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RADAR LEVEL METER

上海思派电子科技有限公司
SHANGHAI SPES ELECTRONIC TECHNOLOGY CO.,LTD.

COMPANY INTRODUCTION

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Shanghai SPES Electronic Technology Co., Ltd (<https://www.spes.com.cn>) was founded in January, 2003 with a registered fund of 10.1 million Yuan, which is a professional high-tech private company specializing in R&D, production, and sales of various level meters. At the very beginning of establishment, SPES has gathered a group of professionals and managerial personnel, and brought together many senior engineers. Their R&D experience of automation instruments guaranteed the quality and excellent performances of products.

SPES has won international certificates such as ISO, CE, and SIL, as well as anti-explosion and metrology certificates, specializing in the production of level switches, RF admittance sensors, capacitance sensors, radar level meters, magnetic level indicators, float switches, and temperature/pressure/differential pressure instruments. Our comprehensive product portfolio caters to diverse industrial applications across chemical processing, pharmaceuticals, new

energy, grain & oils, environmental power, feed production, cement, plastics, and construction machinery sectors. Widely distributed across domestic and global markets, we serve as a trusted supplier to Fortune 500 companies including SANY Heavy Industry, CNPC, and CSSC, having earned the distinction of "Outstanding Supplier" from our clients.

SPES has established offices and branch subsidiaries in multiple locations, including Guangzhou and Chengdu, and has actively participated in international exhibitions such as the Hannover Messe in Germany. Adhering to the principles of innovation, pragmatism, and professionalism, Shanghai SPES maintains an open global vision and a keen industry insight, delivering cutting-edge technology, high-quality products, and efficient services to both domestic and international clients.

COMPANY SCENES



Head Office



Laser Welding



CNC Machine



Testing Room



Pressure Automatic Calibration Aging Workshop



Certificates

Office Address: 8F, Jinyuan Center (5A Office Building), No.28, Yuanwen Road, Minhang District, Shanghai.

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<https://www.spes.com.cn/en/>

26GHz High-Frequency Radar Level Meter				
	Model Number	SRD-P23 / SRD-P63	SRD-P23 / SRD-P63	SRD-P23 / SRD-P63
	Transmit Frequency	26GHz	26GHz	26GHz
	Application	Suitable for measuring both solids and liquids. Maintain accuracy in environments with minor dust, vapor, or volatile interference.	Suitable for measuring both solids and liquids. Maintain accuracy in environments with minor dust, vapor, or volatile interference.	Suitable for solid measurement. Maintain accuracy in light dust conditions.
	Measuring Range	10m 30m	10m 30m	10m 30m
	Process Temperature	-40°C~80°C	-40°C~80°C	-40°C~80°C
	Antenna Material	Horn Antenna SUS304 / SUS316L / Fluorine Coating (Optional)	Horn Antenna, SUS304 / SUS316L / Fluorine Coating (Optional)	Horn Antenna, SUS304 / SUS316L / Fluorine Coating (Optional)
	Beam Angle	8°~23°(Depending on horn size)	8°~23°(Depending on horn size)	8°~23°(Depending on horn size)
	Process Connection	G1-1/2" (Material: SUS304/SUS316L)	Flange ≥ DN80 (Material: SUS304/SUS316L/Fluorine Coating)	Swivel Flange ≥ DN80 (Material: SUS304/SUS316L/ Fluorine Coating)
	Measurement Accuracy	±3mm	±3mm	±10mm
Signal Output	4mA~20mA+HART(2/3/4-Wire System)	4mA~20mA+HART(2/3/4-Wire System)	4mA~20mA+HART(2/3/4-Wire System)	
Power Supply	24VDC/220VAC Optional	24VDC/220VAC Optional	24VDC/220VAC Optional	
Electrical Connection	M20*1.5	M20*1.5	M20*1.5	
Ingress Protection (IP) Rating	IP66/IP67	IP66/IP67	IP66/IP67	
Explosion Protection	Ex tb IIIC T80°C Db, Ex db ia IIC T6 Gb(The SRD-P6 series is explosion-proof. Refer to the selection guide for details)			
Advantages	● High measurement accuracy with minimal environmental interference ● Integrated HART communication protocol ● Configurable horn options ● Robust performance in harsh environments ● Non-contact measurement with simplified installation ● Parameter-based commissioning without material-specific calibration ● Optional purge port available for compressed gas cleaning, effectively removing dust and condensation inside the horn antenna, significantly reducing manual maintenance (excludes parabolic antenna models)			

26GHz High-Frequency Radar Level Meter



Model Number	SRD-P23 / SRD-P63	SRD-P43 / SRD-P63	SRD-P44 / SRD-P64
Transmit Frequency	26GHz	26GHz	26GHz
Application	Suitable for measuring both solids and liquids. Maintain accuracy in environments with minor dust, vapor, or volatile interference.	Suitable for liquid measurement. Maintain accuracy in environments with minor steam, vapor, crystallization, or corrosive liquid interference.	Suitable for solid measurement. Maintain accuracy in harsh environments with heavy dust or extended measuring ranges.
Measuring Range	10m 30m	10m 30m	10m 30m 45m 70m
Process Temperature	-40°C~250°C	-40°C~80°C	-40°C~80°C
Antenna Material	Horn Antenna SUS304 / SUS316L / Fluorine Coating (Optional)	Externally mounted horn with conical antenna /PTFE	Horn Antenna SUS304 / SUS316L / Fluorine Coating (Optional)
Beam Angle	8°~23°(Depending on horn size)	8°~23°(Depending on horn size)	3.5°
Process Connection	Screw G1-1/2", Flange ≥ DN80. (Material: SUS304/SUS316L/PTFE)	Flange ≥ DN80 (Material: SUS304 / SUS316L)	DN250 PN1.0(Thickness 12mm)
Measurement Accuracy	±3mm	±3mm	±3mm
Signal Output	4mA~20mA+HART(2/3/4-Wire System)	4mA~20mA+HART(2/3/4-Wire System)	4mA~20mA+HART(2/3/4-Wire System)
Power Supply	24VDC/220VAC Optional	24VDC/220VAC Optional	24VDC/220VAC Optional
Electrical Connection	M20*1.5	M20*1.5	M20*1.5
Ingress Protection (IP) Rating	IP66/IP67	IP66/IP67	IP66/IP67
Explosion Protection	Ex tb IIC T80°C Db, Ex db ia IIC T6 Gb(The SRD-P6 series is explosion-proof. Refer to the selection guide for details)		
Advantages	● High measurement accuracy with minimal environmental interference ● Integrated HART communication protocol ● Configurable horn options ● Robust performance in harsh environments ● Non-contact measurement with simplified installation ● Parameter-based commissioning without material-specific calibration ● Optional purge port available for compressed gas cleaning, effectively removing dust and condensation inside the horn antenna, significantly reducing manual maintenance (excludes parabolic antenna models)		

26GHz High-Frequency Radar Level Meter



Model Number	SRD-P45 / SRD-P65	SRD-P32 / SRD-P62	SRD-P32 / SRD-P62
Transmit Frequency	26GHz	26GHz	26GHz
Application	Suitable for measuring both solids and liquids. Maintain accuracy in environments with minor dust, vapor, or volatile interference.	Suitable for liquid measurement. Maintain accuracy in environments with minor steam, vapor, crystallization, or corrosive liquid interference.	Suitable for solid measurement. Maintain accuracy in harsh environments with heavy dust or extended measuring ranges.
Measuring Range	10m 30m	10m 30m	10m 30m
Process Temperature	-40°C~80°C	-40°C~80°C	-40°C~80°C
Antenna Material	Teardrop Antenna, PTFE+SUS304/SUS316L	PTFE rod antenna, dimensions: $\phi 44 \times 137$	PTFE rod antenna, dimensions: $\phi 44 \times 137$
Beam Angle	23°	23°	23°
Process Connection	Screw G1-1/2", Flange $\geq$ DN80, (Material: SUS304/SUS316L/ Fluorine Coating)	Screw G1-1/2", Flange $\geq$ DN65, (Material: SUS304/SUS316L/ Fluorine Coating)	Screw G1-1/2", Flange $\geq$ DN80, (Material: SUS304/SUS316L/ Fluorine Coating)
Measurement Accuracy	$\pm 3\text{mm}$	$\pm 3\text{mm}$	$\pm 3\text{mm}$
Signal Output	4mA~20mA+HART(2/3/4-Wire System)	4mA~20mA+HART(2/3/4-Wire System)	4mA~20mA+HART(2/3/4-Wire System)
Power Supply	24VDC/220VAC Optional	24VDC/220VAC Optional	24VDC/220VAC Optional
Electrical Connection	M20*1.5	M20*1.5	M20*1.5
Ingress Protection (IP) Rating	IP66/IP67	IP66/IP67	IP66/IP67
Explosion Protection	Ex tb IIC T80°C Db, Ex db ia IIC T6 Gb(The SRD-P6 series is explosion-proof. Refer to the selection guide for details)		
Advantages	● High measurement accuracy with minimal environmental interference ● Integrated HART communication protocol ● Robust performance in harsh environments ● Non-contact measurement with simplified installation ● Parameter-based commissioning without material-specific calibration		

80GHz Ultra-high Frequency Radar				
	Model Number	SRD-P88 / SRD-P68	SRD-P88 / SRD-P68	SRD-P88 / SRD-P68
	Transmit Frequency	80GHz	80GHz	80GHz
	Application	Suitable for measuring both solids and liquids. Maintain high accuracy in harsh environments with heavy dust, steam, or volatile interference.	Suitable for measuring both solids and liquids. Maintains high accuracy in harsh environments with heavy dust, steam, or volatile interference.	Suitable for measuring both solids and liquids. Maintains high accuracy in harsh environments with heavy dust, steam, or volatile interference.
	Measuring Range	10m 30m 60m 120m	10m 30m 60m 120m	10m 30m 60m 120m
	Process Temperature	-40°C~80°C(Max 250°C)	-40°C~80°C(Max 250°C)	-40°C~80°C(Max 250°C)
	Antenna Material	Curved-surface antenna PTFE+SUS304/SUS316L	Curved-surface antenna PTFE+SUS304/SUS316L	Curved-surface antenna PTFE+SUS304/SUS316L(Optional)
	Beam Angle	3°	8°	8°
	Process Connection	G3-1/2" (Material: PTFE+SUS304/SUS316L)	G1-1/2" (Material: PTFE+SUS304/SUS316L)	Flange ≥ DN80, PTFE anti-corrosion, Flange/SUS304/ SUS316L Flange+PTFE Curved-surface antenna
	Measurement Accuracy	±1mm	±1mm	±1mm
	Signal Output	4mA~20mA+HART(2/3/4-Wire System)	4mA~20mA+HART(2/3/4-Wire System)	4mA~20mA+HART(2/3/4-Wire System)
	Power Supply	24VDC/220VAC Optional	24VDC/220VAC Optional	24VDC/220VAC Optional
	Electrical Connection	M20*1.5	M20*1.5	M20*1.5
	Ingress Protection (IP) Rating	IP66/IP67	IP66/IP67	IP66/IP67
	Explosion Protection	Ex tb IIIC T80°C Db, Ex db ia IIC T6 Gb(The SRD-P6 series is explosion-proof. Refer to the selection guide for details)		
	Advantages	● High measurement accuracy with minimal environmental interference ● Small blind zone, minimum 80mm achievable ● Integrated HART communication protocol ● Robust performance in harsh environments ● Non-contact measurement with simplified installation ● Parameter-based commissioning without material-specific calibration ● Flange connection with optional purge port for periodic compressed gas cleaning, effectively removing dust and condensation inside the horn antenna, significantly reducing manual maintenance ● Special thermal insulation structure allows operation up to 500°C		

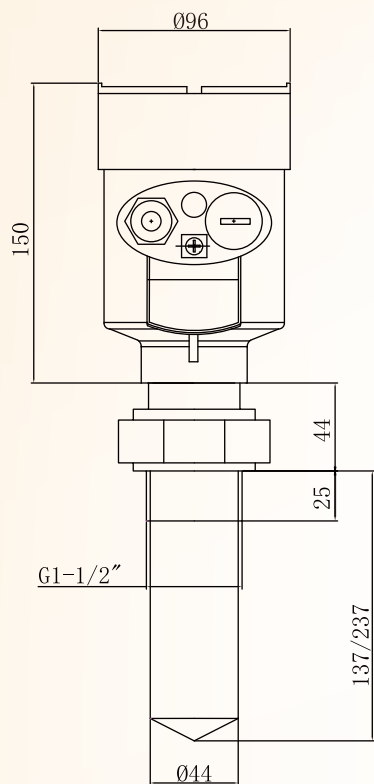
Guided Wave Radar Level Meter			
	Model Number	SRD-P57 / SRD-P67	SRD-P57 / SRD-P67
	Transmit Frequency	1.8GHz	1.8GHz
	Application	Level measurement of non-viscous liquids	Level measurement for liquids with low dielectric constants, surface turbulence, or complex tank internals.
	Measuring Range	6m	6m
	Process Temperature	-40°C~80°C	-40°C~250°C
	Probe type	Rod-type	Coaxial type (Guided-wave radar)
	Probe material	SUS304/SUS316L	SUS304, SUS316L lined with PP/PTFE
	Process Connection	G1-1/2" (Material: SUS304/SUS316L)	Flange ≥ DN50 (Material: SUS304/SUS316L lined with PP/PTFE)
	Measurement Accuracy	±3mm	±3mm
	Signal Output	4mA~20mA+HART(2/3/4-Wire System)	4mA~20mA+HART(2/3/4-Wire System)
	Power Supply	24VDC/220VAC Optional	24VDC/220VAC Optional
	Electrical Connection	M20*1.5	M20*1.5
	Ingress Protection (IP) Rating	IP66/IP67	IP66/IP67
	Explosion Protection	Ex tb IIIC T80°C Db, Ex db ia IIC T6 Gb(The SRD-P6 series is explosion-proof. Refer to the selection guide for details)	
	Advantages	● High measurement accuracy with minimal environmental interference ● Integrated HART communication protocol ● Multiple probe material options available ● Robust performance in harsh environments ● Contact-type design for easy installation ● Parameter-based commissioning without material-specific calibration	

Guided Wave Radar Level Meter

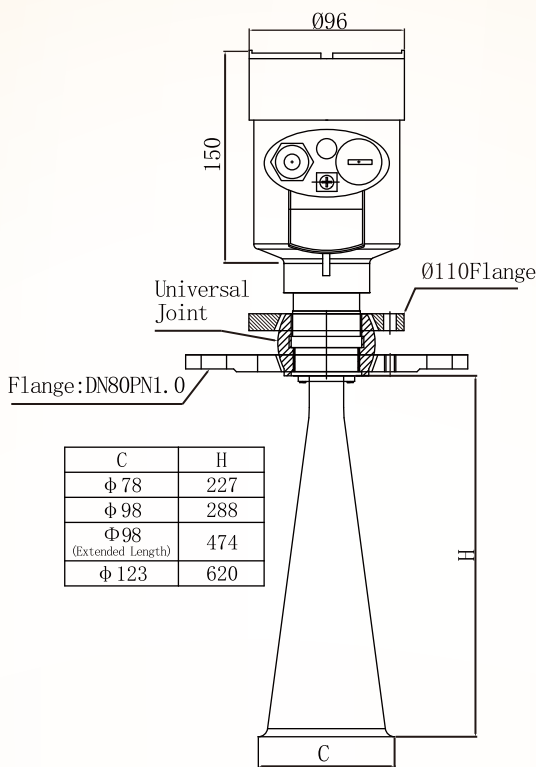


Model Number	SRD-P57 / SRD-P67	SRD-P57 / SRD-P67	SRD-P57 / SRD-P67
Transmit Frequency	1.8GHz	1.8GHz	1.8GHz
Application	Level measurement for high-temperature & high-pressure liquid storage tanks	Level measurement for non-viscous liquid tanks and solid powder silos	Level measurement for solid powder silos, also applicable to low-dielectric liquids
Measuring Range	6m	20m	20m
Process Temperature	-40°C~400°C	-40°C~80°C	-40°C~80°C
Probe type	Rod probe or coaxial (guided-wave) probe options available	Cable probe	Dual-cable probe
Probe material	SUS304/SUS316L	SUS304/SUS316L(PTFE-lined)	SUS304/SUS316L
Process Connection	G1-1/2" Screw, Flange ≥ DN50, (Material: SUS304/SUS316L)	G1-1/2" Screw, Flange ≥ DN50	Flange ≥ DN50, (Material: SUS304/SUS316L)
Measurement Accuracy	±3mm	±3mm	±3mm
Signal Output	4mA~20mA+HART(2/3/4-Wire System)	4mA~20mA+HART(2/3/4-Wire System)	4mA~20mA+HART(2/3/4-Wire System)
Power Supply	24VDC/220VAC Optional	24VDC/220VAC Optional	24VDC/220VAC Optional
Electrical Connection	M20*1.5	M20*1.5	M20*1.5
Ingress Protection (IP) Rating	IP66/IP67	IP66/IP67	IP66/IP67
Explosion Protection	Ex tb IIIC T80°C Db, Ex db ia IIC T6 Gb(The SRD-P6 series is explosion-proof. Refer to the selection guide for details)		
Advantages	● High measurement accuracy with minimal environmental interference ● Integrated HART communication protocol ● Multiple probe material options available ● Robust performance in harsh environments ● Contact-type design for easy installation ● Parameter-based commissioning without material-specific calibration		

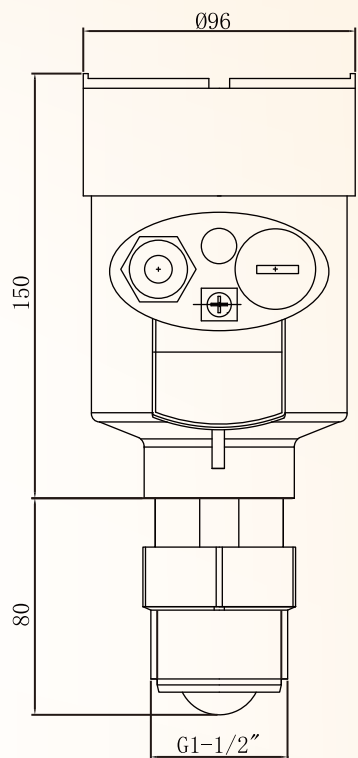
Rod-type Radar Level Meter



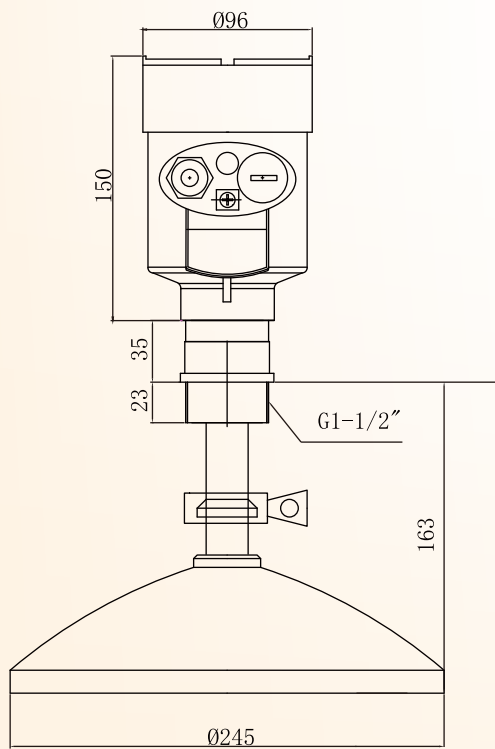
Horn-type Radar Level Meter



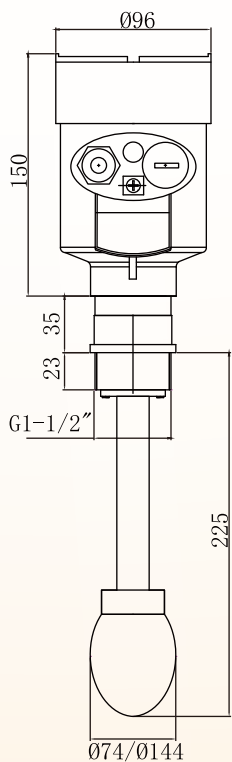
Radar Level Meter (80G)



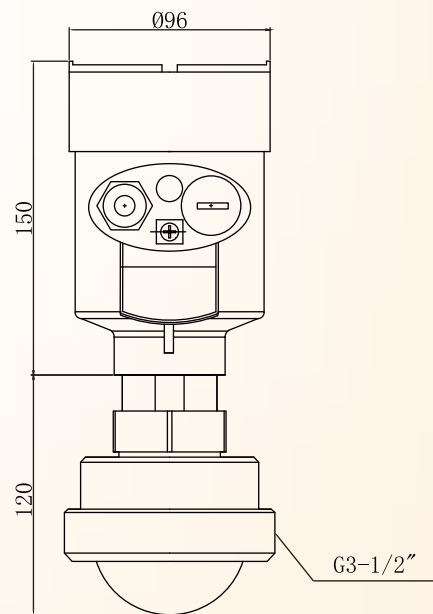
Parabolic Radar Level Meter



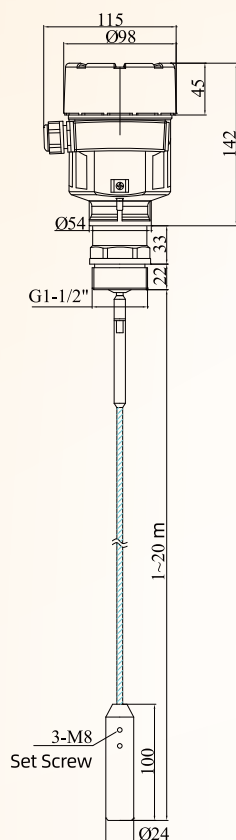
Teardrop Radar Level Meter



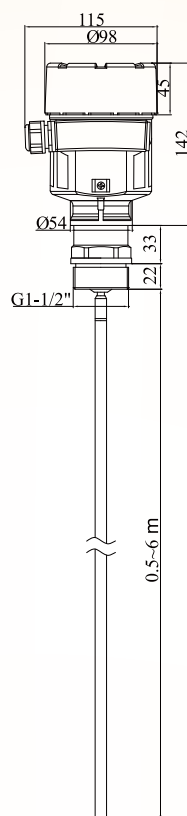
80GHz Curved-surface Radar Level Meter



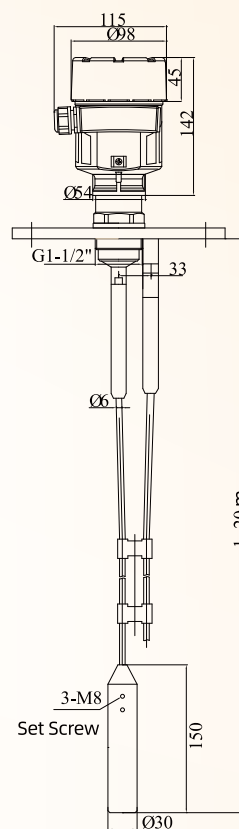
Single-cable GWR



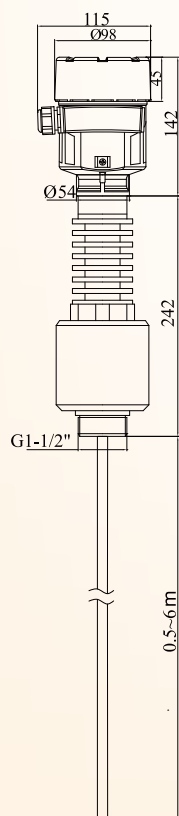
Single-rod GWR



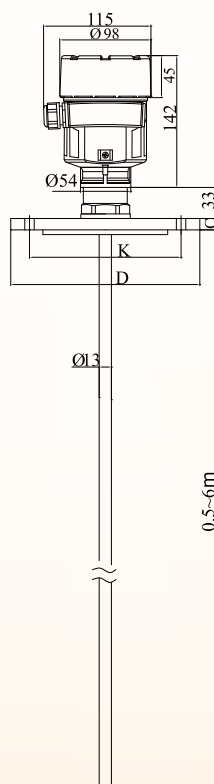
Dual-cable GWR



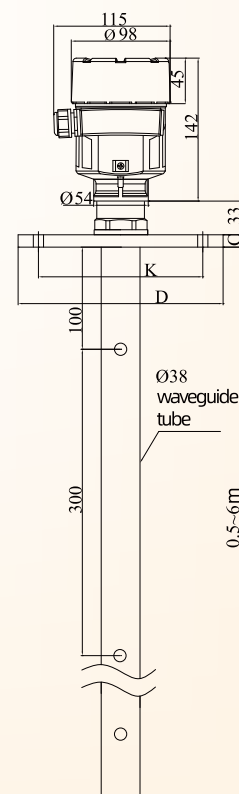
High-Temperature Rod-type GWR



Anti-Corrosion Rod-type GWR



**Coaxial-tube GWR
Waveguide-tube GWR**



Radar Level Meter Model Number (Coding System 2021-04-02)

SRD-P - -

SPES
Radar
Level
Meter

Other Options: Multiple selections allowed. (If standard ambient temperature and 4~20mA two-wire output apply, this field may be left blank or marked "AN")

- A. 4~20mA + Hart, Two-wire (Standard)
- B. 4~20mA + Hart, 24VDC - Three-wire /Four-wire
- S. 4~20mA+Hart, 220VAC-Four-wire
- N. Ambient Temperature (-40~80°C, Standard)
- T. High Temperature (-40~250°C)
- H. Ultra-High Temperature (-40~400°C)
- C. Air Purge (Purging)
- W. Swivel Flange
- F. Dust Cover
- X. Custom Requirements

Range: Unit: meters (m) (e.g.: 12.55)

Connection Material Options:

- A. SUS304 B.SUS316L C. PTFE(Polytetrafluoroethylene) D.CS Carbon Steel E.PP
- X. Custom Requirements

Connection Types (Note: SPES flange thickness: PTFE 15mm, Stainless Steel 12mm)

- A.Screw G1-1/2"(Standard pipe screw) B. Screw G3-1/2"(80G curved) C. Clamp(>φ64)
- D.Flange DN50PN1.0(Guided Wave/Rod-type only) E.Flange DN65PN1.0(Guided Wave/Rod-type only)
- F.Flange DN80PN1.0 G. Flange DN100PN1.0 H. Flange DN125PN1.0 J. Flange DN250PN1.0
- X. Custom Requirements

Antenna Material Options:

- 4. SUS304 6. SUS316L 5. SUS316L lined with PP 7. SUS316L Fluorine Coating
- 8. PTFE-coated Probe(PTFE, applicable to Rod-Type and Curved-Surface Antennas) 9. Custom Requirements

Antenna Specifications and Styles: As listed

Code	Antenna Specifications and Styles	
A	φ78*227mm	Horn Antenna(26G)
B	φ98*288mm	
C	φ98*474mm	
D	φ123*620mm	
E	Tapered Horn Antenna	Hybrid External Horn Antenna(26G)
F	φ245mm	Parabolic(26G)
G	φ44*137mm	Rod-Type(26G)
T	φ44*237mm	Rod-Type(26G)
K	φ74*225mm	Teardrop Antenna(26G)
L	φ144*225mm	
H	Curved Surface	Ultra-High Freq(80G)
M	Single-Rod Type	GWR- Contact Type (Probe Length Determined by Measuring Range)
N	Waveguide Rod Probe	
P	Dual-Rod Type	
Q	Single-Cable Type	
R	Dual-Cable Type	
X	Custom Requirements (specify separately)	

Antenna Types:

- 2. Rod Antenna 3. Horn Antenna 4. Parabolic Antenna 5. Teardrop Antenna 7. Rod/Cable Type(Waveguide)
- 8. Curved Array Antenna(Ultra-High Freq 80G)

Radar Types:

- 6. Explosion-proof Type 2. Horn Antenna(26GHz High Frequency, Non-contact) 3. Rod Antenna(26GHz High Frequency, Non-contact)
- 4. Special Configuration(26GHz High Frequency, Non-contact) 5. Guided Wave Type(Contact) 8. Ultra-High Freq(80GHz, Non-contact)

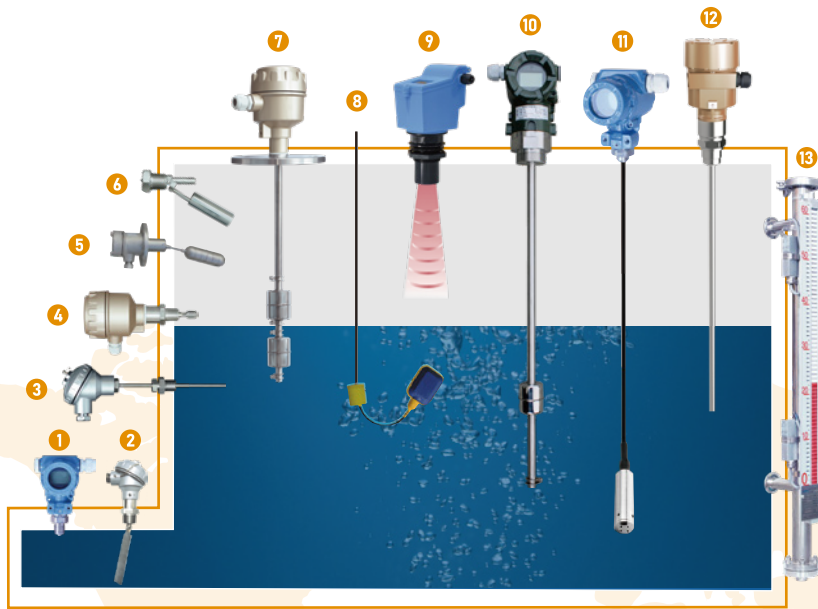
Selection Example:

1. SRD-P23-A6FB10.85-ANCW

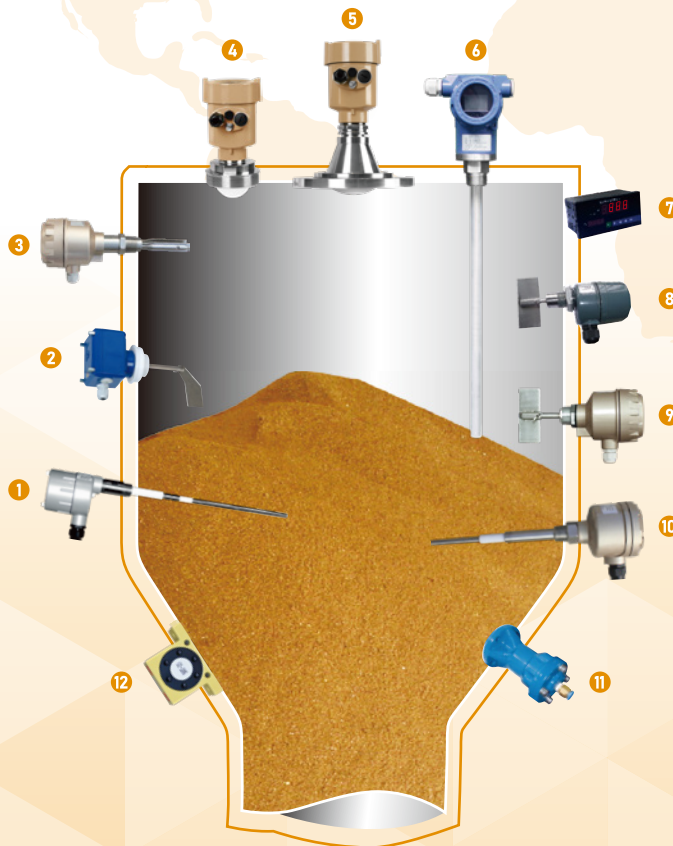
26GHz high frequency non-contact radar, φ78 horn antenna(SUS316L), purge-ready universal flange DN80(SUS316L), measuring range 10.85m, ambient conditions, standard 4~20mA two-wire system.

2. SRD-P27M4DA1.75 (identical to SRD-P27M4DA1.75-AN)

Guided Wave, contact-type, single-rod probe(SUS304), flange DN50(SUS304), measuring range 1.75m, ambient conditions, standard 4~20mA two-wire system.



1. Pressure Transmitter
2. Flow Switch
3. Temperature Transmitter
4. Tuning Fork Level Switch
5. Side-mounting Float Level Switch
6. Float Level Switch
7. Multi-point Float Level Switch
8. Cable Float Level Switch
9. Ultrasonic Level Gauge
10. Magnetostrictive Liquid Level Gauge
11. Immersion Static Pressure Liquid Level Gauge
12. Guided Wave Radar Level Gauge
13. Magnetic Level Gauge



1. RF Admittance Level Switch
2. Rotary Paddle Level Switch
3. Tuning Fork Level Switch
4. Radar Level Meter
5. Radar Level Meter
6. RF Admittance Level Gauge
7. Intelligent Digital Displayer
8. Small Rotary Paddle Level Switch
9. Rotary Paddle Level Switch
10. Capacitance Level Switch
11. Pneumatic Hammer
12. Pneumatic Vibrator



关注上海思派微信公众号

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