PRODUCTS CATALOGUE

Radar Velocity and Flow Meter Solution



TRODEKS TECH CO

TRD-900 Radar Velocity Meter Flowmeter

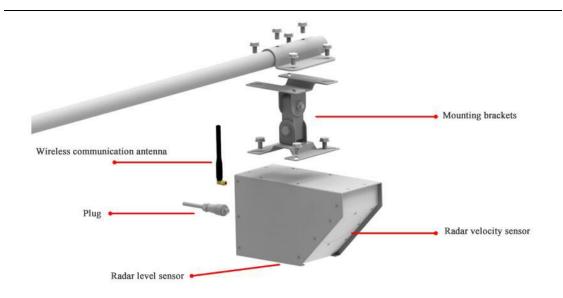
Product Introduction

The TRD-900 radar wave flowmeter is a fully automatic flowmeter based on microwave technology. It uses advanced K-band planar radar technology to measure the water flow rate and water level in a non-contact manner. It is calculated and output according to the built-in software algorithm. Real-time cross-section flow and cumulative flow; can be used for non-contact flow measurement in rivers, irrigation channels, underground drainage networks, flood control early warning, etc.; the product has the characteristics of low power consumption, small size, high reliability and convenient maintenance; measurement process It is not affected by factors such as temperature, sediment, river pollutants, and surface floats.



System Composition

The TRD-900 radar flowmeter consists of a radar flow velocity sensor, a radar water level (liquid level) sensor, a flow accumulation module, and a mounting bracket. It can be transmitted by digital (485, 232) or analog (4-20 mA). As a result, 5 km of data transmission can also be achieved via wireless Lora technology.



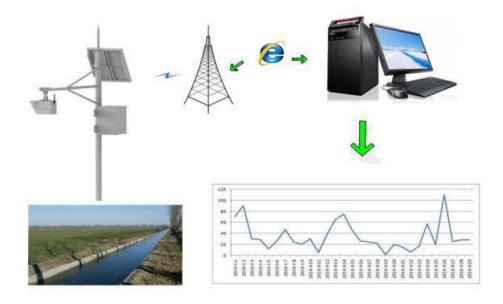
Main Features

1. Non-contact measurement, combined with section parameters to calculate flow, free from wind, temperature, haze, sediment, floating objects, etc.;

2. Applicable to a variety of measurement conditions, can output flow rate, water level, flow measurement data;

3. Equipped with powerful flow measurement software, it can carry out section setting, data receiving, query, traffic statistics, list statistics, report printing, etc.

4. Low power consumption, can be powered by solar energy, easy to install, maintenance-free;



Technical Parameters

Flow Measurement System	
Principle	Planar microstrip array antenna CW+FMCW
Operating mode	Manual, automatic, telemetry
Applicable environment	24-hours,rainy days
Working temperature	-30~80°C
Operating voltage	5.5~32VDC
Operating current	12VDC input, operating mode: <150mA ;standby mode: <1mA
Radar flow velocity sensor	
Radar power	50mW
Radar frequency	24GHz
Effective distance	40m
Measuring range	0.03~20m/s
Measuring accuracy	0.01m/s
Antenna angle	12°
Radar level gauge	
Radar power	100mW
Radar frequency	24GHz
Measuring range	40m
Measuring accuracy	≤±3cm
Antenna angle	11°
Data transmission system	·
Digital transmission	RS232/RS485, 4~20mA, 433MHz (optional)

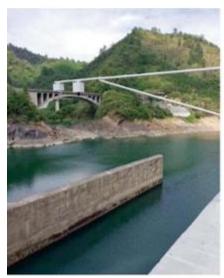
Application Areas

Flow velocity, water level or flow measurement of rivers, lakes, tidal flats, reservoir gates, underground water pipe networks, irrigation channels and irrigation channels

Auxiliary water treatment operations, such as urban water supply, sewage monitoring, etc.

Flow calculation, water flow and drainage flow monitoring, etc.







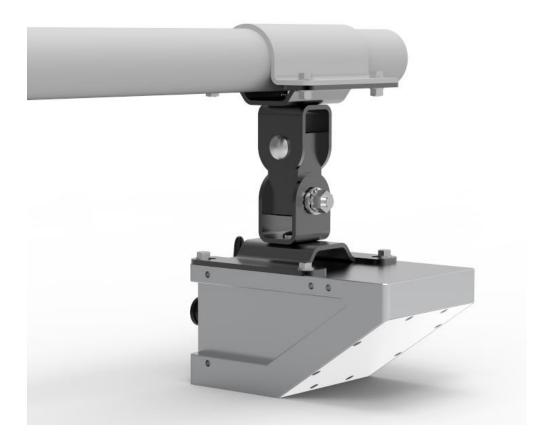
Measurement Considerations

- 1. The probe is measured against the direction of water flow and tilted 45 $^\circ$ C
- 2. Choose a place with a larger wave to measure more accurately
- 3. Do not have water plants in the direction of measurement

TRD-900S Radar Velocity Meter Flowmeter

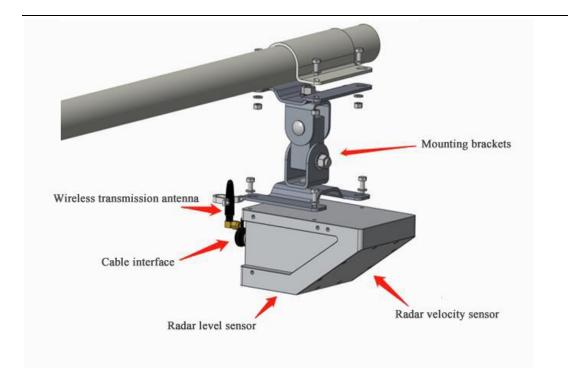
Product Introduction

The TRD-900S is a fully automatic flow meter based on microwave technology. It adopts advanced planar microwave technology to measure the water flow velocity and water level in a non-contact manner, and calculates and outputs real-time cross-section flow and accumulated flow according to the built-in software algorithm; it can be used for open channel, river channel, irrigation channel, underground drainage pipe network, flood prevention warning Non-contact flow measurement is carried out in other occasions; the product has the characteristics of low power consumption, small size, high reliability and convenient maintenance; the measurement process is not affected by factors such as temperature, sediment, river pollutants, surface floats and the like.



System Composition

The TRD-900S radar flowmeter consists of: radar flow sensor, radar water level (level) sensor, flow accumulating unit, data transmission unit, and mounting bracket. It can be digital (485, 232) or analog (4-20mA). The measurement results are transmitted in the same way; wireless data transmission can also be realized by NB-IOT or Lora technology.



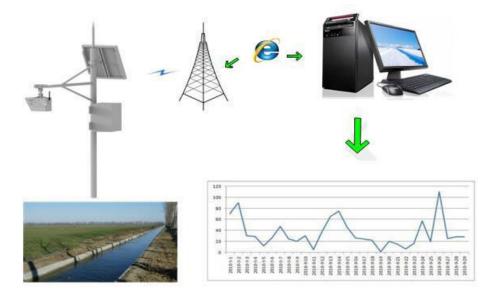
Main Features

1. Non-contact measurement, combined with section parameters to calculate flow, free from wind, temperature, haze, sediment, floating objects, etc.;

2. Applicable to a variety of measurement conditions, can output flow rate, water level, flow measurement data;

3. Equipped with powerful flow measurement software, it can carry out section setting, data receiving, query, traffic statistics, list statistics, report printing, etc.

4. Low power consumption, can be powered by solar energy, easy to install and maintenance free.



Technical Parameters

Flow Measurement System	
Principle	Planar microstrip array antenna CW+ PCR
Operating mode	Manual, automatic, telemetry
Applicable environment	24-hours,rainy days
Working temperature	-30~80°C
Operating voltage	5.5~32VDC
Operating current	12VDC input, operating mode: <50mA; standby mode: <1mA
Protection level	IP68
Lightning protection level	6KV
Size	160*100*80mm
Radar flow velocity sensor	
Radar power	100mW
Radar frequency	24GHz
Effective distance	40m
Measuring range	0.03~20m/s
Measuring accuracy	0.01m/s
Antenna angle	12°
Radar level gauge	
Radar power	100mW
Radar frequency	60GHz
Measuring range	0.2~7m/0.2~20m
Antenna angle	8°
Data transmission system	
Digital transmission	RS232/RS485, 4~20mA, 433MHz (optional) ,NB-IOT (optional)

Application Areas

Flow rate, water level or flow measurement of reservoir gate, underground pipe network, open channel, irrigation channel irrigation channel, etc.

Auxiliary water treatment operations, such as urban water supply, sewage outlet monitoring, etc.

Flow calculation, water flow and drainage flow monitoring, etc.



Measurement Considerations

- 1. The probe is measured against the direction of water flow and tilted 45 $^\circ$ C
- 2. Choose a place with a larger wave to measure more accurately
- 3. Do not have water plants in the direction of measurement

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