iVIBE®

Power Portal supply	12V DC
Battery	6 Volt, 2 AH, Nickel Metal Hydride NiMH
Battery life	Typically 10 hours after full charge
Weight	4.4 kg
Material	anodized machined aluminium ingot with 3 levelling feet
Dimensions	210 mm diameter octagon, 50 mm deep
Operating temperature	-5 ^{o}C to 50 ^{o}C
Power Portal Interface	RS485, 38.4kBaud
Protection	IP65
Internal Memory	4Mb flash
Backup Memory	2GB flash, micro SD card
Reporting interval	1 second to 12 hours
Clock	crystal controlled real time clock with battery backup
Calibration Interval	12 months, Turnkey Ⓡ SCS scheme eligible

Noise

Microphone	Class 1 (with frequency response report) or Class 2
Microphone interface	constant current, 18V phantom power
Frequency weighting	db(A) and db(C) simultaneously
Time weighting	F or S
Dynamic range	30 dB to 120 dB in single range
Measurements	L_{eq}, L_{10}, L_{90}, L_{max}, dB histograms
Measurement interval	1 second to 12 hours
Design Standards	BS4142, IEC651, BS5228, BS4969

Vibration

Sampling rate	1000 samples per second
Channels	X, Y, Z and vector resultant R
PPV range and resolution	0.01 mm/sec to over 100mm/sec, 0.01mm/sec resolution
PPV noise floor (seismic)	~0.01 mm/ sec
PPV noise floor (MEMS)	~0.5 mm / sec
Residual noise (1 Hz, seismic)	2.0 micro-g, RMS
Low frequency -3dB roll off	user selectable 0.2Hz, 0.5 Hz, 1 Hz, 2 Hz, 4 Hz
Measurements	PPV XYZR, dominant frequency XYZR RMS XYZR: acceleration, velocity, distance STATIC: X and Y tilt
Measurement interval	1 second to 12 hours
Design Standards	BS6472, BS7385, BS6955, DIN4140

Product design and development at Turnkey Instruments Ltd is continuous and we reserve the right to make changes to the design and specification of this and other products without prior notice.

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