



PRODUCT SPECIFICATIONS

Model MIL7111 Industrial Sound Transmitter

P/N M71241

The model MIL7111 is an industrial environmental sound and noise warning transmitter. It is part of Mechanalysis (India) Ltd's (MIL) comprehensive suite of site mounted machinery transmitters. Model MIL7111 is designed to be installed in harsh noisy environments to monitor sound levels to warn against excess sound pressure exposure to personnel working in the area. It is supplied with an integral microphone to ensure optimum reliability and reduce wiring. However, an option is to connect a remote industrial microphone is available. The unit is configurable to sound pressure levels at either 'A' or 'C' Scale Weightings selected at time of order or by the MIL Commissioning Engineer.



The Machinery Sound Transmitter is proven for continuous reliable operation in a tough industrial environment and is supplied with a die-cast IP65 enclosure. Standard instrumentation volt and mA signal data can be transmitted to a Central Control Room or DCS for trending or for local display. Internal relays are provided for audible annunciation or visual alarms. The unit should be mounted at a height near the source of the industrial noise so that a 360° radius can be covered. MIL can undertake a survey locating the unit in the optimum position. The microphone is mounted at the base of transmitter so that it is naturally protected from falling debris, dust and moisture.

The transmitter's output current is 4 mA DC (when the input sound signal corresponds to the base threshold) and 20 mA DC (when input sound level corresponds to full scale) with an accuracy of $\pm 3\%$ of full scale range.

SPECIFICATION

SOUND MEASUREMENT

- **Average or Maximum Sound Level** : Continuously transmits average or maximum sound
- **Measurement Range** : 50 db to 126 db
- **Microphone** : Electric Condenser – Output 10k ohm (integral in Transmitter Enclosure)
- **Accuracy** : ± 2 db at 114 db SPL
- **Reference** : 0db = 0.0002 Micro Bar
- **Weighting** : A and C Scale (selectable)
- **Signal Output–Voltage** : 1 volt Peak-Peak min. Open circuit full scale at 1KHz
- **Signal Output–Distortion** : $<2\%$ at 1 kHz, 0.5V p-p output

PROTECTION TRANSMITTER

- Construction:** : Ruggedly packaged in a die cast Aluminium IP65 enclosure
- Mounting:** : Surface
- Display:** : Blind type
- Controls:** : Push button for ALARM and TRIP read, adjust and auto reset.
- Alarm & Trip Set points:** : Adjustable over full scale range (5% -100% is recommended) by trim pot inside the enclosure.
- Alarm & Trip Relays:** : Relay output contacts rated at 5A resistive @ 230V AC.
: Normally de-energised (non fail safe)
- Circuit Fault Relay:** : Reed relay. Contact rating 0.25A resistive @ 28V DC.



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Signal Output:	
Recorder / DCS	: 0-5 V DC with 1K ohm impedance. : 4-20 mA isolated with max load of 250 ohms.
Accuracy	: 1% @ full scale
Power	: 115 / 230VAC, 50/60Hz, Single Phase, 15W.
Environmental	
Enclosure	: IP65 excepting external microphone detection receiver
Operating temp	: 0 °C to 50°C ambient
Storage temp	: -18 °C to 65°C ambient
Humidity	: 95% non-condensing
Weight	: 4.5Kg
Dimensions	: 250mm (L) x 220mm (W) x 110mm (H)

Industrial noise is usually associated with vibrating machinery. MIL's family of Protection Transmitters measure sound, vibration and turbine supervisory in either single or two channels. Selected models available are summarised the table below.

Part Nos.	FUNCTION	Chl.	Display	Sensors	Units	Ranges
M71111 / 2 M71113 / 4 M71133 / 4 M71117 / 8 M71135	Vibration	1	Analog	Velocity ECP Velocity Accelerometer Accelerometer	microns pk-pk microns pk-pk mm/sec pk mm/sec pk g	0-250 & 0-500 microns 0-250 & 0-500 microns 0-25 & 0-50 mm/sec 0-25 & 0-50 mm/sec 0-25 g

Part Nos.	FUNCTION	Chl.	Display	Sensors	Units	Ranges
M71211 / 2 M71213 / 4 M71233 / 4 M71217 / 8 M71235	Vibration	2	Analog	Velocity ECP Velocity Accelerometer Accelerometer	microns pk-pk microns pk-pk mm/sec pk mm/sec pk g	0-250 & 0-500 microns 0-250 & 0-500 microns 0-25 & 0-50 mm/sec 0-25 & 0-50 mm/sec 0-25 g

Mechanalysis (India) Ltd. continuously improves products; it therefore retains the right to change the above specification without notice

The Vibration People of Mechanalysis (India) Ltd can be contacted at any one of the following Branches

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