

HYM270 Radar Level Meter



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Overview

The extremely narrow microwave pulse emitted by the antenna on radar level instrument can travel at the speed of light and part of its energy, which is reflected off the 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, 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.

Features

The guided wave radar level instrument, adopted 26GHz as transmitting frequency, which make this series have specialties as below:

1. Small beam angle, which centralize energy, make RD80X high ability of anti-jamming, hence high accuracy and reliable.
2. Small antenna size, easy to mount and easy to equip extra dust protection
3. Small blind zone, good accuracy even for small.
4. Shorter wave-length, suitable for the measurement of powder, grain and etc.
5. The guided wave radar level instrument, with pulses as its working tool and extremely low emission power, can be mounted on

various metal or nonmetal vessels, harmless towards the environment and human beings.

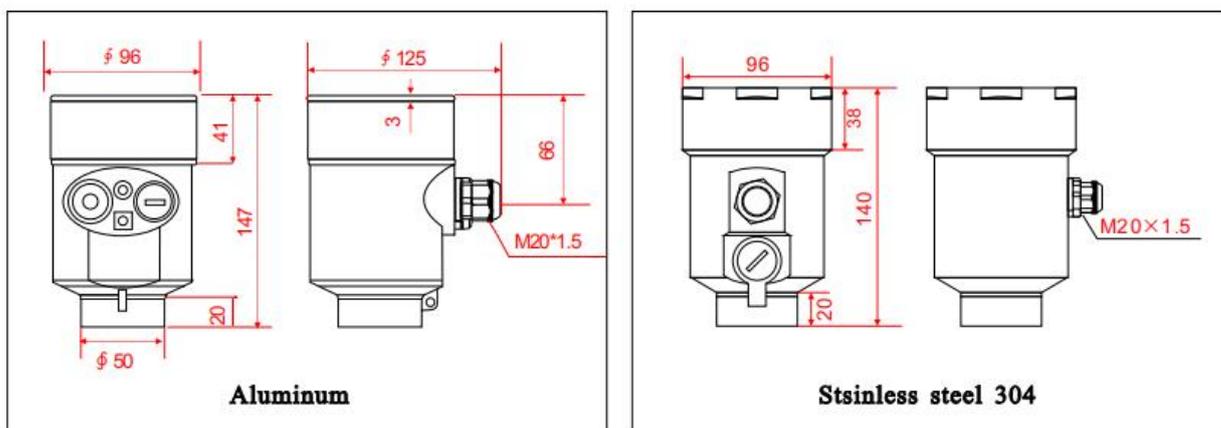
Equipped with advanced microprocessor and unique Echo Discovery echo processing technology, the radar level instrument can

be used under various hazardous process conditions.

Technical Parameters

Measure Range	0-20m
Measuring medium	Strong dew, crystal,corrosive liquid, dust
Frequency	26GHz
Accurate	±5mm
Temperature	-40 ~ 80℃
Process temperature	-40 ~ 350℃
Process pressure	-0.1 ~ 4.0MPa
Process connection	Thread, Flange selected
Protection grade	IP67
Output signal	4...20mA/HART/RS485/Modbus
Power Supply	Two-wire standard version (16~36) V DC Four-wire (21.6~26.4) V DC
Temperature Coefficient of Zero	±1.0%FS/℃ (Reference 25℃)
Temperature Coefficient of Full Scale	±1.0%FS/℃ (Reference 25℃)

Structure Drawing (unit:mm)



Material

Probe: Steel 316L

Seal ring between housing and housing: Silicone

View Point window on housing: Polycarbonate

Ground terminal: Stainless Steel

Ordering Guide

Item NO.	Type					
HYM270	Radar Level Meter					
	Code	Type				
	G	G1 1/2				
	N	NPT 1-1/2				
	F80	Flange DN80				
	F100	Flange DN100				
	Other	Customized				
	Code	Temperature				
	N	Normal -40~120°C				
	H	High -40~350°C				
	Code	Supply Power				
	V1	24VDC				
	V2	220VAC				
	Code	Length of the probe				
	A	Rod Antenna				
	B	Horn Antenna				
	Code	Output				
	B1	4-20mA				
	B7	RS485				
	B8	HART				
	Code	Pressure				
	N	less than 2Mpa				
	H	4Mpa				
HYM270	G1	H	V1	A	B1	H