		
A39	3" ANSI, #900		
A41	4" ANSI, #150		
A43	4" ANSI, #300		
A46	4" ANSI, #600		
A49	4" ANSI, #900		
J51	JIS 50A, 10K		
J52	JIS 50A, 20K		
J81	JIS 80A, 10K		
J82	JIS 80A, 20K		
J10	JIS 100A, 10K		
J11	JIS 100A, 20K		
J15	JIS 150A, 10K		
J16	JIS 150A, 20K		
J20	JIS 200A, 10K		
J21	JIS 200A, 20K		
TN1	1 1/2" NPT		Thread
TN2	1" NPT		
TG1	G 1 1/2"		
TG2	G 1"		
S	Special*		
Code	Process Temperature / Pressure		
S	Standard		
H	High Temperature		
HP	High Temperature & High Pressure		
Code	Material of Construction : Process Connection / Probe		
S	304 SST		
T	316/316L SS		
H	HAST-C*		
M	Monel*		

ALT-6100 Ordering Information

Code	O-ring Material
V	Viton
E	EPDM
K	Kalrez
B	Buna-N
Code	Hazardous Location Certifications
-K0	Maker Standard (Waterproof:IP67)
-K1	KOSHA Flameproof Approval
Code	Option
M1	LCD Indicator
LP	Lightening Protector
BA	Stainless Steel Bracket (Angle Type with SST Bolts)
BF	Stainless Steel Bracket (Flat Type with SST Bolts)
ST	Stainless Steel Housing
Code	Probe Length
-□□□...□(with unit)	Probe Length (meter/ft/mm/inch...)
Code	Remote Housing Cable
-N	NON
-R□□□...□(with unit)	Remote Housing Cable (meter/ft/mm/inch...)*

Example : **ALT6100-LCXA31STV-K1M1BA-2.5m-R4m**

Coaxial Probe, 3"ANSI #150 Flange, Standard Temp/Pressure,
Material of Construction 316 SST, Viton O-ring, LCD Indicator,
Angle Bracket, Probe Length 2.5 meter, Remote Housing Cable 4 meter
KOSHA Flameproof Approval

Note : "*" consult manufacturer before order