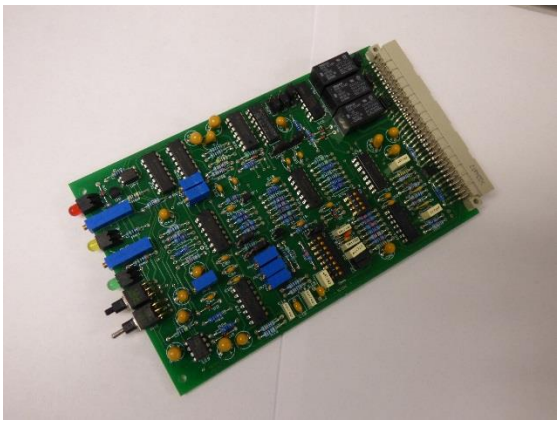
MTN/6100 SERIES

Vibration Module

The MTN/6100 Vibration module operates in conjunction with the MTN/6000 rack and a constant current accelerometer to enable continuous monitoring of vibration signals for pump/motor systems. The module provides outputs to the MTN/6200 Display Module for vibration level display and a buffered ac signal for vibration analysis. Both 0-10V and 4-20mA output signals are also provided for PLC interface.

MTN/6100 SERIES
Vibration Module



Applications

- Accelerometer Input
- Two Adjustable Alarms
- Transducer Integrity
- 4-20 mA Output
- OEM
- Low cost Monitor

Technical

Input	From constant current type 100 mV/g accelerometer .Other sensitivities available on request.
Frequency Range Range Output	2Hz to 20KH 2g and 20g or 20mm/s and 200mm/s via switch 0-10V to MTN/6200 Display Module, Buffered AC output to MTN/6200 Display Module, 0-10V to MTN/6000 rear terminals, 4-20mA to MTN/6000 rear terminals.
Accuracy	±2.5% (Excluding Accelerometer)
Noise	0.2mm/s
Signal Filters	High Pass 12 dB/octave 2Hz, 10Hz, 20Hz, 100Hz Low Pass 12 dB/octave 500Hz, 1kHz, 10kHz, 20kHz via internal switch.
Construction	Eurocard, 100mm x 160mm with 64 pin DIN41612 edge connector.
Temperature	0 to 70ºC

Monitran Ltd | Monitor House | 33 Hazlemere Road | Penn | Bucks | UK | HP10 8AD

Telephone **+44 (0)1494 816569** | E-mail **info@monitran.com** | Website **www.monitran.com**

Alarms

A fixed Transducer Integrity alarm and two pre-settable vibration alarm circuits operate local panel indicators and relay contacts for remote alarm functions. The vibration alarms have adjustable delays to avoid nuisance tripping on machine start-up and can be set for either latching or non-latching modes. A facility for remote alarm inhibit and remote alarm reset is also provided.
A range of high and low pass filters, set via switches, eliminate unwanted input signals.
The module can be configured via links to display acceleration in g, velocity in mm/s or displacement in μm. Signal conversion is true RMS as standard but peak or peak-to-peak can be specified at time of order.

Standard Configurations are as follows:
MTN/6100v – 0-20mm/s or 0-200mm/s RMS, 10Hz – 1 kHz
MTN/6100g – 0-2g or 0-20g RMS, 10Hz – 10 kHz
MTN/6100d – 0-20μm or 0-200μm peak-to-peak, 10Hz – 500Hz.

Alarm functions are set: -TDX OK – LED & relay non-latching, normally closed.
AL1 & AL2 – LEDs & relays latching, normally closed.

Alarm Function

Transducer Integrity (TDX OK) checks accelerometer bias level. LED extinguishes when a transducer or cabling fault occurs and outputs are inhibited if this state exists.
AL1 and AL2 alarm levels adjustable over full range via front panel potentiometer and 3-position switch. Warning LEDs illuminate when preset levels exceeded.
Alarm level monitor to display or to 0-10V output selectable via link.
All three alarms have normally energized (fail safe) relays, which de-energize on alarm
Relay contacts selectable N/O or N/C via links.
Relay & LEDs non-latching selectable via links.
Relay & LEDs latching selectable via links.
LEDs latching and relays non-latching selectable via links.
Latch reset via local panel switch
Alarm relay rating 240V AC, 1A
AL1 & AL2 Alarm delay adjustable 5 – 45sec. via potentiometer.
Remote alarm reset by external momentary switch connected to MTN/6000 rear terminals.
Remote alarm inhibit (opto-isolated) by application of 5 to 24V DC to MTN/6000 rear terminals

Monitran Ltd | Monitor House | 33 Hazlemere Road | Penn | Bucks | UK | HP10 8AD
Telephone **+44 (0)1494 816569** | E-mail **info@monitran.com** | Website **www.monitran.com**