

# PHANTOM®

GEN 3 | VIBRATION SENSOR



**HIGH RANGE**  
(EPH-V11E)**Frequency Range:**  
0.5 Hz - 10 kHz [x,y]  
0.5 Hz - 5.1 kHz [z]**Data Receiving Interval:**  
Captures data as often as  
every minute  
*(configurable)***Dynamic Range:**  
 $\pm 8 / \pm 16 / \pm 32$  g**Sensitivity:**  
100 mV/G**MEASUREMENT**

Product code	EPH-V11E				
Built-in sensor	MEMS Sensor				
Sensing resolution (X, Y, Z)	240 $\mu$ g				
Frequency range (@ 25,600)	0.5 Hz to 10 kHz (X,Y), 0.5 Hz to 5.1 kHz (Z)				
Dynamic range (configurable)	$\pm 8 / \pm 16 / \pm 32$ 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				
Spectral noise (10 Hz)	630 $\mu$ g/ $\sqrt$ Hz				

**CONNECTIVITY AND SOFTWARE**

Wireless protocol	Bluetooth BLE 5.0
Operating frequency	2.4 GHz
Transmission power	$\pm 8$ dBm
Signal strength range	-90 dBm to -30 dBm
Power output range	-4 dBm to +8 dBm <i>(configurable)</i>
Devices compatibility	iOS and Android devices ( <i>WiSER®Vibe &amp; PHANTOM™ Manager</i> ) and PHANTOM™ Gateway
Software compatibility	DigivibeMX 11 M30 & PHANTOM™ Version / PHANTOM™ Manager and WiSER®VIBE
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 °C to 80 °C (40 °F to 176 °F)
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\*Ideal environment. No competing signals or obstructions.

**HIGH SENSITIVITY**  
(EPH-V10E)**Frequency Range:**0.5 Hz - 4 kHz [x,y]  
0.5 Hz - 1.8 kHz [z]**Data Receiving Interval:**Captures data as often as  
every minute  
*(configurable)***Dynamic Range:**

±2 / ±4 / ±8 g

**Sensitivity:**

100 mV/G

**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				
Spectral 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 strength range	-90 dBm to -30 dBm
Power output range	-4 dBm to +8 dBm <i>(configurable)</i>
Devices compatibility	iOS and Android devices ( <i>WiSER®Vibe &amp; PHANTOM™ Manager</i> ) and PHANTOM™ Gateway
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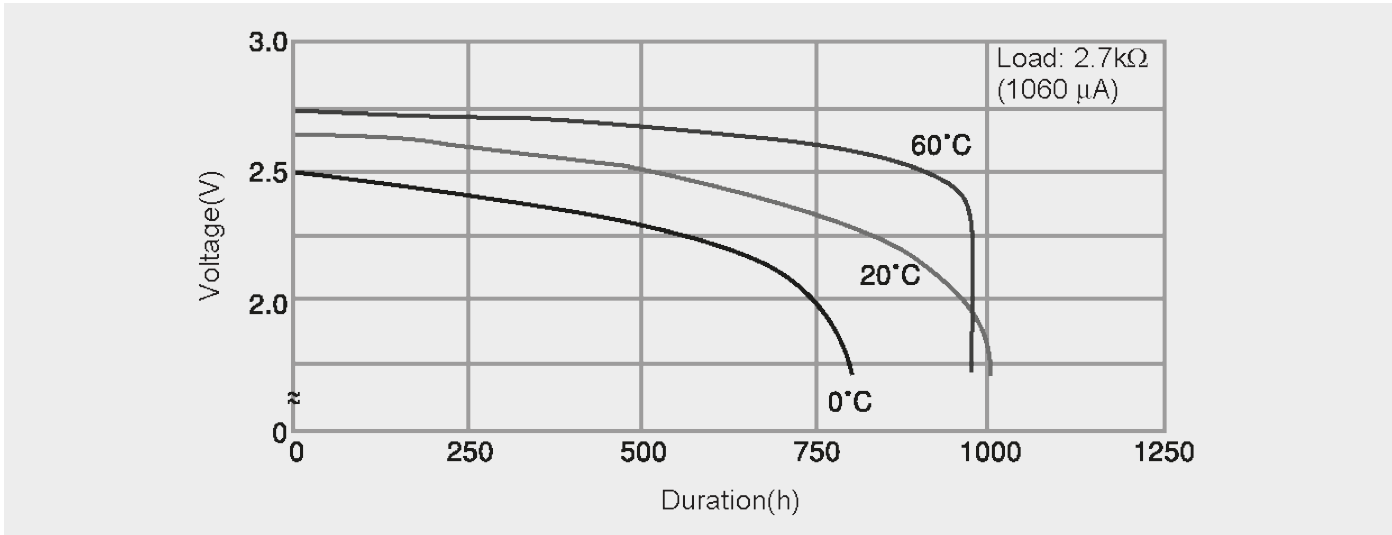
\*Ideal environment. No competing signals or obstructions.



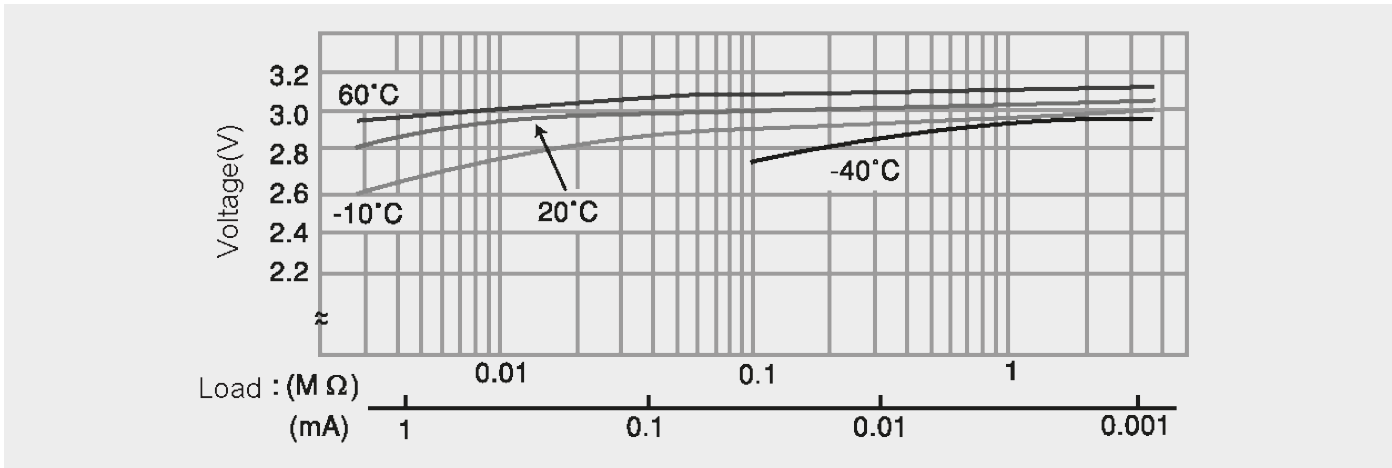
### BATTERY INFORMATION

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 $\mu$ A in Standby mode

### DISCHARGE CHARACTERISTICS



### VOLTAGE VS. TEMPERATURE

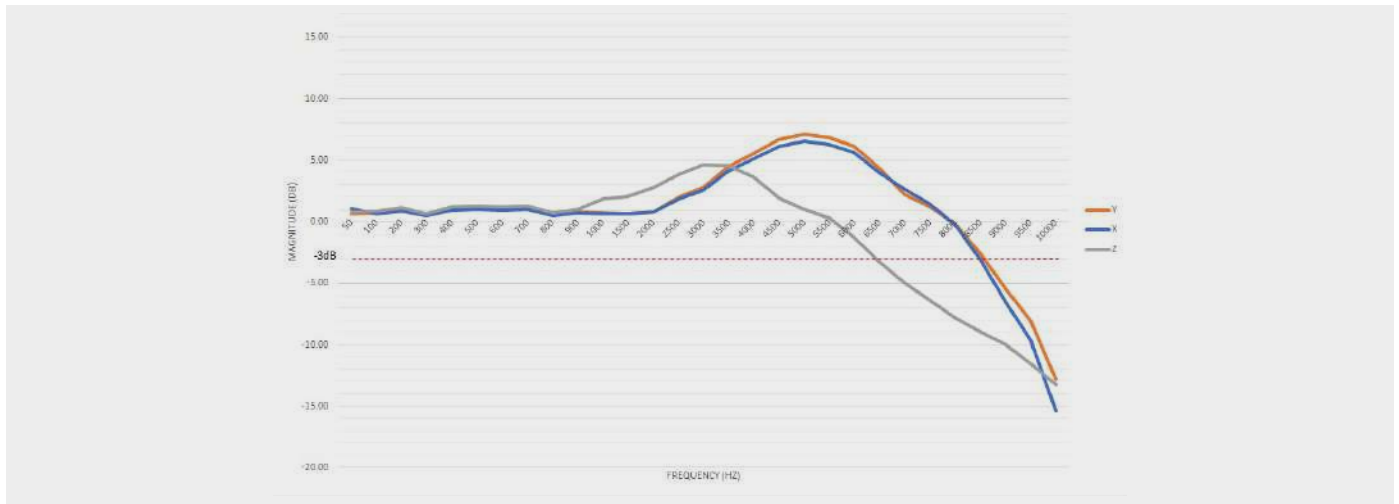


\*Battery life is directly affected by temperature, frequency of alarms, and other factors independent of user settings.



## FREQUENCY RESPONSE

### PHANTOM EPH-V11E



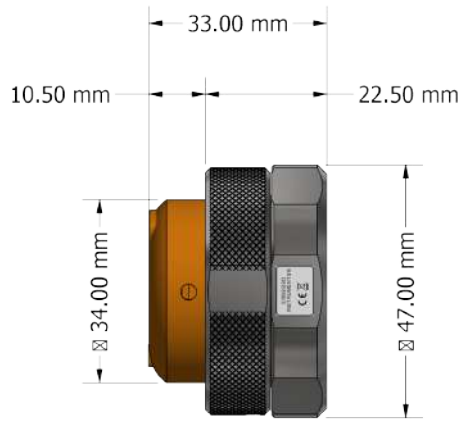
### PHANTOM EPH-V10E



## DIMENSIONS



FRONT VIEW



SIDE VIEW



REAR VIEW