



WETS03 Series



- Media Temperature Range -40-125C (-40-257F)
- Compact Size
- Temperature Error +/- .5C
- 900Mhz Wireless Communication (IOS)
- Media – High Humidity, Air, & Gas
- IP55, IP65
- Long Battery Life
- Auto Shut-Off (Sleep Mode)
- 4 Sec Time Constant
- 1000ft Range

DESCRIPTION

The WETS03 is a wireless temperature sensor manufactured for simple measurements on a variety of applications. This temperature sensor was designed to supply an economical solution for industrial, consumer, and commercial applications.

Simply connect to our PS9W or PS9C gateways and measure a variety of data. The sensor will wake-up with any kind of vibration and will shut down automatically when it is not in use to preserve the battery. The battery version will last up 1 year in continuous (1 measurement/30 sec) use. Please contact us for Custom design availability.

The sensor's on-board memory stores up to 200 hours of data for troubleshooting or evaluation of system pressure or temperature.

- Consumer products
- Industrial Automation
- HVAC
- Solar
- Compressor
- Pneumatics

Maximum Environmental Ratings

Operating Temperature -40°C to 125°C

Storage Temperature Range-40°C to 110°C

WETS03 Enclosures

The WETS03 has several options for housing. Housing Option 1 is the most popular and easiest to you. In just a few minutes, customers can replace the 2 AA batteries for operation. This option allows for long-term battery life and is cost effective. Housing Option 2 is compact and cost effective. Housing option 3 is an industrial option which affords an IP67 housing



Housing Option 1



Housing Option 2



Housing Option 3

WETS03 Applications

Pumps – Pools, Spas, Water, Hydraulic

The WETS03 is a wireless temperature sensor that can measure from -40-150C (-40-302F) , so it is ideal for many Pump applications. For monitoring , the WETS03 offers temporary remote temperature measurement of any systems. The battery powered solution can last up to 12-months of continuous (1 measurement/30 seconds) use.



Water & Oil Temperature– Trucks, Race Cars, Vehicles



The WETS03 is a wireless Temperature sensor used in a variety of liquid level applications, such as Race Cars, Trucks, Liquid Tanks, Oil tanks, and Spas. It has a wide temperature (-40-150C, 350F) measuring range.

HVAC – High & Low Side of A/C

The WETS03 is a wireless temperature sensor that can measure up to 150C (302F). It is accurate and robust enough for HVAC applications; if you need temporary remote Pressure and Temperature measurement of the system this sensor is your solution.



WETS03 Operational Characteristics

$V_+ = 5V$, $V_- = 0V$, Temperature = 25°C

PARAMETER	SYMBOL	MIN	TYP	MAX	UNITS
Supply Voltage (note 1)	V_{DD}	2.2	3	5.5	V
Supply Voltage (note 2)	V_{DD}	9	12	26	V
Supply Current	I_{DD}	5	50	750	uA
Temperature Error (Null and Span) (Note 3)		-0.5		+0.5	C
Response Time	t_R		60	3600	S
Time Constant (NTC)	TC		4		Sec
Operating Temperature (NTC)	OT	-40		125	C
Time Constant (RTD)	TC		2		Sec
Operating Temperature (RTD)	OT	-200		370	C

Notes:

1) Battery & Rechargeable Version - 3V battery operation 2) 12V Wired Option 3) NTC (.1 C, & .5 C Options available), RTD (.1C accuracy)

Application Information

Package

The two piece body design is made of SS304 (or Brass), which allows for easy low-cost manufacturability and corrosion resistance. Vibration proof design for use in industrial applications. Plastic option is available for OEM custom designs.

Temperature Probe port

1/4" -18NPT and 1/8"-18NPT threads are standard SS fittings. Other port fittings such as 7/16-20UNF, and 1/4" BSP are available for OEM customers.

Media

The pressure port is tolerant to most media including but not limited to oil, air, gas, and non-corrosive media to brass or SS304.

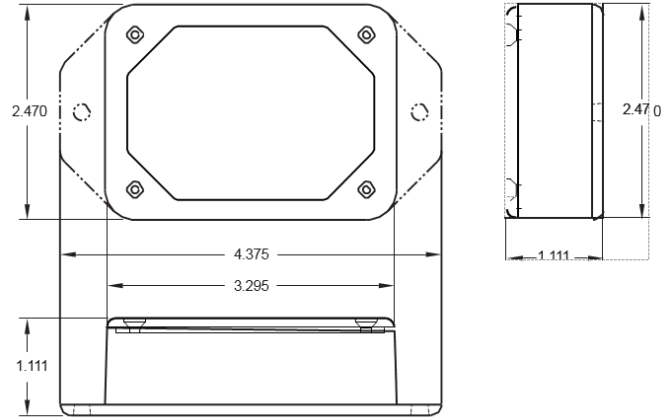
Wetted parts

When checking media capability, the wetted surface is composed of Aluminum and Silicon Gel.

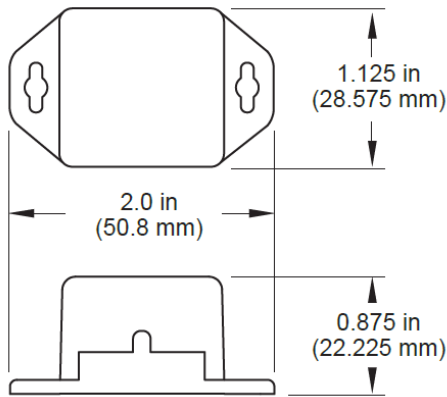
Temperature Ranges

Standard temperature ranges are -40-125C (-40-257F). Custom temperature ranges are available for OEM customers.

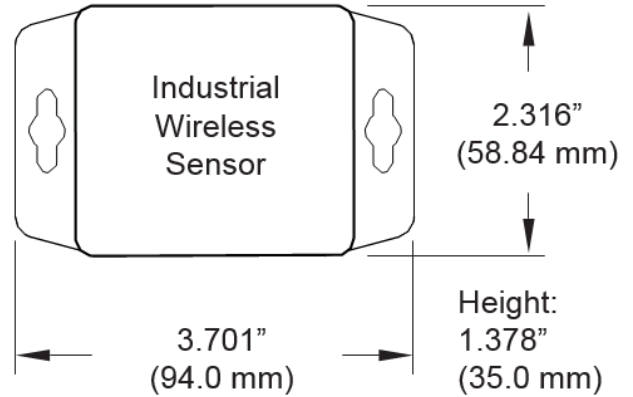
Mechanical Dimensions (inches)



Housing Option 1 (AA Battery Powered)



Housing Option 2 (CR2032 Battery Powered)



Housing Option 3 (Industrial Housing)

Part Number Configuration

WETS03 - 0 - 0 - 1N 1

Model

0=Housing 1, 1= Housing 2, 2= Housing 3

0 = Overmold, 1 = 304SS Probe 2 = Brass Probe

1= Round Tip , 2= 1/4" NPT Male
3= 1/8" NPT Male, 4= Custom

Type (N= NTC, R= RTD, T=Thermocouple)

Temperature Range=
1 = -40°C to +125°C (-40°F to +257°F)
2 = -200°C to +162°C (-328°F to +325°F)
3 = -50°C to +370°C (-58°F to +700°F)

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