



WETR03 Series



- Media Temperature Range -60-370C (-76-700F)
- Compact Size
- Temperature Error +-2.5C
- 900Mhz Wireless Communication (IOS)
- Media – High Humidity, Air, & Gas
- IP55
- Long Battery Life
- Auto Shut-Off (Sleep Mode)
- 9 Sec Time Constant

DESCRIPTION

The WETR03 is a 900Mhz 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 sign in to wireless.PhoenixSensors.com to connect to the device. The sensor will wake-up to measure temperature and will shut down automatically when it is not in use to preserve the battery. The battery version will last up to 1.5 years in continuous (1 measurement/90 sec) use. Please contact us for Custom design availability.

The Cloud-based software enables the user to store data to evaluate later.

- Oil/Gas
- Industrial Automation
- HVAC
- Solar
- Compressor
- Pneumatics

Maximum Environmental Ratings

Housing Operating Temperature -40°C to 85°C

Storage Temperature Range -50°C to 85°C

WETR03 Enclosures

The WETR03 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

WETR03 Applications

Oil/Gas – Pumps, Hydraulic Systems, Brake Systems

The WETR03 is a wireless temperature sensor that can measure from -70-370C (-76-700F) , so it is ideal for many Oil/Gas applications. For monitoring, the WETR03 offers remote temperature measurement of any systems. The battery powered solution can last up to 18-months of continuous (1 measurement/90 seconds) use.



Water & Oil Temperature– Trucks, Race Cars, Vehicles



The WETR03 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 (-70-370C, 700F) measuring range.

HVAC – High & Low Side of A/C

The WETR03 is a wireless temperature sensor that can measure up to 370C (700F). 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.



WETR03 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 Current	I_{DD}	5	50	750	uA
Wireless Digital Output (900Mhz)	900Mhz				
Temperature Error (Null and Span) (Note 2)		-2.5		+2.5	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		8		Sec
Operating Temperature (RTD)	OT	-50		370	C

Notes:

1) Battery & Rechargeable Version - 3V battery operation 2) NTC (.1C, & .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

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

Media

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

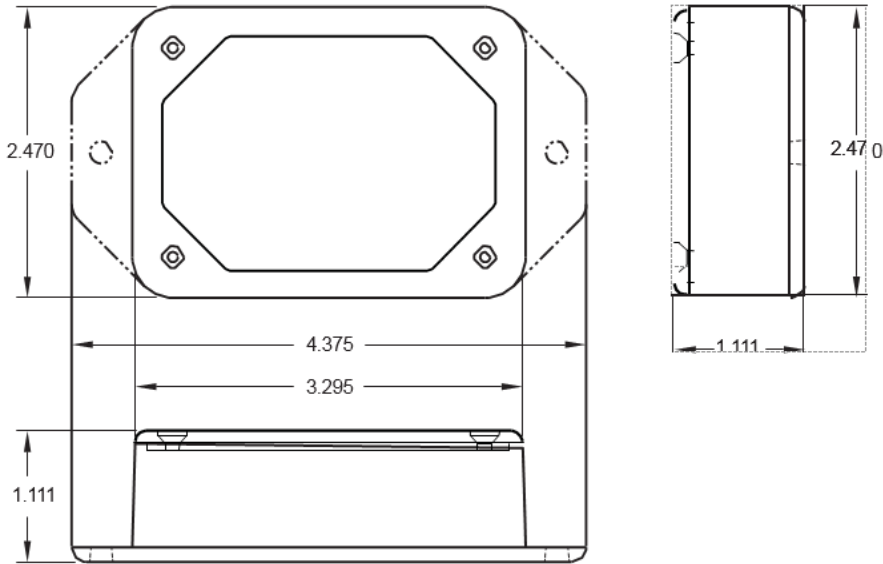
Wetted parts

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

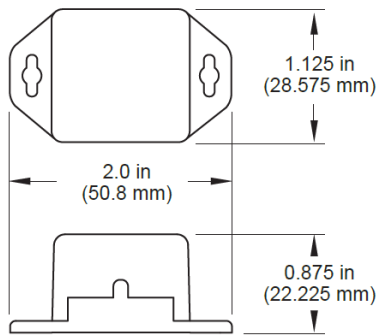
Temperature Ranges

Standard temperature ranges are -60-370C (-40-302F), -20-100C (-20-212F). Custom temperature ranges are available for OEM customers.

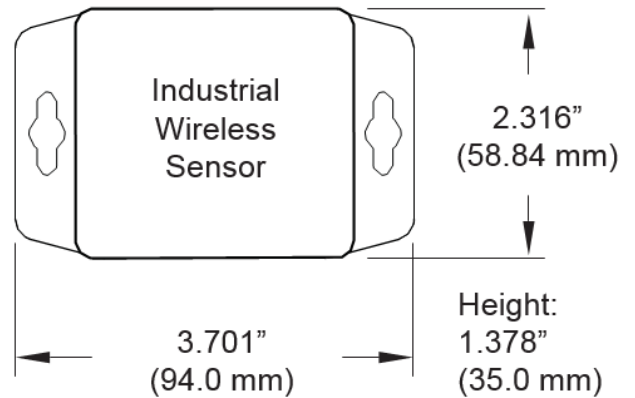
Mechanical Dimensions (inches)



Housing Option 1

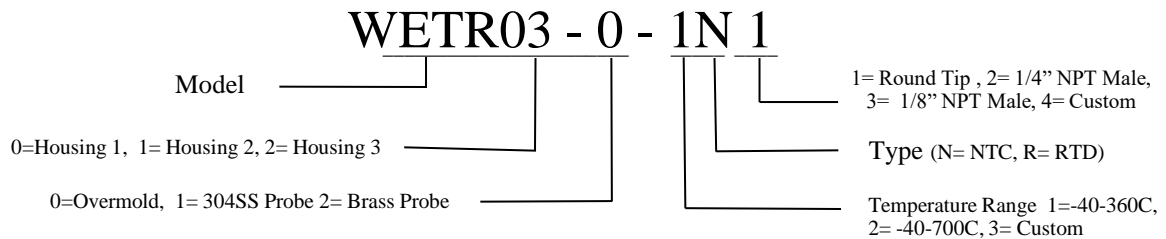


Housing Option 2



Housing Option 3

Part Number Configuration



sales@PhoenixSensors.com

Notice:

Phoenix Sensors LLC reserves the right to make changes to the product contained in this publication. Phoenix Sensors LLC assumes no responsibility for the use of any circuits described herein, conveys no license under any patent or other right, and makes no representation that the circuits are free of patent infringement. While the information in this publication has been checked, no responsibility, however, is assumed for inaccuracies.

Phoenix Sensors LLC does not recommend the use of any of its products in life support applications where the failure or malfunction of the product can reasonably be expected to cause failure of a life-support system or to significantly affect its safety or effectiveness. Products are not authorized for use in such applications.