PHANTOM
Vibration Sensor

PHANTOM Expert Gen 3, the best wireless triaxial vibration and temperature sensor worldwide.

The triaxial vibration sensor is able to send **3 simultaneous** FFT and Time waveform recordings at once.

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

TECHNICAL SPECIFICATIONS

You can find **Phantom Expert Gen 3** in two versions, depending on machines with high and low RPM's.

High Range
(EPH-V11E)

Frequency Range:
0.5 Hz - 10 kHz [x,y]
0.5 Hz - 5.1 kHz [z]

Dynamic Range:
±8 / ±16 / ±32 g

Data Receiving Interval:
(Configurable)
Min: 10 min
Max: 1440 min

Sensitivity:
100 mV/G

High Sensitivity
(EPH-V10E)

Frequency Range:
0.5 Hz - 4 kHz [x,y]
0.5 Hz - 1.8 kHz [z]

Dynamic Range:
±2 / ±4 / ±8 g

Data Receiving Interval:
(Configurable)
Min: 10 min
Max: 1440 min

Sensitivity:
100 mV/G

HIGH RANGE TECHNICAL SPECIFICATIONS

MEASUREMENT					
Product code	EPH-V11E				
Built-in sensor	MEMS Sensor				
Sensing resolution (X, Y, Z)	240 µg				
Frequency range (@ 25,600)	0.5 Hz to 10 kHz (X,Y), 0.5 Hz to 5.1 kHz (Z)				
Dynamic range (configurable)	±8 /±16 /±32 g				
Recording time (s) 3 axes	1	2	4	8	16
Recording time (s) 1 axes	3	6	12	24	48
Sample rate (Hz)	25,600	12,800	6,400	3,200	1,600
Max frequency (Hz) [x,y]	10,000	5,000	2,500	1,250	625
Max frequency (Hz) [z]	5,100	5,000	2,500	1,250	625
Resolution lines	Triaxial-12,800 Single Axis-25,600				
Espectral noise (10 Hz)	630 µg√Hz				
CONNECTIVITY AND SOFTWARE					
Wireless protocol	Bluetooth BLE 5.0				
Operating frequency	2.4 GHz				
Transmission power	±8 dBm				
Signal strenght range	-90 dBm to -30 dBm				
Power output range	-4 dBm to +8 dBm (Configurable)				
Devices compatibility	iOS and Android devices (WISER VIBE PRO & Phantom™ Manager) and Phantom™ Gateway				
Software compatibility	DigivibeMX 11 M30 & Phantom™ Version / Phantom™ Manager and WiSER VIBE PRO				
Operating distance	100 m Line sight*				
DIMENSIONS AND FIXTURE					
Dimensions (h x w)	47 x 33 mm				
Protection grade	IP69				
Weight	185 grams				
Fixture	Fastener 1/4-28 UNF				
Housing material	ABS, stainless steel				
ENVIRONMENTAL CONDITIONS					
Operating temperature	-40 to 80 ºC (40 to 176 ºF)				

*Ideal enviroment. No competing signals or obstructions.

HIGH SENSITIVITY TECHNICAL SPECIFICATIONS

MEASUREMENT					
Product code	EPH-V10E				
Built-in sensor	MEMS Sensor				
Sensing resolution (X, Y, Z)	60 µg				
Frequency range (@ 25,600)	0.5 Hz to 4 kHz (X,Y), 0.5 Hz to 1.8 kHz (Z)				
Dynamic range (configurable)	±2 /±4 /±8 g				
Recording time (s) 3 axes	1	2	4	8	16
Recording time (s) 1 axes	3	6	12	24	48
Sample rate (Hz)	25,600	12,800	6,400	3,200	1,600
Max frequency (Hz) [x,y]	4,000	4,000	2,500	1,250	625
Max frequency (Hz) [z]	1,800	1,800	1,800	1,250	625
Resolution lines	Triaxial-12,800 Single Axis-25,600				
Espectral noise (10 Hz)	130 µg√Hz				
CONNECTIVITY AND SOFTWARE					
Wireless protocol	Bluetooth BLE 5.0				
Operating frequency	2.4 GHz				
Transmission power	±8 dBm				
Signal strenght range	-90 dBm to -30 dBm				
Power output range	-4 dBm to +8 dBm (Configurable)				
Devices compatibility	iOS and Android devices (WISER VIBE PRO & Phantom™ Manager) and Phantom™ Gateway				
Software compatibility	DigivibeMX 11 M30 & Phantom™ Version / Phantom™ Manager and WiSER VIBE PRO				
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BATTERY INFORMATION

| POWER SUPPLY	
Battery type	Lithium battery (CR2477)
Battery life	65,000 measurements (duration depends on user configuration)*
	Standby mode if Gateway not detected
	Consumption of 6-9 µA in Standby mode

DISCHARGE CHARACTERISTICS

VOLTAGE VS. TEMPERATURE
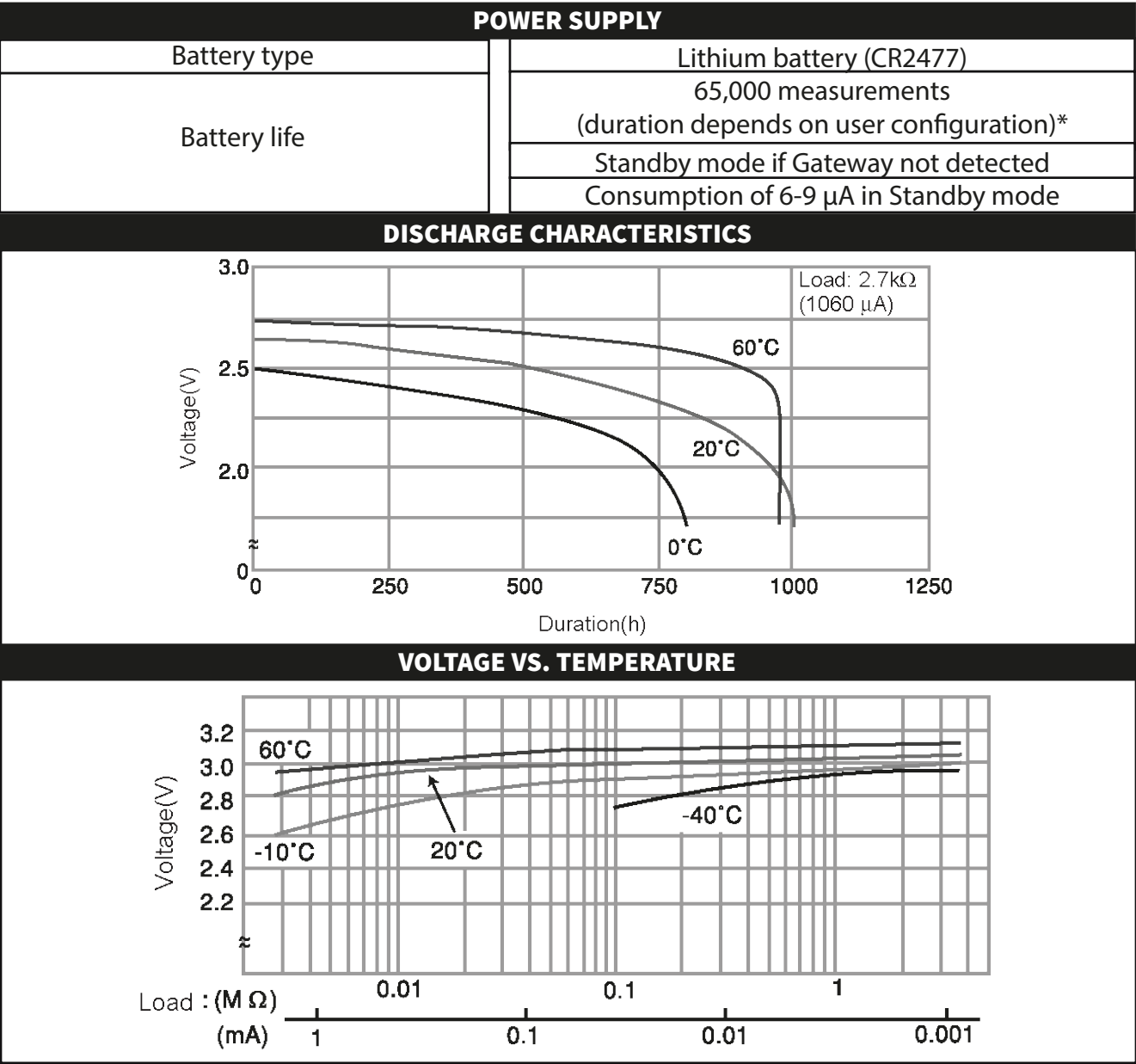
*Battery life is directly affected by temperature, frequency of alarms, and other factors independent of user settings.

DIMENSIONS
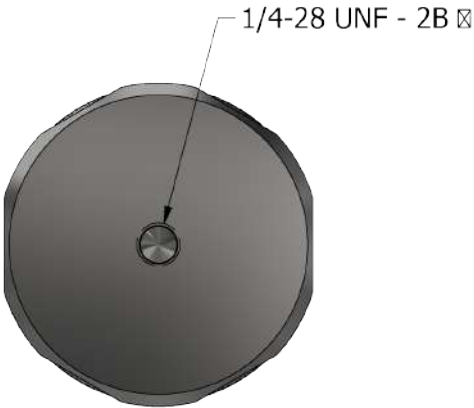
44.98 mm

FRONT VIEW

33.00 mm

10.50 mm — 22.50 mm

⌀ 34.00 mm

⌀ 47.00 mm

SIDE VIEW

1/4-28 UNF - 2B ⌀
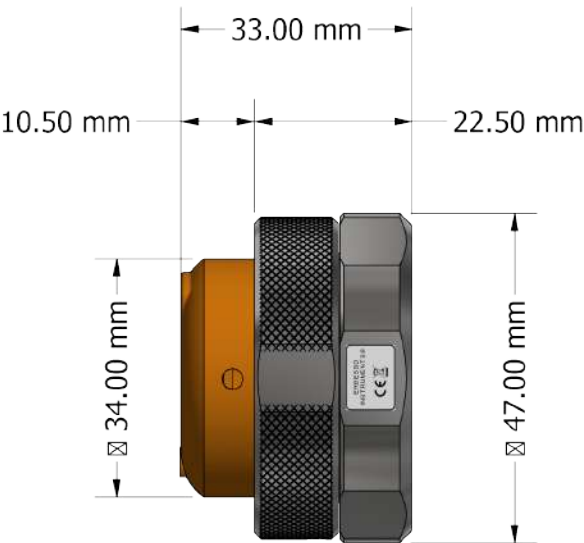
REAR VIEW

QUICK GUIDE

Easily orient your dominant axis with tactile iconography and a user adjustable base.

Use the symbol on the top of the Phantom to locate the axis in the right position.

X

Y   Z

Once you've placed the sensor on your machine, set it up on DigivibeMX and define each axis to an orientation: Horizontal, Vertical and Axial.

The Phantom vibration sensor has everything you need to start collecting data without the need of additional accesories.

Add it to your measurement point trough DigivibeMX and you will be ready to monitor your machines instantly.

Use Machine Learning, Envelope Alarms, Identify Bearing Faults and more with DigivibeMX.

CERTIFICACIONES

Analize and visualize the health of your machines with

DigivibeMX®

Easily access your data worldwide with EI Analytic and WiSER VIBE PRO.

Phantom sensors are compatible
with communication protocols:

(using Gateway 2.0)

MEET THE PHANTOM FAMILY

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 Termocouple & Phantom Infrared

Have a better control of your machines' temperature. You can connect up to 3 thermocouple sensors or acquire the **infrared** temperature sensor so you can monitor with extreme precision.

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 compatibe 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.

Phantom Thermographic Camera

With the Phantom thermal camera you can take infrared images of surfaces or objects at a distance of no more than 1m. Use DigivibeMX to create trends at different points of these captures.