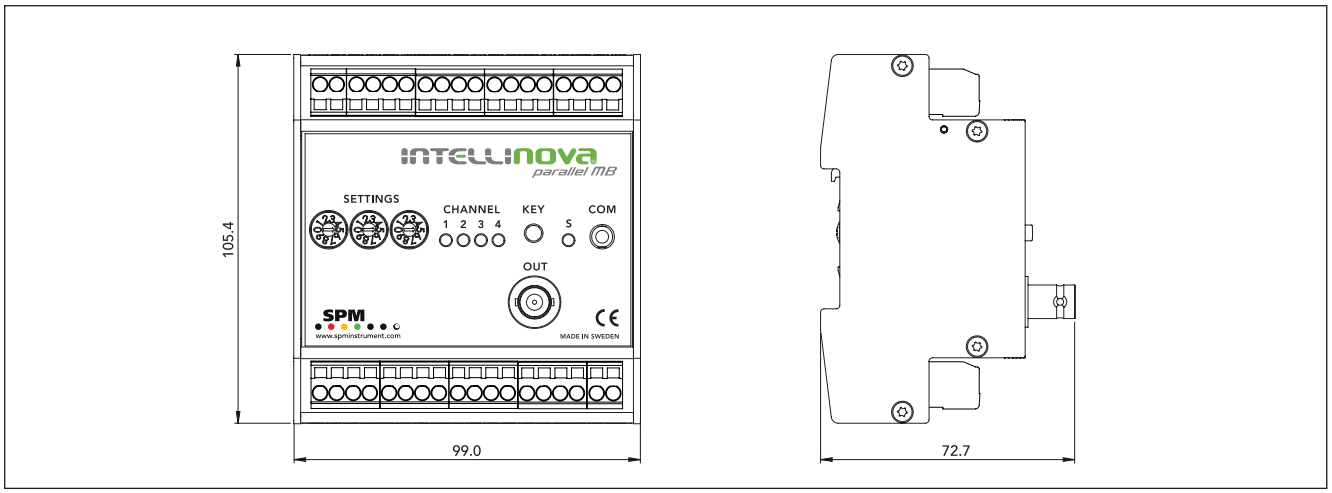
Intellinova® Parallel MB VIB/Dual technology – INSMB4V



Intellinova Parallel MB VIB/Dual technology is a small unit for parallel measurement on four channels, monitoring operating condition by means of:

- Vibration measurement (ACC, VEL, DISP rms, HD ENV)
- Symptom values (BPFO etc.)
- Spectrum
- Time signal
- Shock pulse measurement incl. lubrication condition (HDm/HDc, LR/HR)

The ACC, VEL and DISP rms values are measured within a user defined frequency range. The symptoms are defined by the user as a fundamental frequency and its harmonics where sidebands can be included. A spectrum or time signal can also be generated for further processing. A cumulative moving average is calculated for all measured parameters and symptoms. These averages can also be used to trigger alarms. Both vibration and shock pulse measurements can be performed using DuoTech accelerometers that use a standard IEPE interface.

A DIO (Digital Input Output) configured as an input can be used to activate a measurement. Measuring results and symptom values are compared with an alarm level set up and can activate any of the 6 DIOs which can control, e.g. a relay. Alarms can be set with or without delay, based either on time or number of measurements. The unit can be set up to repeat its configured measurements as often as possible, and a LED for every channel indicates the status of the latest measurement. Two RPM inputs can be used for measurements based on order tracking.

The unit can operate in online or offline mode, selected by rotary switches on the front. When set to online mode, the unit operates as a Modbus RTU where the Modbus master configures the measurements and reads the result. When run in offline mode, the measurements are defined in an internal text file created in the configuration software PRO230. The text file can contain a large number of unique configurations selected with the rotary switches on the front panel. The text file is transferred to the unit using the COM port, which is also used for updating the firmware.

Technical specifications

Measuring channels:	4, measuring in parallel
Measuring range, VIB:	> 50 g peak-peak (using 100 mV/g transducers)
Measuring range, SPM:	0 to 75 dB
Resolution:	7 µg /√Hz 0.5 - 40 000 Hz using 100 mV/g transducers
Spectrum lines:	400, 800, 1600, 3200, 6400, 12 800
Transducer type, VIB:	SLD, SLC DuoTech or standard IEPE type accelerometer
Transducer type, SPM:	SLC DuoTech accelerometer
RPM channels:	RPM 1 and RPM 2 (parallel meas.), proximity switches, 1 - 120 000 rpm (when 1 pulse/rev.)
Digital In/Out:	6, configurable as input or output
Digital output:	24 V/0.8 A per channel, max 3 A all channels
Alarm delay type 1:	0 to 1000 measurements
Alarm delay type 2:	0 to 1800 s (=30 min)
Status indicatiors:	green/red LED for every channel indicating condition status and one LED for overall status
Communication:	Modbus RTU
Isolated output:	BNC connector that the user can select to connect to channel 1 - 4
Power supply:	24 VDC (15 to 36 V)
Power consumption:	<3 W
Temperature range:	0 to 50 °C
Enclosure:	aluminum
Mounting:	DIN rail
Dimensions:	105.4 x 99.0 x 72.7 mm
Weight:	370 g
Cable lengths:	VIB, SPM, RPM, DIO <30 m

Accessories

15484	Communication cable, USB - 3.5 stereo plug
PRO230	Offline configuration software

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