xBud™

VAYERON

A wireless monitoring solution for your industrial equipment

Feature	Characteristic	Value	Units
Accelerometer	Axis	X,Y,Z	
	Sensing element	MEMs	
	Amplitude Range	+/- 16	g
		+/- 8	
		+/- 4	
		+/- 2	
	Measurement Accuracy	+/- 2g @ 16384	LSB/g
		+/- 4g @ 8192	
		+/- 8g @ 4096	
		+/- 16g @ 2048	
Gyroscope	Transverse Sensitivity (Typ.)	+/- 1.5 @ 25c	%
		+/- 3.0 @ -40c to +85c	%
	Sensing element	MEMs	
	Angular Range	+/- 250	dps
		+/- 500	
		+/- 1000	
		+/- 2000	
	Measurement Sensitivity	+/- 250 @ 131	LSB/dps
		+/- 500 @ 65.5	
		+/- 1000 @ 32.8	
		+/- 2000 @ 16.4	
Trending Variables	Acceleration frequency range	0.27 to 562 (Low-Power)	Hz
		4.5 to 1.125k (LPF)	Hz
	Acceleration amplitude range	+/- 16	g
		+/- 8	
		+/- 4	
		+/- 2	
	Acceleration units / subunits	m/s^2 or g	
	Fmax	1.125k - 10k	Hz
Wireless	Network topology	Mesh	
	Radio standard	Lumen Radio Protocol	
	Radio frequency	2.4 GHz	
	Provisioning/ firmware updates	None/TBA	
	Encryption/ security	None/TBA	
	Output power	-20 to +4 dBm	
	Maximum RF Output Power	+4 dBm	
	Wireless range	30 meters sensor to access point, 30 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 & Power	Type	Non Rechargeable Li-SOCl	
	Life	~1 Year (depending on acquisition rate)	
	Hazardous area temperature range (Ta)	0c to 40c	
Operating Conditions	Operating temperature	-20c to 60c	
	Vibration limit	Customisable range 1Hz - 1kHz (Upto 10kHz possible with certain paramater configurations)	