

## **PVH01** Triaxial Vibration Meter

Introducing the PVH01. An Australian Design, Australian built triaxial vibration meter. Designed from the ground up to provide industry leading connectivity and IIOT interface, the PVH01 is ready to provide accurate, reliable vibration monitoring for all industry areas.



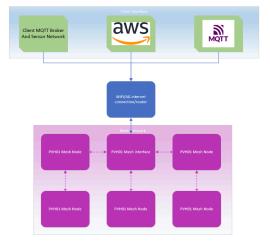


### **PVH01** Triaxial Vibration Meter

Instralabs is proud to present the PVH01 triaxial vibration meter with inbuilt mesh networking and MQTT data streaming. Representing the latest technology in IIOT and compliance measurements, the PVH01 is designed to exceed the requirements of AS2187 and DIN 45669-1.

The PVH01 has been designed from the ground up to be a highreliability triaxial vibration meter. Providing measurements of acceleration, velocity and displacement for all three othogonal axes and the vector sum result. Standard output is 1 secondly data of both peak and RMS values which can be stored locally and/or sent remotely. Over the air remote control is standard to enable remote management and configuration of the device.

34.3 x 34.3 x 38.5 mm





### **Specifications**

Ideally placed for condition monitoring, asset monitoring, blasting monitoring, bridge monitoring, any application where you need accurate, real-time vibration monitoring.

When combined with an environmental monitoring system such as Matrix Hub, or your own in-house IOT solution, the PVH01 provides you with a highly flexible, low power, accurate vibration monitoring solution.

Addition of a small solar panel gives indefinite monitoring length, and we have a range of 4G and satellite connection options for remote data applications.

Frequency Range	0.1 - 500Hz	Interface options	Touch screen, Micro USB Serial, Wifi Mesh
AS2187 Setting	2 - 250Hz		
Linear Setting	0.315 - 500Hz	Storage device	SD card
Peak acceleration	10g	Maximum storage capacity	32GB
		Maximum storage duration (approx)	4 years
Reported Metrics			
Acceleration (Peak and RMS)*	X, Y, Z, Vector Sum	Power consumption (approx)	1.03W
Velocity (Peak and RMS)	X, Y, Z, Vector Sum	Maximum battery runtime (approx)	3 days
Displacement (Peak and RMS)*	X, Y, Z, Vector Sum		
Dominant Frequency	X, Y, Z	Charge current	1-1.2A
Dominant Frequency resolution	0.1Hz	Charge voltage	5-5.2V
		Charge Cable	Micro USB
Measurement rate	1s - 24hr adjustable*		
		USB data streaming	Peak and RMS for X, Y, Z, and Vector Sum
Noise floor (X,Y,Z AS2187 response)	0.08 mm/s RMS		Stored as JSON or CSV
Noise floor (VS AS2187 response)	0.14 mm/s RMS	Wireless streaming format	MQTT with SparkplugB, JSON or CSV payload
			2
Accelerometer Mass	74 g		



Accelerometer Dimensions (L,W,H)



# Price list

Part Number	Unit	Description	RRP exGST
PVH01	Triaxial Vibration Meter	Inclusing triaxial sensor and cable AS2187.2 and DIN45669-1 Inbuilt WiFi, MQTT, SD, USB streaming, Velocity (X, Y, Z in peak and RMS), 15 min resolution, "	\$3,495
Options			
PVH01 HR	High resolution logging option	Logging measurement resolution down to 1 second	\$2,100
PVH01 Metric	Displacement and acceleration metrics	Add measurements of velocity and acceleration	\$1,900
PVH01 Mesh	Mesh Network option	Mesh network option - up to 10 hops	\$2,500
PVH01 Wave	Wave recording	Option for wave recording of all 3 channels	\$ <i>2,</i> 500
PVH01 USB	USB Stream Output	Stream measurement outputs through usb port	\$1,500

If 2 or more options are purchased in the same transaction, a 10% discount can be applied.

#### Accessories

PVH01 MP	Standard Mounting plate	Mounting plate with threaded holes for vibration sensor mounting, and 4 holes for ground mounting	\$250
PVH01 C	Standard PVH01 cable	2m cable for connection between PVH and vibration sensor (Longer lengths available as special order)	\$195

Jan 2024 - prices subject to change without notice PVH01 comes with a manufacturer's calibration certificate All hardware supported by 12 month return to manufacturer warranty