



**Predictive**  
Technology

# VibePro 24/7

PERMANENT MOUNT SYSTEM



## DESCRIPTION

VibePro 24/7 is the most advanced turn-key wireless solution for continuous asset monitoring. The standard VibePro 24/7 mote is a 3 axis acceleration and temperature sensor which sets a new standard for frequency bandwidth while maintaining outstanding sensitivity. Wireless motes are managed by a rugged central base station to acquire data for intelligent trending. The VibePro 24/7 hardware designed for demanding environments, is easy install, and requires minimal time investment to implement a complete monitoring solution. An expanded antenna selection makes VibePro 24/7 suited for long range data collection tasks. Through the VibePro web app, asset condition and predictive data are available from any internet connected device, anywhere in the world - 24/7.

## VIBRATION SENSOR MOTE

The 24/7 system provides continuous remote monitoring of key performance metrics to track the operating health of equipment.

- Multiple antenna solutions for challenging connections
- Optimized for long battery life
- Full time series data sets up to 5 times per minute
- Expandable to hundreds of motes per system
- Infinite spectral lines
- No limit to time sample lengths



## VIBEPRO 24/7 BASE STATION

The VibePro 24/7 base station communicates with an unlimited number of motes. Sensor motes communicate with the base station through a proprietary frequency hopping network to seamlessly coexist with established plant networks.

## VIBEPRO ONLINE WEB APP

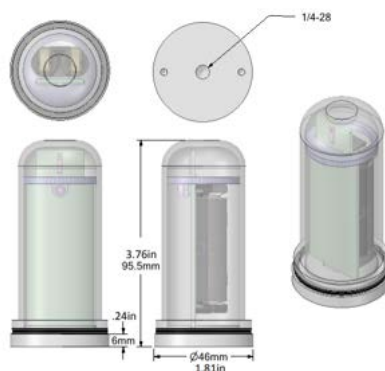
The base station serves data to the VibePro Online web app for remote condition analysis and data storage in the cloud. This data can be securely accessed anytime, anywhere, from any internet connection. Stay in control using the remote interface to communicate with and adjust system settings easily to make changes in your data collection on-demand.



## SPECIFICATIONS

<b>FREQUENCY RESPONSE</b>	6000Hz +/- 3 dB 12000Hz +/- 5 dB
<b>RADIO FREQUENCY TO BASE STATION</b>	2.4 GHz
<b>SENSITIVITY</b>	1mg
<b>AXIS SELECTABLE FOR INCREASED RESOLUTION</b>	1 axis 12800 Hz fMax 2 axis 6400 Hz fMax 3 axis 3200 Hz fMax
<b>SPECTRAL LINES</b>	Unlimited
<b>SAMPLES PER ACQUISITION</b>	Infinite
<b>SAMPLE RATE</b>	3200sps - 25600sps configurable
<b>INGRESS PROTECTION</b>	IP65
<b>MASS</b>	80g with battery
<b>ENCLOSURE MATERIAL</b>	Fiber filled polyimide Anodized aluminium base Gold antenna connector Stainless steel snap ring
<b>RADIO</b>	2.4GHz ISM band proprietary
<b>RANGE</b>	Omnidimensional antenna 120' line of sight Directional antenna 800' line of sight
<b>POWER SOURCE</b>	3-Volt lithium manganese dioxide (CR123A)
<b>BATTERY LIFE APPROX.</b>	1 reading per week: 3 years 1 reading per day: 1.5 years
<b>RANGE</b>	+/- 30g nominal

24/7 Rev 2 Mechanical Footprint





## TEMPERATURE RANGE

<b>TEMPERATURE RANGE</b>	-40° to 125°C
	-40° to 257°F
<b>STORAGE TEMPERATURE WITH BATTERY</b>	.85°C
	33.53°F
<b>STORAGE TEMPERATURE WITHOUT BATTERY</b>	125°C
	257°F
<b>MIN. OPERATING TEMPERATURE</b>	-20°C
	-4°F
<b>MAX SURFACE TEMPERATURE</b>	85°C
	185°F

## ANTENNA OPTIONS

<b>STUB ANTENNA</b>	125 ft (low gain)
<b>PATCH ANTENNA</b>	250 ft (medium gain)
<b>BACK FIRE ANTENNA</b>	1000 ft (high gain)

## BASE STATION SPECIFICATIONS

ENABLED AXES	POSSIBLE COMBINATIONS	TURBO MODE	PACKET DATA RATE	SAMPLING RATE
3	X,Y,Z	Disabled	800 packets/seconds	3200sps
3	X,Y,Z	Enabled	711 packets/seconds	6400sps
2	X,Y	Disabled	914 packets/seconds	6400sps
2	X,Y	Enabled	914 packets/seconds	12800sps
1	X or Y or Z	Disabled	914 packets/seconds	12800sps
1	X or Y or Z	Enabled	914 packets/seconds	25600sps

### FEATURES:

- User determined collection schedule
- 2-way communication with data sensors
- Automated email notification for alerts and alarms
- Per sensor customizable collection schedule
- Trending in Peak, RMS & Crest Factor
- Velocity, acceleration, displacement & demodulation
- VibePulse automatic fault detection algorithm

## GTI ONLINE WEB APP SECURITY

GTI Predictive Technology provides access to VibePro Online through a secure Internet site. GTI Predictive Technology access to this site is password protected. GTI uses an SSL Certificate to ensure secure connectivity. Communication within the GTI Online network is only from sensor through the base station to VibePro Online and from VibePro Online through the base station to the Internet. GTI Online does not allow access to machine settings or controls. Secure communication through a VPN is also available.

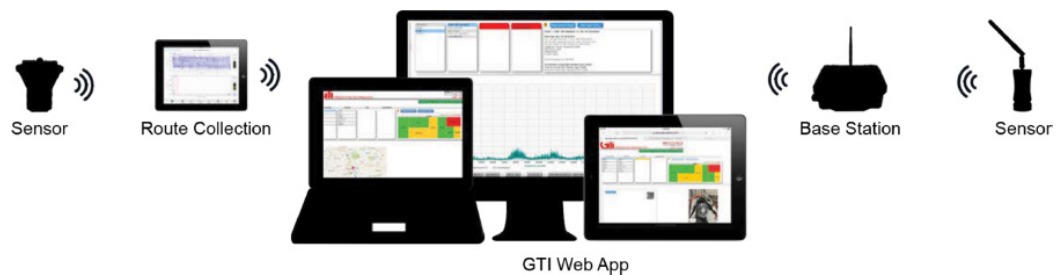
## WHAT IS AN SSL CERTIFICATE?

SSL Certificates are small data files that digitally bind a cryptographic key to an organization's details. When installed on a web server, it activates the padlock and the https protocol and allows secure connections from a web server to a browser. Typically, SSL is used to secure credit card transactions, data transfer and logins, and more recently is becoming the norm when securing browsing of social media sites.

### SSL CERTIFICATES BIND TOGETHER:

- A domain name, server name or hostname.
- An organizational identity (i.e. company name) and location.

An organization needs to install the SSL Certificate onto its web server to initiate a secure session with browsers. Once a secure connection is established, all web traffic between the web server and the web browser will be secure. When a certificate is successfully installed on your server, the application protocol (also known as HTTP) will change to HTTPS, where the 'S' stands for 'secure'. Depending on the type of certificate you purchase and what browser you are surfing the Internet on, a browser will show a padlock or green bar in the browser when you visit a website that has an SSL Certificate installed.



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