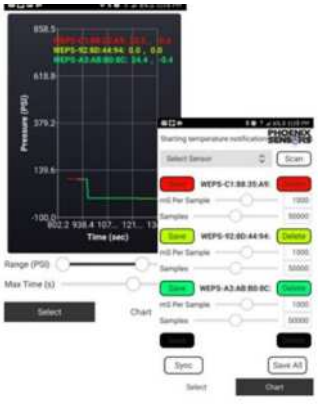


WETS02 Series





- Media Temperature Range -40-150C (-40-302F)
- Compact Size
- Temperature Error +-.5C
- BLE Wireless Communication (Android/IoS)
- Media – Liquid, Air, & Gas
- IP65 (& IP67)
- Monitor up to 10 sensors at a time
- 3 Sec Time Constant
- Long Battery Life
- Synchronize up to 4 sensors

DESCRIPTION

The WETS02 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 shut down (Sleep mode) automatically when it is not in use to preserve the battery. The battery version will last up 18-months in continuous (1 measurement/60 sec) use. Please contact us for Custom design availability.

The Mobile Software enables the user to store data to evaluate later. The Android's on-board memory stores up to 2,000 hours of data for troubleshooting or evaluation of system pressure or temperature.

- Consumer products
- Industrial Automation
- HVAC
- Pool Pumps
- Compressor
- Pneumatics

Maximum Environmental Ratings

Operating Temperature ……..... -20°C to 85°C

Storage Temperature Range ……..-40°C to 100°C

Pumps – Pools, Spas, Water, Hydraulic, etc.

The WETS02 is a wireless temperature sensor that can measure from -40-150C (-40-302F) , so it is ideal for many Pump applications. For monitoring , the WETS02 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 WETS02 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 WETS02 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.



WETS02 Operational Characteristics

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

PARAMETER	SYMBOL	MIN	TYP	MAX	UNITS
Supply Voltage (note 1)	V_{DD}	2.7	3	3.3	V
Supply Voltage (note 2)	V_{DD}	5	12	16	V
Supply Current	I_{DD}	5	50	250	uA
Wireless Digital Output (BLE)	BLE				
Temperature Error (Null and Span) (Note 3)		-.5		+.5	C
Response Time	t_R		5	60,000	Ms
Time Constant (NTC)	TC		3		Sec
Operating Temperature (NTC)	OT	-40		150	C
Time Constant (RTD)	TC		2.5		Sec
Operating Temperature (RTD)	OT	-40		150	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.

Pressure port

1/4" -18NPT and 1/8"-18NPT threads are standard SS fittings. Other port fittings such as 7/16-20UNF, and ¼" 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)

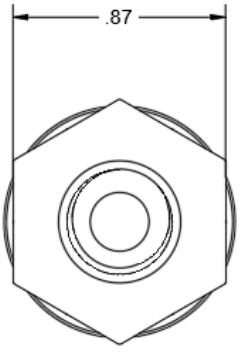


Fig. 1: Extended port option

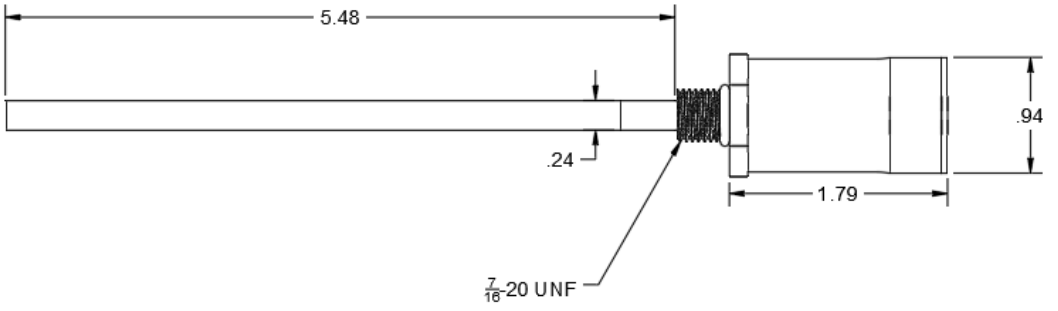
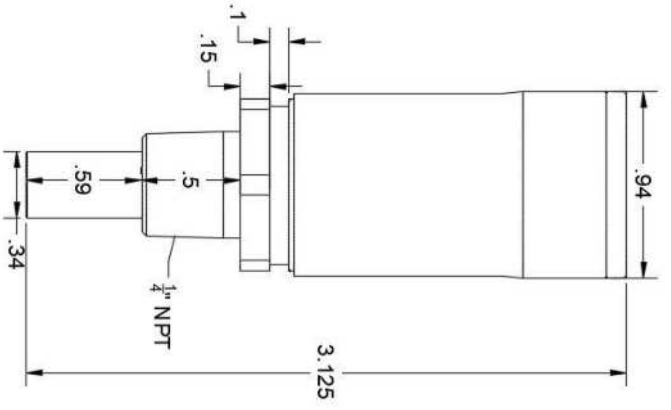


Fig. 2: Standard port option



Part Number Configuration

WETS02-0-0 – 1 N 1 S

Model

0=Battery, 1= 3Ft Cable, 2= Rechargeable

0=Brass, 1= 304SS

Port: S=Standard(½"), E=Extended(5 ½")

1= 1/4" NPT Male, 2= 1/8" NPT Male, 3= 7/16-20 UNF-3A, 4= Custom

Type (N= NTC, R= RTD)

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

(480) 462-1810 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.