



DESCRIPTION

The WETS06 Wireless Temperature Transducer is a cost effective replacement to a traditionally wired Temperature transducer that offers the advantages of a low-cost installation in inaccessible and expensive installation environments. It is easily paired to the compatible PS6W-1 family of single- or five-channel wireless receivers thus offering a “plug and play” solution to your Temperature measurement applications. The instrument uses a RTD, J or K Type Thermocouple sensor mounted within a stainless steel housing giving excellent media compatibility for the harshest of applications. A swivel adaptor is available which allows the head to be easily aligned to the PS6W-1 receiver. A line-of-sight range of up to 2500 feet is possible depending on the wireless receiver used (refer to datasheets PS6W-1-1 & PS6W-1-5 for further information). Each device is temperature compensated, calibrated and supplied with a traceable serial number.

- Up to 2500 feet line-of-site range
- Temperature ranges from -200°C to 1200 ° C
- RTD, J-Type, & K-Type Temperature Probes
- Five year battery life at 10 second transmission update rate
- User-selectable transmission update rates
- User-selectable 1-5V or 4-20mA receiver outputs
- Simple DIL switch pairing with the single channel receiver
- Relay Contacts provided for alarm functions

APPLICATIONS

- Consumer products
- Agriculture
- HVAC
- Pool Pumps
- Compressor
- Pneumatics
- Temporary Service Trials

Maximum Environmental Ratings

Operating (Electronics) Temperature -20°C to 85°C

Media (-200 ° -1200 ° C) Temperature Range .-50°C to 125°C

Agricultural Equipment

The WETS06 is a wireless Temperature sensor used in a variety of applications, such as agricultural farms, agricultural equipment, Oil tanks, and even wineries.



Natural Gas Pipe Equipment



The WETS06 is a wireless Temperature sensor that can measure temperatures up to 1200°C for high temperature chemical and metal processing plants. It is accurate and robust enough for very high temperature applications; if you need temporary remote Temperature measurement of the system this sensor is your solution.

Oil/Gas Industry

The WETS06 is a wireless Temperature sensor that can measure up to 1200°C, so it is ideal for most oil and gas applications. For troubleshooting, the WETS06 offers temporary remote Temperature measurement of the system. The battery powered solution can last up to five years of continuous (1 measurement/10 seconds) use.



Pumps – Water, Hydraulic, etc.



The WETS06 is a wireless Temperature sensor that can measure -200°C to 1200°C, so it is ideal for cryogenic pumps applications. For monitoring, the WETS06 offers temporary remote Temperature measurement of the system. The battery powered solution can last up to 5 years of continuous (1 measurement/10 seconds) use.

WETS06 Operational Characteristics

V ₊ = 5V, V ₋ = 0V, Temperature = 25°C					
PARAMETER	SYMBOL	MIN	TYP	MAX	UNITS
Supply Voltage (Lithium C Cell)	V _{DD}	2.2	3	3.5	V
Supply Current	I _{DD}	5	50	750	uA
Wireless Digital Output			2.4		GHz
Linearity (Note 1)		-0.25		0.25	%FS
Temperature Error (Null and Span) (Note 3)		-0.07		+0.07	%FS/°C
Response Time	t _R	1	5	30	Seconds
Total Error Band (Note 4)		-1		1	%FS
Media Temperature Range	C	-200		1200	°C
Operating Temperature Range	C	-20		85	°C

Notes:

1) Defined as best straight line 4) Measured over compensated temperature range -10-50C

Application Information

Package

The body design is made of SS316, which allows for easy low-cost manufacturability and corrosion resistance. Vibration resistant design for use in industrial applications.

Stability

The RTD and Thermocouple Temperature sensor elements are housed in different stainless steel configurations. The selection of thermally capability materials reduce the mechanical stress on the sensor resulting in greater stability over time and temperature.

Additional stability is gained from factory stabilization of the sensors.

Temperature ports

1/4" -18NPT thread is the standard SS fittings. Other port fittings such as 7/16-20UNF, and 1/4" BSP are available for OEM customers.

Media

The variety of Temperature ports are tolerant to most media including but not limited to oil, air, gas, and non-corrosive media. Sensor will only work on a temporary basis in any non-air application. Sensor will need to have a period of time to dehydrate.

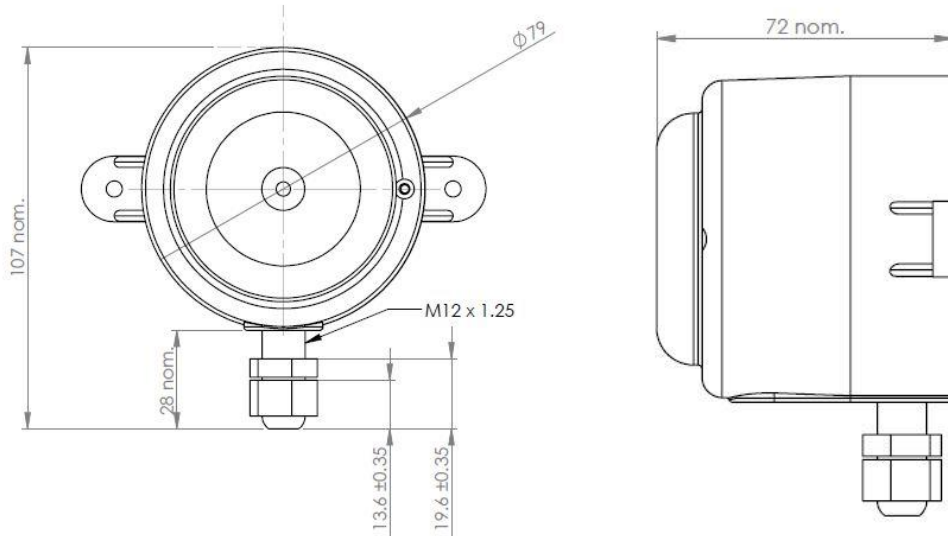
Wetted parts

When checking media capability, the wetted surface is composed of 316 SS, Brass, or Titanium.

Temperature ranges

Standard Temperature ranges are -50 to 250°C, 0-800°C, - and 20°-1000°C, .

Mechanical Dimensions (mm)



Part Number Configuration

Model	Material	Sensor Type	Thread	Probe Length	Cable Length (Optional)
WETS06	1 = 316SS	R = RTD (-200 to +800°C)	1 = 1/4" NPT	4 = 4" Probe	1 = 1FT Cable
		K = K-Type (0 to 1200°C)	2 = 1/4" BSP	6 = 6" Probe	20 = 20FT Cable
		J = J-Type (0 to 1200°C)		8 = 8" Probe	
				10 = 10" Probe	
				12 = 12" Probe	
				16 = 16" Probe	

Standard Part Numbers

Part Number	Temperature Rating	Probe
WETS06-1-R1-4	RTD -200° to 800°C	1/4" NPT 4" Probe
WETS06-1-K1-6-1FT	K-Type 0° to 1200°C	1/4" NPT 6" Probe 1FT Cable
WETS06-1-J1-8	J-Type 0° to 1200°C	1/4" NPT 8" Probe

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