



VIBRATION MONITORING SOLUTION

FLIR SV87-KIT



The FLIR SV87-KIT is a wireless connected sensing-solution designed for continuous vibration and temperature monitoring. Vibration trending and analysis can help detect serious problems with industrial machines long before the damage can be seen, making the SV87-KIT ideal for manufacturing environments that use rotating machinery, industrial pumps, fans, gearboxes, and motors. The included remote monitoring gateway stores sensor data and wirelessly transmits readings in real time to a mobile device or PC. This allows professionals to make knowledgeable decisions about machine operation and maintenance without having to wait for the next manual inspection – reducing unplanned downtime, lowering operational costs, and improving profitability.



IMPROVE EFFICIENCY

Monitor vibration and temperature frequently to make better-informed decisions

- View real-time data and trending charts
- Predict mechanical failure before it occurs with automated vibration analysis
- Take corrective actions earlier through regular, routine monitoring and sampling



MAINTAIN SAFER OPERATIONS

Minimize exposure to dangerous environments and difficult-to-access locations

- Monitor conditions remotely from a mobile device or PC
- Reduce the need to change the sensor battery (4-year life), limiting direct contact with machinery
- Protect equipment from damage while ensuring a safer working environment by staying informed of abnormal conditions



ANALYZE DATA QUICKLY

Gain a faster understanding of the state of manufacturing equipment

- Receive an automatic alert or email the instant a defined vibration or temperature threshold is exceeded
- Review data samples that are automatically taken every 90 seconds and stored for further analysis
- Export sensor data to CSV files

SPECIFICATIONS

Measurement & Analysis	
Sensitivity range	±32 g
Frequency range	10 Hz to 1 kHz
Velocity data	mm/s or in/s derived from Fast Fourier Transform (FFT)
Capture rate	One data point/90 sec
Temperature range	Display measurement trend of contact temperature: -30°C to 80°C (-22°F to 176°F)
Data export format	CSV
Data visualization	Min, Max, live, historical data and trending charts on mobile devices and Windows®
Alerts	When a user defined vibration or temperature threshold is exceeded, a warning alert or email is issued.
Connections & Communications	
Bluetooth®	BLE 4.2
Range (during a session)	Up to 65 m, line-of-sight
Wi-Fi® type	IEEE 802.11 b/g/n
Wi-Fi frequency	2.4 GHz
Data storage	32 MB (approx. 5 days of data backup for 4 sensors in case of Wi-Fi outage)
Indicators	LEDs indicate power, sensor alarm and Wi-Fi status
General Information	
Warranty	3 years
Certifications	ETL, IC, FCC, CE, RCM
Supported Operating Systems	iOS® App: 9.0 or above; Android™ App: 7.0 or above Windows App: Windows 10, Intel® Core™ i3 processor or better
Environmental Data	
Operating temperature range	Gateway: -25°C to 65°C (-13°F to 149°F) Sensor: -30°C to 80°C (-22°F to 176°F)
Storage temperature range	Gateway: -25°C to 65°C (-13°F to 149°F) Sensor: -30°C to 80°C (-22°F to 176°F)
Relative humidity	10 to 95% non-condensing
Operating altitude	2000 m max.
Drop test	1 m
IP rating	Gateway: IP40; Sensor: IP67
Power	
AC input	Gateway: 100 V to 240 V AC, 50/60 Hz
Battery type	Sensor: 3.6 V Lithium battery
Battery life	Sensor: Typically 4 years (varies by usage)
Battery status indicator	Sensor: Low battery LED
Physical Data	
Packaging size (L × W × H)	18.25 × 12.90 × 8.50 cm (7.19 × 5.08 × 3.35 in)
Packaging weight	488 g (1.08 lb)
Size (L × W × H)	Gateway: 5.41 × 4.94 × 4.94 cm (2.11 × 1.93 × 1.93 in) Sensor: 6.5 × 2.5 × 2.7 cm (2.54 × 0.98 × 1.05 in)
Weight	Gateway: 66 g (0.15 lb); Sensor: 62 g (0.14 lb)
Box contents	GW65 Gateway for Vibration Monitoring Solution, 4 Gateway AC connectors for US/EU/UK/AUS power outlets, 4 SV87 Remote Vibration/Temperature sensors with adhesive tape, Quick Start Guide, access to configuration and visualization software

NASDAQ: FLIR

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20-1060-INS-SV87-KIT Datasheet



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