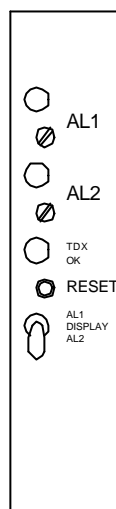MONITRAN
SENSORS FOR YOUR INDUSTRY

MTN/6500 Series

Temperature module

- Pt100, AD590 or LM35
- Two adjustable alarms
- Transducer integrity
- 4-20 mA output
- OEM
- Low cost monitor

The MTN/6500 Temperature Module operates in conjunction with the MTN/6000 rack and a Pt100, AD590 or LM35 temperature sensor to enable continuous monitoring of bearing temperature in pump/motor systems. It can be used in the same rack as the MTN/6100 Vibration Module to give a comprehensive indication of bearing condition.

The module provides outputs to the MTN/6200 Display Module for temperature display and 0-10V and 4-20mA output signals proportional to temperature are provided for PLC interface.

A fixed Transducer Integrity alarm and two pre-settable temperature alarm circuits operate local panel indicators and relay contacts for remote alarm functions. The temperature alarms can be set for either latching or non-latching modes and a facility for remote alarm inhibit and remote alarm reset is also provided.

The module can display temperatures over the full range of the sensor chosen which must be specified at time of order.

Standard Configurations are as follows:

MTN/6500/1 – AD590 1μA/$°$K (-55 to 150$°$C)
MTN/6500/2 – Pt100 2 wire connection (-50 to 200$°$C)
MTN/6500/3 – Pt100 3 wire connection (-50 to 200$°$C)
MTN/6500/4 – LM35 10mV/$°$C (0 to 100$°$C)

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

Technical Specification

Input	PT100, AD590 or LM35 temperature sensors, to be specified.
Range	0°C to 200°C (dependent on sensor)
Outputs	To MTN/6200 display scaled in °C
	Buffered output to MTN/6200 via panel BNC – 2.5mV/°C
	0-10V to MTN/6000 rear terminals
	4-20mA to MTN/600 rear terminals
Display Resolution	0.1°C
Accuracy	± 0.2 °C – Pt100
	± 2.5 °C – AD590
	± 2.0 °C – LM35
Alarms	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-energise 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.
Construction	Eurocard, 100mm x 160mm with 64 pin DIN41612 edge connector
Operating Temperature	0 to 70°C