

## Challenge

Condition monitoring in a large facility can be difficult when monitoring points are spread around the building and sometimes in difficult and expensive-to-reach areas. Banner's MultiHop Vibration Solutions Kit makes it easy for a user of any level to deploy a vibration monitoring system using a versatile MultiHop wireless network that can use repeaters to extend the range or circumvent obstacles and monitor critical assets in a large facility with hard-to-reach locations.

## Banner Wireless Value

- **Easy to deploy**—Pre-programmed DXM700 and HMI make it easy to deploy a MultiHop vibration monitoring system, no programming needed
- **Simple and powerful**—No vibration experience necessary, machine learning algorithm baselines then auto generates warning and alarm thresholds
- **Monitoring capability**—Monitor a variety of vibration characteristics and temperature on up to 40 assets using VT1 vibration sensors connected to H10 MultiHop radios or VT2 sensors connected to a MultiHop radio with RS-485
- **Flexible and robust**—MultiHop networks are self-healing, auto routing RF networks with multiple hops that extend the network range and improve radio link performance
- **Visualize data and alarms**—HMI clearly displays alarms and graphs of raw vibration data along with baseline, warning, and alarm values
- **Reduces complexity**—Machine or process reconfiguration made easier; great for retrofit applications
- **Industrial Internet of Things**—Connect to a network for remote monitoring using Banner CDS or any other cloud service



## Banner MultiHop Vibration Solutions Kit

- Use VT1 sensors and the H10 MultiHop radio or VT2 sensors and any MultiHop radio with RS-485
- Visualize the data with the pre-programmed DXM700 and pre-programmed HMI
- Bind Nodes and perform site surveys using the HMI
- Connect to a network using the five-port industrial Ethernet switch
- View up to seven days of data history on the HMI while archiving over 30 days of logged data in CSV files
- Create new asset baselines easily using the HMI
- Add local indication of faults using DXM outputs to Tower Lights or Indicator Lights

## Key Monitoring Applications

- Rotating Asset Health
- Bearing Health
- Pump cavitation
- Rotor unbalance
- Misalignment
- Loose or worn components
- Fillers
- Gear boxes
- HVAC systems

Model	Frequency	Additional Notes
SOLUTIONSKIT9-VIBE-MH	900 MHz ISM Band	Pre-wired M12/Euro-style connector for use with any Banner 1-wire serial sensor (sold separately); values displayed in Imperial units
SOLUTIONSKIT2-VIBE-MH	2.4 GHz ISM Band	
SOLUTIONSKIT9-VIBEMETRIC-MH	900 MHz ISM Band	Pre-wired M12/Euro-style connector for use with any Banner 1-wire serial sensor (sold separately); values displayed in metric units
SOLUTIONSKIT2-VIBEMETRIC-MH	2.4 GHz ISM Band	