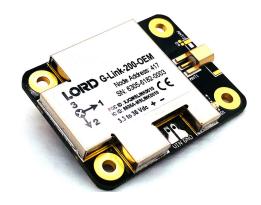
LORD Sensing DATASHEET

G-Link®-200-OEM

Wireless Accelerometer Node



G-Link®-200-OEM - High-speed triaxial accelerometer node

The **G-Link-200-OEM** has an on-board triaxial accelerometer that allows high-resolution data acquisition with extremely low noise and drift. Additionally, derived vibration parameters allow for long-term monitoring of key performance indicators while maximizing battery life.

LORD Sensing Wireless Sensor Networks enable simultaneous, high-speed sensing and data aggregation from scalable sensor networks. Our wireless sensing systems are ideal for test and measurement, remote monitoring, system performance analysis, and embedded applications.

Users can easily program nodes for continuous, periodic burst, or event-triggered sampling with the SensorConnect software. The optional web-based SensorCloud interface optimizes data aggregation, analysis, presentation, and alerts for sensor data from remote networks.

INPUT SENSORS WIRELESS NODES GATEWAYS SOFTWARE (((**))) Serror Cloud* (MSCL)

PRODUCT HIGHLIGHTS

- On-board triaxial accelerometer with ±2 to ±40 g measurement range
- · Continuous, periodic burst, and event-triggered sampling
- Output raw acceleration waveform data or derived vibration parameters (Velocity, Amplitude, Crest Factor)
- 1 Sample per hour to 4096 Samples per second
- Wide input voltage from 3.3 to 36 V

FEATURES AND BENEFITS

HIGH PERFORMANCE

- Extremely low noise on all axis 25 μg/√Hz or 80 μg/√Hz
- High accuracy temperature sensor ±0.25 °C
- Wireless range up to 2 km (800 m typical)
- · Datalog up to 8 million data points

EASE OF USE

- End-to-End wireless sensing solution reduces development and deployment time
- Remote configuration, acquisition, and display of sensor data with SensorConnect™
- Optional web-based SensorCloud platform optimizes data storage, viewing, alerts, and analysis.
- Easy custom integration with open-source, comprehensive communications and command library (API)

APPLICATIONS

- Vibration monitoring
- · Condition based maintenance (CBM)
- · Impact and event monitoring



G-Link®-200-OEM Wireless Accelerometer Node

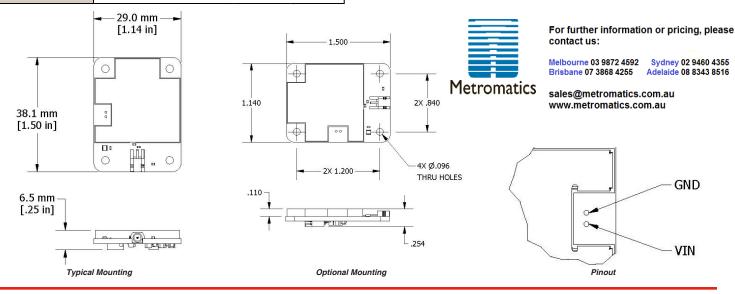
Specifications

Analog Input Channels				
Measurement range	8 g	40 g		
	±2 g, ±4 g, or ±8 g configurable	±10 g, ±20 g, or ±40 g configurable		
Noise density	25 μ <i>g</i> /√ Hz 80 μ <i>g</i> /√ Hz			
0 g offset	±25 mg (±2 g)	±50 mg (±10 g)		
0 <i>g</i> offset vs temperature	±.1 mg/ °C (typical) ±.15 mg/ °C (max)	±0.5 mg/ °C (typical) ±0.75 mg/ °C (max)		
Integrated Sensors	Triaxial MEMS accelerometer, 3 channels			
Accelerometer bandwidth	DC to 1 kHz			
Resolution	20-bit			
Scale factor error	< 1% full-scale			
Cross axis sensitivity	1%			
Sensitivity change (temperature)	±0.01%/°C			
Anti-aliasing filter	1.5 kHz (-6 dB attenuation)			
Low-pass digital filter	26 to 800 Hz - configurable			
High-pass digital filter	Off to 2.5 Hz - configurable			
Integrated Temperature Channel				
Measurement range	- 40°C to 85°C			
Accuracy	±0.25°C (over full range)			
Sampling				
Sampling modes	Continuous, periodic burst, event triggered			
Output options	Acceleration, Tilt, and Derived channels: Velocity (IPSrms), Amplitude (Grms and Gpk-pk) and Crest Factor			
Sampling rates	1 sample/hour to 4096 samples/second			
Sample rate stability	±5 ppm			
Network capacity	Up to 128 nodes per RF channel (bandwidth calculator) http://www.microstrain.com/configure-your-system			
Node synchronization	±50 µsec			
Data storage capacity	16 M Bytes (up to 8,000,000 data points)			

Operating Parameters						
Wireless communication range	Outdoor/line-of-sight: 2 km (ideal)*, 800 m (typical)**					
	Onboard antenna: 1 km (ideal)*, 400 (typical)**					
	Indoor/obstructions: 50 m (typical)**					
Antenna	Surface mount or External through MMCX or U.FL connector					
Radio frequency (RF) transceiver carrier	License-free 2.405 to 2.480 GHz with 16 channels					
RF transmit power	User-adjustable 0 dBm to 20 dBm. Restricted regionally					
Power source	3.3 V dc to 36 V dc to solder pads					
Pulse Current***	Tx Power	VIN = 3.6 V	VIN = 5.0 V	VIN = 12 V		
	+20 dBm	135 mA	100 mA	45 mA		
	+16 dBm or less	100 mA	70 mA	32 mA		
ESD	±4000 V (Applies to VIN, GND, Antenna, and shield)					
Operating temperature	-40°C to +85°C					
Mechanical Shock Limit	1000 <i>g</i> /1.5ms					
Physical Specifications						
Dimensions	38.1 mm x 29.0 mm x 6.5 mm					
Mounting	(4) 2- 56 UNC					
Weight	8.17 grams					
Conformal coating	Humiseal 1B31					
Integration						
Compatible gateways	All WSDA gateways					
Software	SensorCloud, SensorConnect, Windows 7, 8 & 10 compatible					
Software development kit	http://www.microstrain.com/software/mscl					
Regulatory compliance	FCC (USA), IC (Canada), CE (European Union), JET (Japan)					

- * Actual range varies with conditions

 ** Measured with antennas elevated, no obstructions, no RF interferers.
- *** Power source must supply short duration pulse currents as determined by the transmit power setting and the supply voltage.



LORD Sensing MicroStrain

www.microstrain.com

459 Hurricane Lane Suite 102 Williston, VT 05495 • USA

Customer Support Center (in United States & Canada)

Tel: +1.802.862.6629

Email: sensing_sales@LORD.com | sensing_support@LORD.com For a listing of our worldwide locations, visit LORD.com



