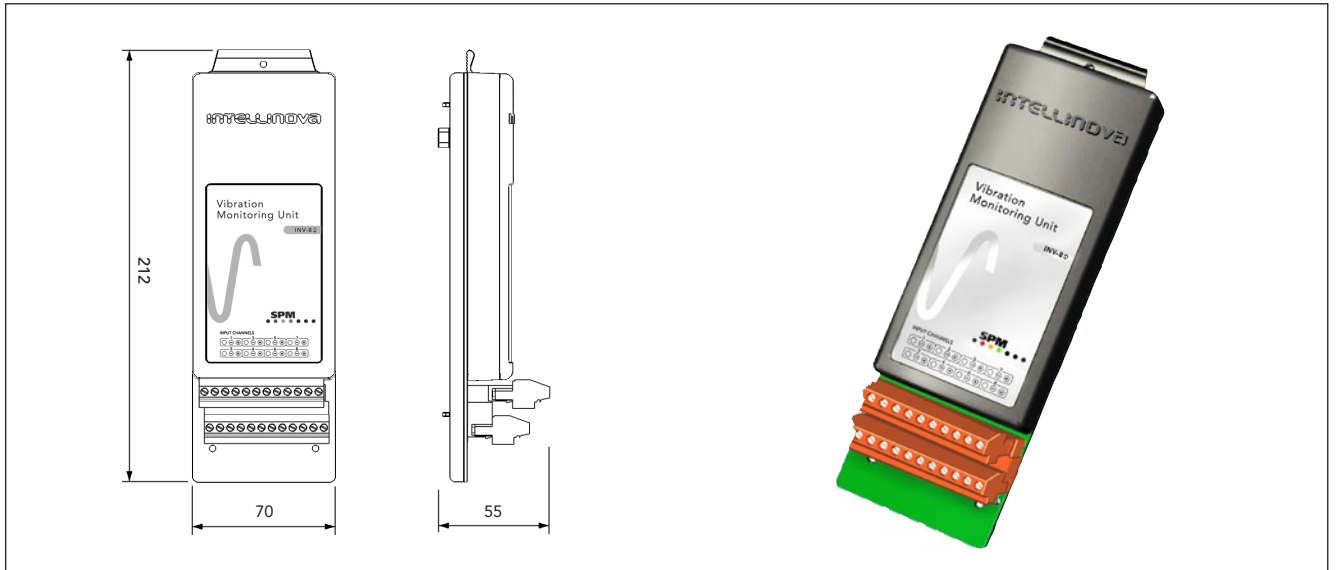


Intellinova® – Vibration Monitoring Unit INV80A



The Vibration Monitoring Unit INV80A is a part of the Intellinova System and has eight channels for continuous monitoring of vibrations. The unit is simply plugged into the socket in the Intellinova Commander Unit. Measuring time, alarm limits, alarm delay etc. are set up in Condmaster®Nova.

It supports broad band vibration measurement, both ISO 2372 and the more recent ISO 10816, the most cost-efficient method for the diagnosis of general machine condition.

It also supports FFT with symptoms and EVAM (Evaluated Vibration Analysis Method). The EVAM method generates condition parameters describing various aspects of machine vibration, vibration spectra where significant line patterns are highlighted and evaluated plus machine specific condition codes and condition values, based on a statistical evaluation of the condition parameters and symptom values.

For each measuring point, the user can make an individual selection and define the type of data best suited for the surveillance of an individual machine.

Two channel simultaneous vibration monitoring requires that either the measuring technique 'FFT with symptoms' or 'EVAM' is active in Condmaster Nova. This type of measurement allows the user to study machine movement in two dimensions by observing the difference of the phase angles measured on the two channels.

Orbit analysis is a vibration measurement function offered with the Vibration Monitoring Unit. The resulting orbit graph shows the movement of the shaft's centerline and is used to detect failures like rubs, unbalance, misalignment or oil whip on machinery with journal bearings. Required are two channel simultaneous vibration measurement and two transducers placed at an angle of 90° to each other, plus a trigger signal from a tachometer probe.

Technical data

Measuring methods:	ISO 2372, ISO10816, FFT with symptom, EVAM, 2-channel vib, orbit
Measuring channels:	8, multiplexing, 2 simultaneous
Design:	encapsulated circuit board, not protected
Input connectors:	screw terminals
Power consumption:	max. 1.5 W, typical 0.8 W
Operating temp.:	0 to +60 °C (32 to 140 °F)
Storage temp.:	-20 to +80 °C (-4 to 176 °F)
Relative humidity:	10% to 90% (non-condensing)
Mounting:	plug-in connector and holding screws for attachment in Commander Unit INC40/41
Dimensions:	212 x 70 x 55 mm
Weight:	approx. 200 g

Vibration analysis

Freq. limit, lower:	0.5, 2, 10 or 100 Hz
Freq. limit, upper:	100, 200, 500, 1000, 2000, 5000, 10000, 20000, 40000 Hz
Envelope HP filters:	100, 200, 500, 1000, 2000, 5000, 10000 Hz
Measur. windows:	Rectangle, Hanning, Hamming, Flat Top
Averages:	time synch, FFT linear, FFT exponential, FFT peak-hold
Spectrum lines:	400, 800, 1600, 3200, 6400, 12800
Transducer types:	Vibration transducer SLD144 or IEPE (ICP®) type transducers with voltage output

Orbit analysis

Orders:	1 to 5, default 1
Filter types:	None, band pass, low pass
Signal unit:	DISP, VEL, ACC
Measuring time:	1 to 25 revolutions
Transducer types:	Buffered outputs from API670 approved protection systems, alt. transducers SLD144 or IEPE (ICP®) type transducers with voltage output

