

2300 Vibration Monitor Series



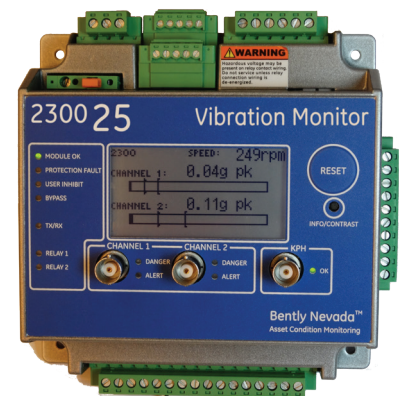
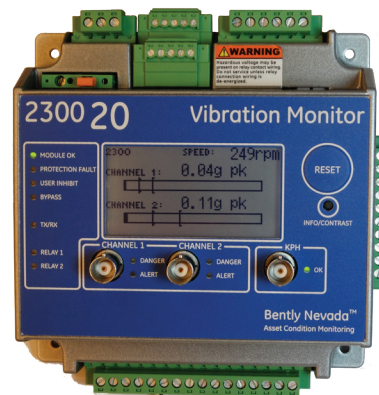
Description

The 2300 Vibration Monitors provide cost-effective continuous vibration monitoring and protection capabilities for small and spared machinery. They are specifically designed to continuously monitor and protect essential balance-of-plant equipment assets in a wide range of industries, including: oil & gas, power generation, water treatment, pulp & paper, manufacturing, mining, cement, and a wide range of equipment in other industries.

The 2300 Vibration Monitors deliver vibration monitoring and high vibration level alarming. They include two channels of vibration measurement inputs from various accelerometer- and proximator- type sensors, a speed input channel, and outputs for relay contacts. Any channel may be used for process parameter sensor inputs. The 2300/20 monitors feature a configurable 4-20 mA output, as well as Modbus/TCP, which interfaces more points to a DCS. The 2300/25 monitor features System 1* connectivity for Trendmaster SPA interface configuration, which enables users to leverage existing DSM SPA infrastructure. Envelop acceleration demodulation is also supported for advanced rolling element bearing and gear diagnostics.

The 2300 Vibration Monitors are designed for use on a broad range of machine trains or individual casings where the sensor point count fits the monitor's channel count and where advanced signal processing is desired.

The 2300 Vibration Monitors provide very low cost condition monitoring and protection capability on small machinery. The monitors can be used with proximity sensing to be used on fluid film bearing machines and velomitor sensing to monitor slow speed machines.



Key Features

- Robust, compact, self-contained device
- 127 x 127 x 76 mm (5 x 5 x 3 in) device size
- Two acceleration/velocity/proximity inputs
- Key measurements (direct pk, direct rms, derived pk, velocity pk, velocity rms, displacement pp, displacement rms, speed)
real-time provided with alarm configuration
- Two protection relays
- Two protection relay outputs with configurable set points
- One dedicated speed/KPH input (Proximitors*, Proximitorswitch or magnetic pickup)
- Local monitor status LEDs
- Local display showing overall values and speed
- Convenient local and remote reset for alarms and relays
- BNMC (Bently Nevada Monitor Configuration) device configuration and display software
- Local configuration lockout and remote configuration lock (two reserved contacts)
- Three 1:1 buffered transducer outputs (including speed signal) with short circuit and EMI protection, via BNC connectors
- 24 VDC and optional 240/110 V DIN rail-mounted power supplies
- Ethernet connectivity with Modbus functionality
- Continuous velocity, acceleration, and proximity monitoring and protection suitable for BOP applications
- Next generation platform
- Configurable 4-20 mA output available on the 2300/20 monitor
- Trendmaster SPA interface configuration available on the 2300/25 monitor

Benefits

- Compact form factor and skid or local mounting capability reduces wiring and installation cost
- Configurable measurements from each channel fit individual customer needs
- Key machine and monitor information clearly displayed at the monitor; no separate display required; complements operation-driven reliability (ODR)
- Meets individual customer alarm reset needs: can reset either locally or in control center
- Overall Data and Event displayed on BNMC and enables easy 2300 Series Vibration Monitors configuration
- Secure, tamper-proof configuration management
- Enables portable data collectors data collection from the 2300 Series Vibration Monitors
- Operates from low- or high-voltage power source
- Provides needed PdM condition monitoring data
- Expandable architecture
- Advanced technology electronics and signal processing
- Connectivity to System 1* condition monitoring and diagnostic system enabled

Channel Name	Channel	Channel Type	Measurement	Active	Integrated	Top Scale	Bottom Scale	High Pass...
Magnetic Pickup Speed Ch...	1	Proximity/Speed Channel	Speed	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	0.0 to 100.0	0.0 to 100.0	10.0 Hz
Acceleration Channel 2	1	Acceleration Channel	Direct rms	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	0.0 g rms	0.0 g rms	10.0 Hz
Acceleration Channel 1	1	Acceleration Channel	Derived pk	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	0.0 g pk	0.0 g pk	10.0 Hz
Acceleration Channel 3	1	Acceleration Channel	Integrated pk	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	0.0 in/s pk	0.0 in/s pk	10.0 Hz
Acceleration Channel 1	1	Acceleration Channel	Integrated rms	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	0.0 in/s rms	0.0 in/s rms	10.0 Hz
Acceleration Channel 1	1	Acceleration Channel	Bias	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	-24.0 V	0.0 V	
Acceleration Channel 2	2	Acceleration Channel	Direct	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	0.0 g pk	0.0 g pk	10.0 Hz
Acceleration Channel 2	2	Acceleration Channel	Derived pk	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	0.0 g pk	0.0 g pk	10.0 Hz
Acceleration Channel 2	2	Acceleration Channel	Integrated rms	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	0.0 in/s rms	0.0 in/s rms	10.0 Hz
Acceleration Channel 2	2	Acceleration Channel	Integrated pk	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	0.0 in/s pk	0.0 in/s pk	10.0 Hz
Acceleration Channel 2	2	Acceleration Channel	Direct rms	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	0.0 in/s rms	0.0 in/s rms	10.0 Hz
Relay 1	4	Relay Channel	Discrete	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	-24.0 V	0.0 V	
Relay 2	5	Relay Channel	Discrete	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	-24.0 V	0.0 V	

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