



PRODUCT SPECIFICATION

Model MIL7120 Dual Channel – Machinery Protection Transmitter (Vibration)

The model MIL7120 is a series of dual channel Machinery Protection Transmitters that is a cost effective solution for measuring two vibration points. It converts rotating machinery vibration measurements to industry standard 4-20mA or 0-5volt. It is a high integrity solution for machinery protection with warning and trip relays suitable for process management systems. The model MIL7120 is proven for continuous reliable operation in a tough industrial environment. Sensor signal data is transmitted to the Central Control Room or DCS for trending and display.



The Transmitter can be located near to the measurement point and used for warning and alarm with integral relay contacts at local switch panels. It is supplied in a die cast aluminium enclosure certified to IP65 standard.

The MIL7120 is series of Dual Channel Machinery Data Transmitters (MPT) that measures any one of three vibration parameters depending on the sensor selected by each channel. Selected part numbers are summarised in the table below. At the time of placing the order, the client must specify the required scale and range or listed part number.

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

When associated with MIL544M inductive velocity sensor, the unit is ideal for most machinery vibration monitoring and protection applications. It converts the vibration velocity or displacement signal into a proportional DC current output. The transmitter's output current is 4 mA DC (when input vibration signal corresponds to zero) and 20 mA DC (when input vibration signal corresponds to full scale) with an accuracy of $\pm 3\%$ of full scale range.

Mechanalysis also has a wide range of accelerometers or eddy current non contact probes (ECP) for input to it's Machinery Protection Transmitters. The required signal input is converted to 4-20mA DC for integration into PLC or DCS systems as required by instrumentation and control networks.



PRODUCT SPECIFICATION

SPECIFICATION

Construction:	- Ruggedly packaged in a die cast Aluminium IP65 enclosure
Mounting:	- Surface or rack mounted
Channels:	- Two channels Input and Output
Signal Input:	- From MIL544M Velocity Sensors or - Eddy Current Probes or - Accelerometers (ICP)
Frequency Range:	- 5–2,500 Hz within $\pm 5\%$
Display:	- Blind type
Controls:	- Push button for ALARM and TRIP read, adjust and reset.
Alarm & Trip Set points:	- Independent and adjustable over full scale range (5% - 100% is recommended) by trim pot inside the enclosure.
Alarm Relays:	- Independent Relay 1 C/O contacts rated at 5A resistive @ 230V AC Normally de-energised (non fail safe). Automatically resets when signal level falls below the set point.
Trip Relays:	- Independent Relay 2 C/O contacts rated at 5A resistive @ 230V AC Normally de-energised (non fail safe)
Circuit Fault Relay:	- Independent Reed relay. Contact rating 0.25A resistive @ 28V DC.
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, 20W.
Environmental	
Operating temp:	- 0°C to 50°C ambient
Storage temp:	- -18°C to 65°C ambient
Humidity	- 95% non-condensing
Weight:	- 5Kg
Dimensions :	- 250mm (L) x 220mm (W) x 110mm (H)

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

Mumbai	Delhi	Kolkata	Chennai
1/5, Marol Co-op. Industrial Estate Ltd, Off. Mathuradas Vasanji Rd. Marol, Andheri (East) Mumbai 400 059	Sagar Deep, Plot No.11 LSC Saini Enclave Vikas Marg New Delhi 110 092	153/A, 2nd Floor VIP Road Kolkata 700 054	7-C, Chesney Nilgiri Apartments 65, Commander-In-Chief Rd. Chennai 600 105
Tel: +91(0)22-2852-0178 Tel: +91(0)22-2859-6214 / 6573 Fax: +91(0)22-2852-1814 Email mumsa@mechanalysisindia.com service@mechanalysisindia.com	Tel: +91(0)11-2237-3916 Fax: +91(0)11-2237-0778 Email delsa@mechanalysisindia.com	Tel: +91(0)33-2355-2062 Fax: +91(0)33-2355-9214 Email: kolsa@mechanalysisindia.com	Tel: +91(0)44-2823-0726 Fax: +91(0)44-2823-4702 Email: chensa@mechanalysisindia.com