Truly wireless

Ranger Pro

ATEX/IECEx Zone 0/CSA Class 1 Div 1

ISA100 & WirelessHART protocol

User-friendly and collaborative

Connected with System 1

Temp and triaxial capable

Specifications summary (See datasheet 125M5237 for full details)

Accelerometers	Axis	1 or 3 axes
	Amplitude range	±20 g peak
	Measurement accuracy	±5% (160 Hz) Z-axis, ±10% (160 Hz) X and Y axis
Static overall variables	Acceleration frequency range	Z axis: 5 Hz (±3dB) to 10 kHz (±3dB), X and Y axis: 5 Hz (±3dB) to 4 kHz (±3dB) (Tri-axial sensor only)
	Accel Fmin / Fmax (Hz)	2, 5, 10, 100, 200 / 200, 500, 1000, 2000, 5000, (10000 Z-axis only)
	Velocity range	5 – 2000 (Hz) / 0 – 50 mm/s (0 - 2 in/s)
	Velocity Fmin / Fmax (Hz)	5, 10 / 200, 500, 1000, 2000
	Measurement interval	10, 20, 30, 60, 120, 180, 240, 360 (minutes)
Waveforms and spectra	Accel Fmin / Fmax (Hz)	2, 5, 10 / 200, 500, 1000, 2000, 5000, 10000
	Number of samples	1024, 2048, 4096, 8192
	Velocity Fmin / Fmax (Hz)	5, 10 / 200, 500, 1000, 2000
	Number of lines	400, 800, 1600, 3200
	Waveform Measurement intervals	6, 8, 12, 24, 48, 168, 336, 672 (hours)
Temperature sensor	Measurement range	-40 ºC to 120 ºC (-40 ºF to 248 ºF)
Wireless	Network standard	ISA100.11a or WirelessHART®
	Radio standard	IEEE 802.15.4, 2.45 GHz ISM band
	Encryption/ security	128-bit AES encrypted packets
	Wireless range	150 meters sensor to access point, 100 meters sensor to sensor, line of sight (actual range depends on obstacles present, gateway antenna type, and orientation of the sensor relative to the gateway antenna)
Battery and power	Type	Replaceable D size 3.6V lithium-thionyl chloride
	Life	Up to five years depending on the operating mode and configuration
Operating conditions	Operating temperature	-40 ºC to 85 ºC (-40 ºF to 185 ºF)
Physical	Weight	230 grams (without battery; 300 grams with battery)
	Dimensions	Height: 88 mm; diameter: 40 mm
	Case material	316 stainless steel body and glass-reinforced, impact-resistant
	Mounting hole	M6 x 1mm X 5mm deep internal thread
	IP rating	IP67 dust and water resistant (pending)
Regulatory compliance	EMC conformity	IEC 61326-1, ETSI EN 301 489-1, CISPR22, ETSI EN 301 489-17
	Radio spectrum	ETSI EN 300 328
	Safety	ETSI EN 61010-1, IEC 62479
	Hazardous atmosphere	CSA Class 1 Division 1 Groups A, B, C, D T4 ATEX/IECEx Zone 0
	Conformity	Compliant with all CE and FCC/IC requirements
Compatible gateways	Bently Nevada	ISA100, up to 50 Ranger Pro sensors per gateway
	Emerson	WirelessHART®–Emerson 1410 or 1420 v4.7.84 or higher, up to 70 Ranger Pro sensors per gateway
	Honeywell	ISA100–Honeywell WDM R310.2-4 or higher, up to 40 Ranger Pro sensors per access point
	Yokogawa	ISA100–Yokogawa YFGW 410/510, up to 40 Ranger Pro sensors per access point

Baker Hughes

bakerhughes.com