

ERBESSD INSTRUMENTS®

# PHANTOM

Thermocouple Temperature Sensor

**PHANTOM**, the best wireless continuous monitoring system worldwide.



Have a better control of your machines' temperature with the Phantom Thermocouple sensor.



The signal from the Phantom sensors is encrypted which ensures the reliability of the information and the security of your data.



# TECHNICAL SPECIFICATIONS

## MEASUREMENT

**Part Number:**

EPH-T21

**Sensor:**

Thermocouple type K

**Status:**

Battery and temperature

**Temperature range  
(ambient):**

-40°C a 80°C  
-40°F a 176°F

**Data Receiving  
Interval:**

30min / Configurable

**Temperature Range  
(object):**

-100°C to 1250°C  
-212°F to 2282°F

**Internal Temperature  
Accuracy:**

±5°C

## POWER SUPPLY

**Battery Lifetime:**

2-3 years\*  
Standby Mode if Gateway not detected

**Main Power Supply:**

2 AAA 1.5V Batteries (Replaceable)

## CONNECTIVITY AND SOFTWARE

**Wireless Protocol:**

Bluetooth BLE 5.0 / Modbus via Gateway

**Software Compatibility:**

DigivibeMX version  
Phantom / WISER Vibe  
Firmware Updates via Phantom  
Manager (iOS & Android)

**Signal Strength  
Range:**

-90dBm to -30dBm

**Power Output Range:**

-4dBm a +8dBm  
(Configurable)

**Wireless Range:**

100m line sight

**Operating Frequency:**

2.4GHz

## DIMENSIONS

**Dimensions:**

100mm x 77mm x 26mm

**Weight:**

138 gr

**Base Temperature  
Range:**

-40 to +80 °C  
(-40 to +176 °F)

**Material:**

Nylamid / Aluminum

**Protection Rating:**

Water and dust resistant (IP67)

## ACCESSORIES

Place your **thermocouple type K\*** on your Phantom and start monitoring. This sensor can handle the most extreme temperatures so you can have control of even the most demanding machinery.

### Specifications

**Operating Temperature:**

-100°C to 1250°C  
-212°F to 2282°F

**Probe Material:**

Stainless steel

**Cable Length:**

3 meters

**Dimensions (probe):**

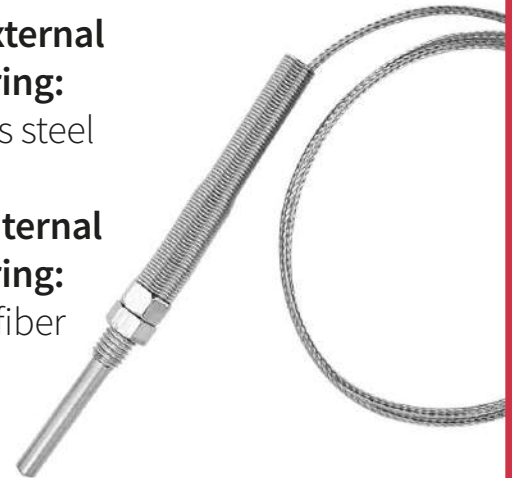
5mm x 100mm

**Cable External  
Covering:**

Stainless steel

**Cable Internal  
Covering:**

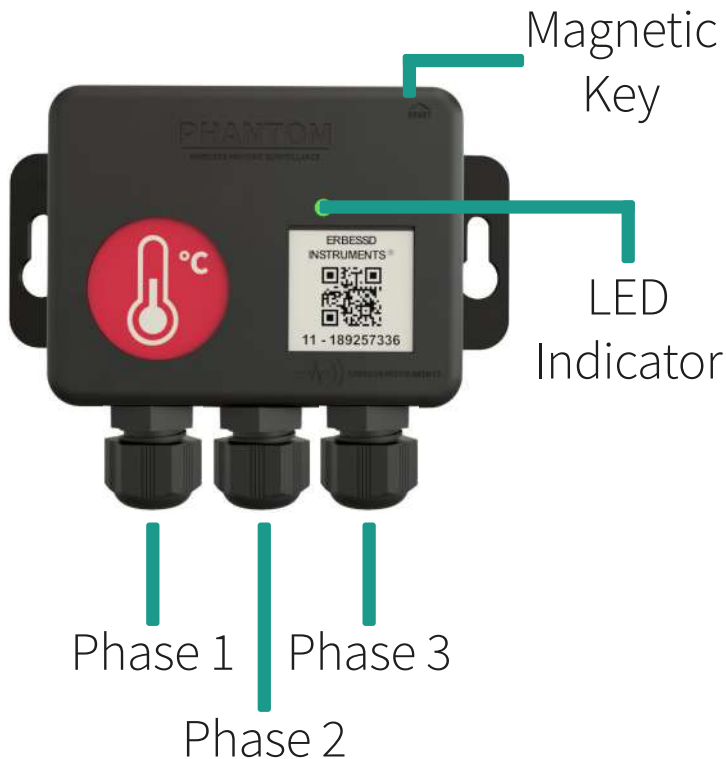
Glass fiber



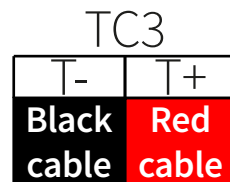
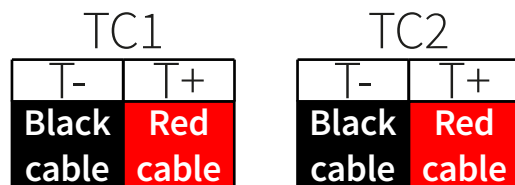
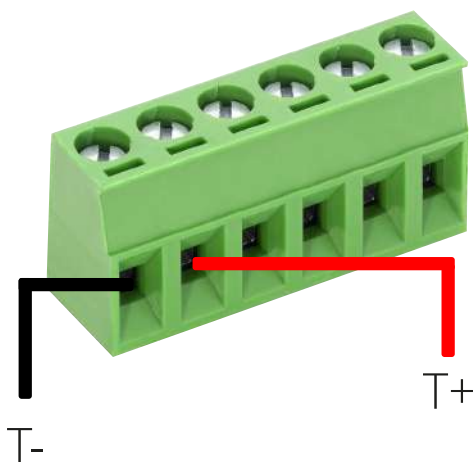
Place your sensor's cables easily with the help of a screwdriver

\*Not included in the kit.

# QUICK GUIDE



# CONNECTION DIAGRAM



Analyze and visualize the data  
of your sensors with

**DigivibeMX®**



Access to your information  
in an easy way trough your  
browser or DigivibeMX.

Phantom sensors are compatible with  
communication protocol



# MEET THE PHANTOM FAMILY

## Phantom Expert & Phantom Gen 2

High Range triaxial vibration sensor. It is able to send 3 simultaneous FFT and time waveform recordings at once. Available in **High Sensitivity**, **Biaxial** and **ATEX**.



## Phantom RPM

With the RPM sensor you can easily analyze the revolutions per minute of any rotor, turbine or vent with incredible precision with a switching speed of 600kRPM.



## Phantom Current

The Phantom current module allows you to measure up to 4 amperage channels with clamps that start with 50 amp and go to 500 amp.



## Phantom GP

General Purpose modules that are compatible with any kind of sensor to obtain wireless data. Available for **4-20mA**, **0-10V**, **Digital Signals** and **2.2Vpp** sensors.



## Phantom All in One

Obtain the reliability of three sensors in only one Phantom module; vibration, temperature and current. Complete condition monitoring all in one.



Coming soon...

Phantom  
Thermographic  
Camera





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