GE
Energy

1900/65A General Purpose Equipment Monitor

fact sheet

Traditional Bently Nevada* monitoring systems like the 3500 Series are widely recognized for protecting large, complex rotating machinery. However, it is generally difficult to justify this type of continuous monitoring for less critical, essential or general purpose equipment. As a result, these machines typically operate without adequate protection.

The Bently Nevada 1900/65 General Purpose Equipment Monitor is a flexible, cost-effective system specifically designed to continuously monitor and protect essential and balance-of-plant equipment assets in a wide range of industries including: Oil & Gas, Power Generation, Water Treatment, Pulp & Paper, Manufacturing, Mining, Cement, and others. The 1900/65 Monitor is suitable for monitoring and protecting cooling tower fans, pumps, blowers, motors, pulverizers, air compressors, small reciprocating compressors, small electric motors, small hydro turbines, centrifuges, and other equipment assets.

Benefits

- Lower-cost, continuous online protection than traditional rack-based systems
- Digital connectivity via optional Modbus® gateway serves rich static variable set, alarm statuses, and event list data to Distributed Control Systems (DCSs), Programmable Logic Controllers (PLCs), Supervisory Control and Data Acquisition (SCADA) Systems, and System 1* Optimization and Diagnostic Software
- Reliable system offers improved capability over transmitters for equipment protection
- Uses proven and reliable circuit designs as found in 3500 and 3300 monitoring systems
- 8-channel monitor offers greater number and variety of inputs than other 1900 Series monitors
- Easy installation and configuration through small size, flexible mounting options, and configuration software
- Monitor functions independently or with an optional display for local indication of all channels and variables
- Display can be mounted directly to the monitor or up to 250 feet away and connected to the monitor via a single cable
- Particularly suited for use on standalone, skid-mounted, and packaged machinery
- Packaged and designed for cost-effective OEM applications
- Simplified, less costly on-line installation via 232 or 485 connectors.
- Flexible Dynamic channels can be configured for vibration, position or speed

Capabilities/Specifications

- Self-contained, stand-alone monitor
- Continuous monitoring and protection, suitable for auto-shutdown applications
- Optional Modbus gateway communicates via Modbus/TCP over Ethernet to any Modbus client, including DCSs, PLCs, SCADA systems, and System 1
- 4 channels of vibration inputs (2- and 3-wire velocity and acceleration sensors and Bently Nevada proximity sensors)
- Up to 4 variables per channel with independent integration and filter control
- Up to 8 pole filters on some variables
- 24 bit A/D converters with 25 kHz bandwidth
- 4 Channels of temperature inputs (type E, J, K, and T thermocouples as well as RTD type sensors)
- 2 levels of alarms — ALERT and DANGER
- 6 configurable relays with voting logic
- Buffered transducer outputs — 4 on monitor, 1 on display
- 4 configurable 4-20 mA recorder outputs
- Stand alone configuration software
- Accepts 18 to 36 Vdc power; an external power supply is available for 110/220 VAC
- Mountable via DIN-rail clip or the bulkhead mounting plate
- Small package – Dimensions (inches):
  - Monitor: 7.75 x 5.88 x 2.93
  - Display: 7.75 x 5.03 x 1.29
  - Monitor with attached Display: 7.75 x 5.88 x 3.85
- Optional fiberglass housing, or steel door (for panel-mount applications), to meet weatherproof installation requirements and IP65
- Approvals include CSA (Class 1 Div 2 — although the monitor cannot be installed in Div 1 locations, it will support transducers installed in Div 1 locations via the use of isolators and barriers), ATEX (Zone 2), CE, and GOST (IEC Ex)
- Trip Multiply function to prevent unwanted machine trips during periods of expected high vibration like machine start-ups

For complete product specifications and ordering information:

— Rick Bauer, Product Line Leader, (678) 844-4932
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— contact your local salesperson

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