

# Condition Monitoring

The MTN/5032 is a cost-effective, versatile and easy-to-use microcontroller-based condition monitoring system.

Available with up to 96 channels, this system is ideal for viewing the health of plant and equipment, raising alarms and indicating when further investigations may be warranted.

As an optional extra, the system can be fitted with Modbus TCP/IP, for networking purposes or to enable multiple MTN/5032s to operate together within a larger monitoring or control system.

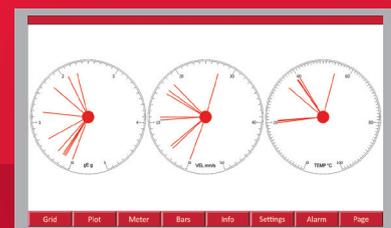


The MTN/5032 is designed to work with Monitran's **Vibration** sensors but it can also accommodate most other sensor types including those for measuring:

- **Temperature**
- **Displacement**
- **Proximity**

...plus it can also accept a **voltage or current** as input. Please note: the channels are configured for sensor and input type during manufacture. Also set are the input ranges and data resolution, in order for the unit to best suit your application.

Data can be displayed and plotted over time in a number of ways including:



A grid of data readings, with appropriate parameter units.

An easy-to-interpret bar chart of signal levels; colour coded to show relative to alarm levels.

Radial meters indicating channel levels against their corresponding parameters.

The MTN/5032 features a high-performance ARM Cortex-M3 processor with a 7.0 inch TFT touch screen.

The easy-to-navigate menu allows you to set:

- Data sampling periods and buffer sizes;
- Threshold (alarm) levels - on a channel-by-channel basis or across all channels simultaneously

In addition, the system has a number of digital I/O channels (16 as standard) that can be used for multiple alarms or as a communication channel. Integration is also possible via Modbus TCP/IP plus the raw signals from the sensors are available via BNCs for analysis, using a spectrum analyser.

## Technical

Our standard MTN/5032 has the following technical specifications:



**Sensors:** 32

**Analogue input channels:** 96

Velocity x 32 (20mm/sec)

Envelope G x 32 (3-6kHz)

Temperature x 32 (0-100°C)

**Sampling resolution:** 12 bit

**Input range:** Dependent on sensor

**Screen:** 5.0" (178mm) TFT touchscreen 800 x 480 x 24 bit colour

**Sample buffer:** 96 x 100 samples

**Operating voltage:** 100-240VAC

**Alarms:** 96 (user-configurable alarm level and alarm delay)

**Enclosure:** Stainless steel

**Dimensions (enclosure only):** 600 x 400 x 210 mm

### Applications

Vibration and temperature monitoring and logging

## About Monitran

Established in 1986 and based about 35 miles west of London, Monitran is a world leader in the design, development and manufacture of sensors and systems for vibration, proximity and displacement measurement and monitoring.

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