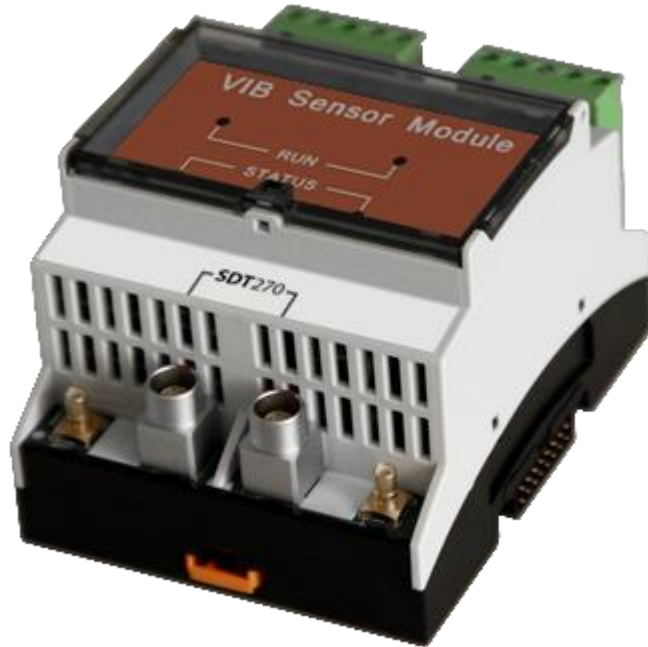


Online4US Module VIB

Online4US Module: FU.O4US.VIB.001 (Vibration Sensor Module)



The VIB sensor module is the vibration conditioning and processing unit of the system. It collects analog vibration data (up to 2 sensors), computes all indicators and communicates this information to the main central unit.

The module is specific for ICP accelerometer with a sensitivity of 100 mV/g.

The reading bandwidth is from 10 Hz to 1000 Hz.

General	
Function	Vibration measurement module
Operable with	ICP Accelerometer (provided by SDT International)
Processor	ARM Cortex-M4 @ 120MHz
Measurement channel	2 parallel isolated channels
Measuring range	0.0g to 10.0g
Resolution	0.1g
Measurement bandwidth	10Hz to 1kHz (ISO2954 compliant)
Signal amplification	Automatic
Environmental	
Operating temperature range	-20 to +55 °C -4 to 131°F
Mechanical	
Housing material	Polycarbonate
Dimensions housing	71.6x89.7x54.9 mm 2.80"x3.50"x2.13"
Mounting	35 mm DIN-rail
Weight	180g 6.35oz
Power	
Power supply	24VDC +/- 10% (uses main power supply through internal DIN-rail connection, no external wiring is needed)
Power consumption	≈100mA
Processing	
Signal indicators	Acceleration RMS (with configurable RMS period) Velocity RMS (with configurable RMS period) Acceleration Peak (absolute maximum signal value during whole RMS period) Acceleration Crest Factor (peak to RMS ratio)
Sample rate	32ksps
Resolution	12bits
External	Compatible for dynamic measurement and data recording using SDT or external devices through LEMO7 and BNC output connectors