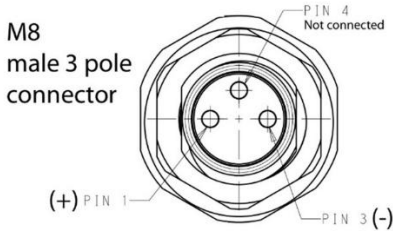


DATASHEET

Product information IVIB161410-24V-PWR-8A/9A

Name	IVIB161410-24V-PWR-8A/9A
	
	Industrial Wireless Cable Powered Vibration Sensor
Product description	
Type / version	IVIB161410-24V-PWR / subversion -8A or -9A
Description	Industrial Wireless Cable Powered Vibration Sensor, (6VDC-60VDC) with 1x CR2032 coin cell battery as fail-over, measures both vibration and temperature data, collects triple axis time series vibration data, EMC compliant, RoHS compliant. Unlike the Battery-Powered Vibration Sensor, the Cable-Powered model measures continuously. This “always-on” operation lets it capture the highest peak vibration during each measurement window—even on machines that run only intermittently, such as CNC machines or conveyor belts. It is also the better choice when ultra-dense data are required, for example, recording a full 3-axis time series every 15 minutes.
Note	Perfect for monitoring rotating machinery—capturing bearing wear, misalignment, imbalance, and other faults—even on assets that operate intermittently or unpredictably, or when a high measurement capture rate is needed.
Product specifications	
Dimensions	57 x 47 x 14 (mm) – (M8 connector not included)
Case material	Thermoplastic
Weight	40 g
Sealing	IP68
Installation	magnetic mount or M3 screws (epoxy adhesive for permanent mount)
Operating temperature	-20° to +85°C
Recommended storage temperature	10°C~35°C
Certifications	CE (version-8A) or FCC (version-9A)
Wireless communications range	Up to 50 m typically in plant (actual range depends on specific site topology and device placement)
RF standard - Wireless protocol	General ISM SubGhz (8A: 863–870 MHz / 9A: 902–928 MHz) - FSK proprietary
Max. Tx power	<10 dBm EIRP (<10mW) “Short Range Device” (SRD)
Transmitted data	100% full raw time waveform data
Power supply	24VDC typical (6VDC to 60VDC accepted) + 1 x 3V standard LiMnO₂ cell • Power entry: 3 pole M8 male connector (signal connector not used) • Poles reversal protected • EMI filtered against RF disturbance • Max 80V overvoltage protection (with internal fuse) • Double conversion (accepts voltage drops) • 1 x 3V replaceable CR2032 battery as battery failover (to detect power cable failure) • When running solely on its battery, the device behaves like a battery-powered sensor and should only be used in this mode for short periods

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Amplitude range	2G, 4G, 8G or 16G – user selectable via sensor management software
Measurement axis	X, Y and/or Z (3 axis) – user selectable via sensor management software
Sampling rate	12 to 3200 Hz (Fmax 1600Hz) – sampling rate user selectable via sensor management software
Number of samples	32 to 8192 samples – user selectable via sensor management software
Units	g or mm/s – user selectable via sensor management software
Activity threshold	Auto or user selectable – user selectable via sensor management software
Temperature sensor on board	Yes
Data storage	Upon connection, Tri-Axial full time-series acceleration data and temperature data is instantly transmitted to and stored in the iQunet Edge Gateway's SQL database. Transmitted sensor measurement data is overwritten with next new measurement.
Sensor Management	Sensor Management software is embedded in the iQunet Edge Gateway's web interface
Start data acquisition	Via iQunet (IPC) Edge Gateway software - Manual trigger (REC button in Sensor Dashboard) - Automatic measurements (user selectable time interval) - Conditional automatic measurements (user selectable threshold level)
Postprocessing	Via iQunet (IPC) Edge Gateway software - Time series, frequency or waterfall plots 1/f flicker noise detrending (for velocity spectra) - DFT averaging for noise reduction - Trend tracking: RMS or Kurtosis - Configurable high pass cut off filter
Communication protocols	Subscribe to sensor parameters and data AND control sensors over: - Embedded OPC UA Server - Embedded MQTT client - Embedded GraphQL API
Compliance	- RoHS: 2015/863/EU - EMC: EN 301 489-1 / EN 301 489-3 - SPECTRUM: EN 300 220-2 8A-version: Radio Equipment Directive (2014/53/EU). 9A-version: FCC ID: OA3MRF89XAM9A Model: MRF89XAM9A IC: 7693A-89XAM9A <i>This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation</i>
Picture & Drawing	
Connection scheme power cable	Connection scheme for IVIB161410-24V-PWR  M8 male 3 pole connector (+) PIN 1 PIN 3 (-) PIN 4 Not connected Sensor accepts 6 to 60 VDC Note: iQunet advises to use the accessory cable with product code ACCS616210-M8-5MTR. CAUTION: fit the female connector of the power cable hand-tight only!
Battery emplacement	

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The fail-over battery must be inserted with the arrow on the battery holder pointing to the dot indicating the "open" position (as marked on the outside of the sensor with an open lock icon).

CAUTION: inserting the battery in another position will harm the sensor and will void warranty!

After insertion, the battery holder must be gently turned clockwise until the arrow on the battery holder points to the dot indicating the "closed" position (as marked on the outside of the sensor with a closed lock icon). Use a 1.2x6mm flat screwdriver or a 0.05€ coin to turn the battery holders into place. Maximum torque: 0.3 Nm

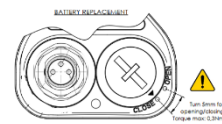
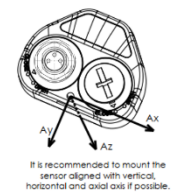
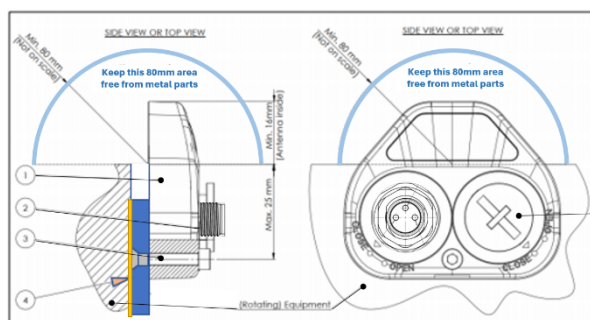


CAUTION: the battery surface may not be touched when installing the batteries into the sensor.

Sensor mounting

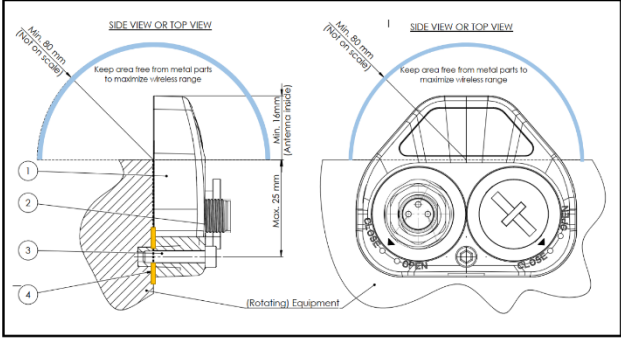
iQunet.® Sensor Mounting WITH Magnet

Mechanical installation instructions



- 1 Wireless iQunet Sensor (SKU: IVIB161410-24V-PWR)
- 2 Battery holder + battery (SKU: ACC5602010-2032-IP68)
- 3 Magnet incl. magnet mounting set (SKU: ACC5622010-MAGN-3230)
- 4 RECOMMENDED: Epoxy ~ 5 mm gap filling (SKU: ACC5612010-50ML-EPXY)

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	iQunet.® Sensor Mounting WITHOUT Magnet Mechanical installation instructions  ① Wireless iQunet Sensor (SKU: IVIB161410-24V-PWR) ③ Mounting Screw set (SKU: ACCS611010-SSM3-X20) ② Battery holder + battery (SKU: ACCS602010-2032-IP68) ④ RECOMMENDED: Epoxy – 5 mm gap filling (SKU: ACCS612010-50ML-EPXY)
Shipping information	UN 38.3 Test Summary of the Li-primary cell: Varta-ag.com/Supplier-Test-Summary-STS-ST5_CR2032_09.pdf