

## MTN/8066 g-macD VIBRATION MODULE

## **Applications**

- Vibration analysis output for FFT analysers
- ISO 10816-3 overall RMS velocity signal for continuous overall machine vibration monitoring
- Peak acceleration signal for continuous bearing condition monitoring
- Analogue and digital outputs for PLCs and industrial controllers
- A cost-effective alternative to standard complex vibration monitoring instrumentation and requires minimal training.



A DIN rail mounted single-sensor signal conditioning unit in a 22.5mm format providing early warning of bearing and gear faults, imbalance, misalignment and looseness. Three different vibration output signals; AC acceleration for vibration analysis with on-line or hand-held FFT data collectors, velocity for overall machine vibration and peak acceleration for bearing wear for continuous monitoring in industrial controllers, PLCs etc. in either analogue or digital format.

The g-macD can be configured to give a large signal when small high frequency variations are present. These high frequencies are indicative of bearing and gear problems but usually go undetected because they are swamped by the overall vibration signal.

### **Features**

- Provides constant current (ICP®) drive for accelerometers of 50 or 100mV/g units e.g. Monitran 1100 series
- Also accepts voltage drive accelerometers, e.g. Monitran MTN/1107 series
- Front panel BNC with buffered native accelerometer signal for portable vibration analysers
- Native output also on screw terminals for multiple signal paths and on-line analysers
- Velocity RMS measurement compatible with ISO 10816-3 Vibration Severity test
  - Selectable in 10, 25, 50 and 100mm/sec ranges
  - Filtered at 2 Hz to 1KHz
- Peak acceleration selectable in 10, 20, 40 and 80g ranges
  - Internal filters 12dB/octave
  - Low pass selectable at 1, 3.5 or 5kHz, high pass selectable at 2, 10 or 100Hz
  - g-peak response delay selectable at 120 or 1200ms, suppresses false alarms
- Analogue velocity and peak g outputs selectable as either voltage (0-10V) or current (4-20mA)
- Digital velocity and peak g outputs available as RS485 (Modbus)
  - Up to 16 g-macD addressable per loop
  - Simple 2 wire connection between each g-macD and host computer
- Bias voltage monitoring LED on front panel for easy status checking
- Requires +24V supply
- Paired terminals for loop through to additional q-macD units

ICP® is a registered trademark of PCB Piezotronics Europe GmbH, Linnich, Germany

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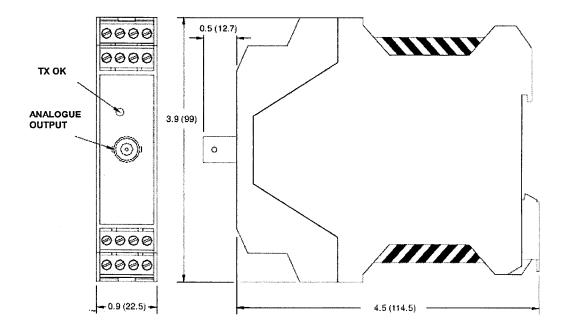






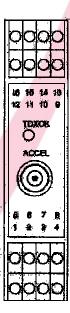
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#### **Dimensions**



# **Pin Assignments**

- 1. Signal I/P (2)
- 2. Signal Return (2)
- 3. Shield (2)
- 4. RS485, Modbus D-
- 5. Signal I/P (1)
- 6. Signal Return (1)
- 7. Shield (1)
- 8. RS485, Modbus D-
- 9. +24 VDC Power Supply In (1)
- 10. +24 VDC Power Supply Out (2)
- 11. 0-10 VDC +ve O/P
- 12. 4-20 mA +ve O/P
- 13. Power Supply Ground In (1)
- 14. Power Supply Ground Out (2)
- 15. 0-10 VDC -ve O/P
- 16. 4-20 mA -ve O/P





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