WETS05 Series

- Media Temperature Range -200-898ºC
- Compact Size
- Temperature Error +-.25ºC
- BLE Wireless Communication (Android & IoS)
- IP65 (& IP67)
- Auto Shut-Off (Sleep Mode)
- 3 Sec Time Constant
- 18-month battery life (10 Sec update rate)

DESCRIPTION

The WETS05 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/10 sec) use. Please contact us for Custom design availability.

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

- Consumer products
- Industrial Automation
- Vehicle Exhaust Temperature
- Aircraft Engine Temperature
- Glass Forming Temperature

Maximum Environmental Ratings

Operating Temperature of Probe……..... -200°C to 898°C

Operating Temperature of Electronics ……..0°C to 85°C

Vehicle Exhaust – Temperature Monitoring

The WETS05 is a wireless temperature sensor that can measure media from -200-898C, so it is ideal for many exhaust applications. For monitoring , the WETS05 offers temporary remote temperature measurement of any systems. The battery powered solution can last up to 12-months of continuous (1 measurement/5 seconds) use.

Aircraft Engine – Temperature Monitoring

The WETS05 is a wireless Temperature sensor used in a variety of applications, such as aircrafts, trucks, and more.. It is compact and can be fit into areas without enough space for other transducers.

Glass Forming – Temperature Monitoring

The WETS05 is a wireless temperature sensor that can measure up to 898C . It is accurate and robust enough for industrial applications; if you need temporary remote temperature measurement of the system this sensor is your solution.

WETS05 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	750	uA
Wireless Digital Output (BLE)	BLE				
Temperature Error (Null and Span) (Note 3)		-.25		+.25	C
Response Time	t_R		5	500	ms
Operating Temperature (Electronics)	OT	0		85	C
Time Constant (Thermocouple)	TC		2		Sec
Operating Temperature (Thermocouple)	OT	-200		898	C

Application Information

Package

The Thermocouple body design is made of SS304, allowing low-cost manufacturability and corrosion resistance. Vibration proof design for use in industrial applications. Other stainless steel options are available for OEM custom designs.

Thermocouple

The thermocouple used in the WETS05 can be a type K or J, depending on the termperature requirements. The sensor can withstand high temperatures (900+ºC) and can be applied to a variety of industrial applications.

Media

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

Wetted parts

When checking media capability, the wetted surface is composed of stainless steel 304 (or 316L)

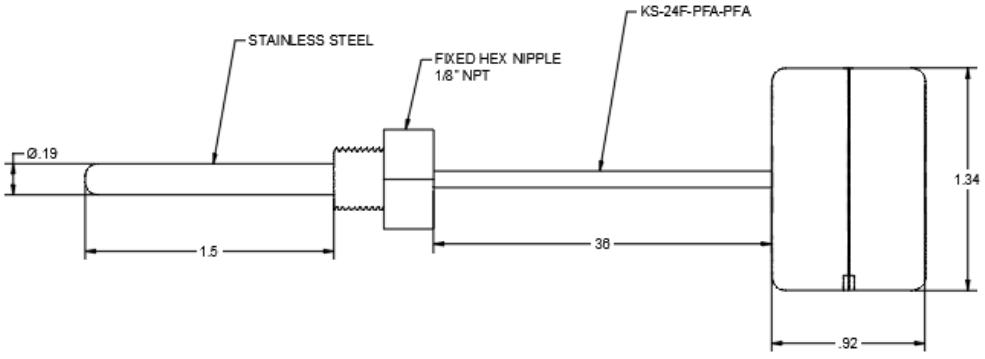
Temperature Ranges

Standard temperature ranges are -200-898C. Custom temperature ranges are available for OEM customers.

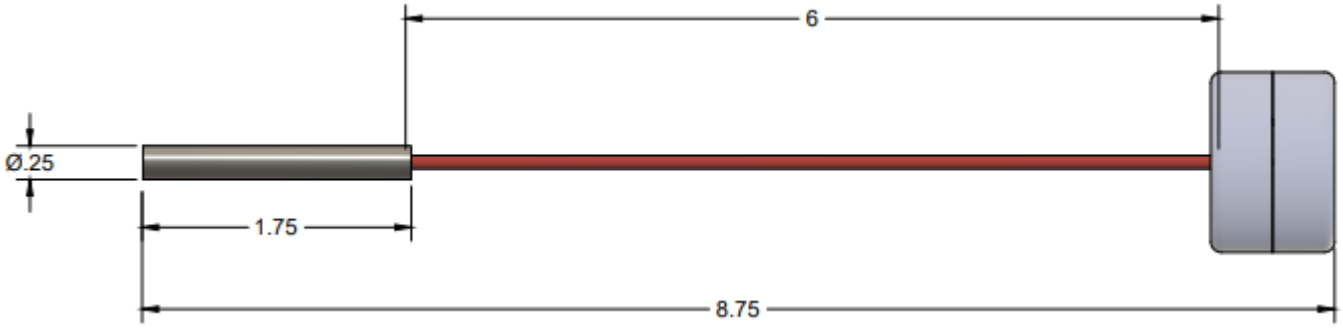
Mechanical Dimensions (inches)

NOT TO SCALE

Example 1:



Example 2:



Part Number Configuration

WETS05-0-0 – 1 D 1

- Model
- 0=Battery, 1= 5-30VDC
- 0= 6" Cable , 1= 1Ft Cable, 2= 3Ft Cable
- Temperature Range 1=--40-150C 2= 200-500C, 3= -400-1000C, 4= Custom
- Type (D= Digital Sensor, K= K-Type T/C, J= J-Type T/C, N= NTC, R=RTD)
- 1= 1.75" SS Thermowell , 2= 6" SS Thermowell, 3= ¼" NPT Male, 4= 1/8" NPT Male, 5= Custom.

sales@PhoenixSensors.com