



WETS03 Series



- Media Temperature Range -40-105C (-40-302F)
- Compact Size
- Temperature Error $\pm .5C$
- 900Mhz Wireless Communication (IOS)
- Media – High Humidity, Air, & Gas
- IP55
- Long Battery Life
- Auto Shut-Off (Sleep Mode)
- 4 Sec Time Constant

DESCRIPTION

The WETS03 is a Bluetooth 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 download the Phoenix Sensors application from our website and connect to the device. 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 to 1 year in continuous (1 measurement/30 sec) use. Please contact us for Custom design availability.

The Mobile Software enables the user to store data to evaluate later. 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 -20°C to 105°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
Wireless Digital Output (BLE)	BLE				
Temperature Error (Null and Span) (Note 3)		-5		+5	C
Response Time	t_R		60	3600	S
Time Constant (NTC)	TC		4		Sec
Operating Temperature (NTC)	OT	-40		105	C
Time Constant (RTD)	TC		2		Sec
Operating Temperature (RTD)	OT	-40		250	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.

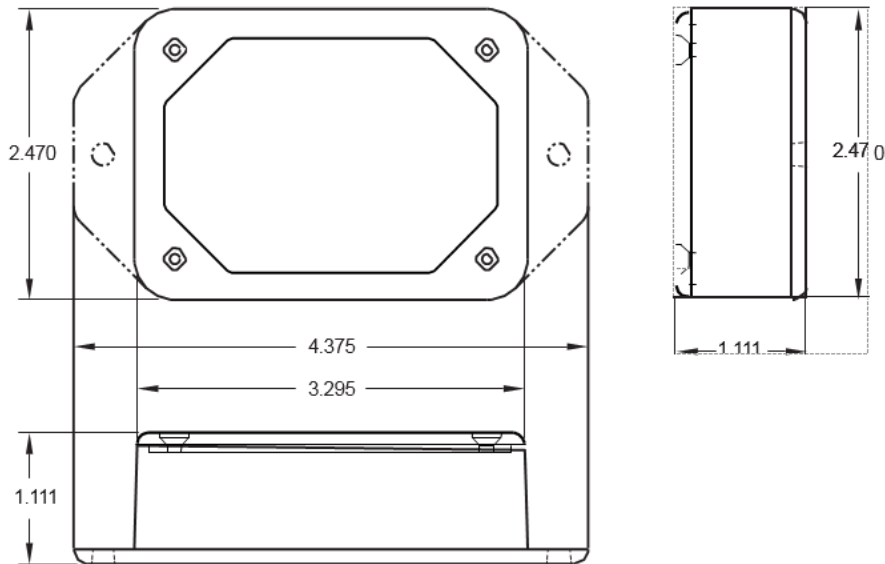
Wetted parts

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

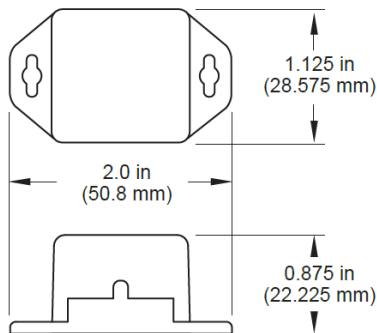
Temperature Ranges

Standard temperature ranges are -40-150C (-40-302F), -20-100C (-20-212F). Custom temperature ranges are available for OEM customers.

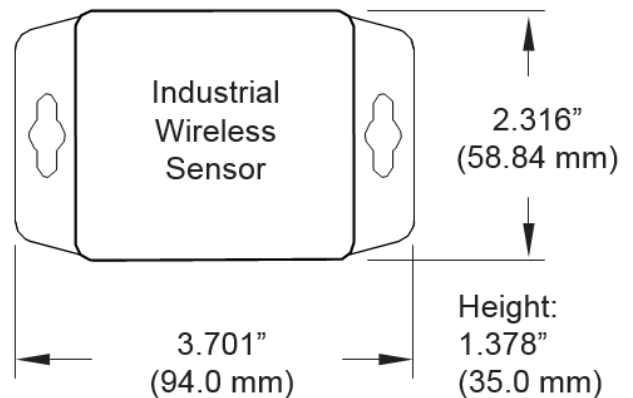
Mechanical Dimensions (inches)



Housing Option 1



Housing Option 2



Housing Option 3

Part Number Configuration

WETS03 - 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)

Temperature Range 1=-20-100C,
2= -40-150C, 3= Custom

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