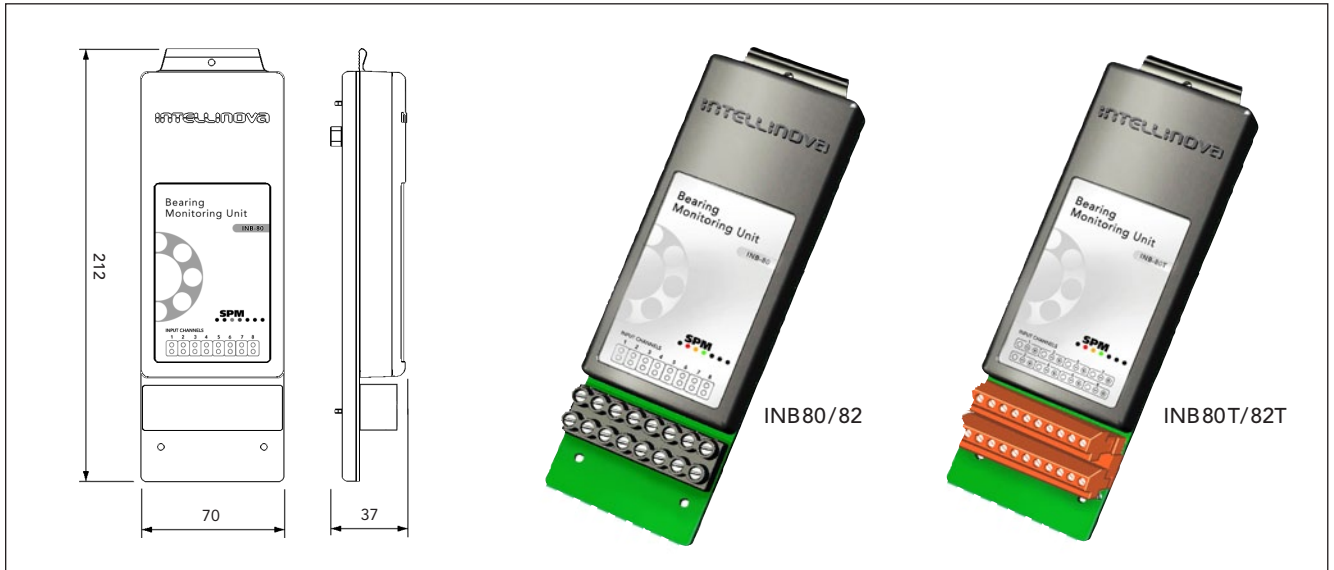


# Intellinova® – Bearing Monitoring Unit



The Bearing Monitoring Unit is a part of the Intellinova System and has eight channels for continuous monitoring of bearing condition. It measures shock pulses according to the True SPM method and supports SPM Spectrum and SPM HD. The unit is simply plugged into the socket in the Intellinova Commander Unit. Measuring methods, measuring time, alarm limits, alarm delay etc. are set up in Condmaster®Nova.

Four versions of the Bearing Monitoring Unit are available. INB80 and INB82 have input connectors for coaxial cables. INB80 is intended for shock pulse transducers of type 40000 (cable length max. 4 m) and INB82 is intended for shock pulse transducers of type 42000 (cable length max. 100 m).

INB80T and INB82T have input connectors for twisted pair cables. INB80T is intended for shock pulse transducers of type 40000 (cable length max. 4 m) and INB82T is intended for shock pulse transducers of type 42000 (cable length max. 100 m).

## Signal processing

The resonance frequency of the SPM shock pulse transducer, calibrated to 32 kHz, constitutes the ideal carrier wave for transients caused by shocks. The output of this transducer is the same type of demodulated signal produced by 'enveloping', with this important difference: both frequency and amplitude response of the SPM transducer are precisely tuned, so there is no need to find uncertain and shifting machine resonances to get a signal.

Intellinova measures the shock amplitude by a shock pulse measurement with the dBm/dBc or the LR/HR method and the results are bearing condition data for condition evaluation. The measurement also produces a time record which can be analyzed using SPM Spectrum. The resulting spectrum is used mostly for pattern recognition. The technique SPM HD generates a signal with razor-sharp resolution and is particularly well suited for condition monitoring on low speed applications.

## Technical data

Measuring methods:	dBm/dBc, LR/HR, SPM Spectrum, SPM®HD
Measuring channels:	8, multiplexing
Measuring range:	-9 to 99 dBsv, -19 to 99 LRHR
Measuring time:	approx. 2 sec. per channel dBm/dBc, approx. 20 sec. LR/HR
Frequency range:	0 to 100, 200, 500, 1000, 2000, 5000, 10000, 20000, 40000 Hz
Number of spectrum lines:	400, 800, 1600, 3200, 6400, 12800
Measurement windows:	Rectangle, Hanning, Hamming, Flat Top
Spectrum types displayed:	linear, power
Averages:	time synchronous, FFT linear, FFT peak-hold
Frequency units:	Hz, CPM
Saving options for spectrum:	full spectrum, peaks only
Amplitude scale unit:	S <sub>0</sub> (Shock Distribution), S <sub>L</sub> (Shock Level), HDesv
Scaling:	linear or logarithmic X and Y axis
Zoom:	true FFT zoom, visual zoom
Pattern recognition:	bearing frequencies and optional patterns highlighted in the spectrum. Automatic configuration of bearing symptoms linked to ISO bearing no.
Input connectors:	for coaxial cables on INB80/82, for pair cables on INB80T/82T
Transducer line test:	TLT test
Design:	encapsulated circuit board, not protected
Power consumption:	max. 1.5 W, typical 0.8 W
Operating temperature:	0 to +60 °C (32 to 140 °F)
Storage temperature:	-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 INC40/INC41
Dimensions:	212 x 70 x 37 mm
Weight:	approx. 200 g

## Part numbers

<b>INB80</b>	Bearing Monit. Unit, transducers type 40000/coax cable
<b>INB82</b>	Bearing Monit. Unit, transducers type 42000/coax cable
<b>INB80T</b>	Bearing Monit. Unit, transducers type 40000/pair cable
<b>INB82T</b>	Bearing Monit. Unit, transducers type 42000/pair cable
<b>12775</b>	Connector for coaxial cable (INB80/82)

