



VT7S12

Dual Channel Vibration Transmitter

Accurate. Easy. Advanced.

Masibus VT7S12 is an innovative Dual Channel Transmitter indigenously designed for accurate vibration measurement. It excites and reads signal from accelerometer and transmits overall vibration value as current/voltage signal. It measures Vibration in different parameters like Acceleration, Velocity, and Displacement.

Configuration is very user friendly using front keys. It is a low cost high performance vibration monitor in a modular format ideally suited for protection of valuable rotating machines against costly breakdowns including motors, fans, pumps etc.

It employs True-RMS and RMS-Peak measurement techniques, considered best for general machine health. Online vibration monitoring can be made cost-effective by interfacing analog output with control systems like RTU/PLC/DCS. Machine protection can be effectively implemented by alarm/trip facility or by interfacing analog output to remote systems like SCADA/DCS.

Features

- Compact DIN rail mounting
- Digital Display
- Easy configuration using keys & display
- Micro controller based transmitter
- Measuring Parameters: Acceleration, Velocity, Displacement - field configurable
- Transducer/cable health check
- Dual Retransmission output
- Relay for Alarms, Danger, Health

Applications

- Online vibration measurement
- Cooling towers
- Pumps
- Motors
- Gear boxes
- Blowers
- ID/FD/PA Fans
- Air compressors
- Conveyors

Technical Specifications:

Input

Input type	Accelerometer
No of Channels	Two/ One (Optional)
Display	4-digit, 0.3" seven segment Red LED
Keys	3 Keys (ENT, SEL, ESC)

Measurement Parameters:

	Measuring Range (Field configurable)	Resolution
Acceleration	0 to 50.00g (RMS)	0.01g
Velocity	0 to 50.00mm/sec (RMS)	0.01mm/sec
Displacement	0 to 1000microns (Pk-Pk)	1 micron

Sensor bias current	3.87 mA
Frequency range	10Hz to 1 KHz
Channel scan time	150 mSec
Calibration	Through Front Panel
I/P to Display Accuracy	±2.0% of Full Scale (20Hz < F < 800Hz)

Output

Analog Output

No of Outputs	Two (Output-2 is optional)
Output types	4-20mA, 0-20mA, 1-5V, 0-5V, 0-10VDC (Either Voltage or Current from a Channel at a time)
Load	750Ω Max (for Current) 2000Ω Min (for Voltage)
Output Accuracy	±0.25% of Full Scale

Alarm/Trip Output

Relays	Three - Alarm, Danger, Health
Rating	2A@230VAC / 30VDC (C, NO, NC)

Communication

Interface	RS485
Protocol	Modbus-RTU
Baud Rate	9600, 19200

Power Supply

Voltage	18 to 36 VDC Or 85 to 265 VAC/125-300VDC (optional)
Power Consumption	<10VA

Isolation (Withstanding voltage)

- Between primary terminals* and secondary terminals**:
At least 1500 V AC for 1 minute
- Between primary terminals* and grounding terminal:
At least 1500 V AC for 1 minute
- Between grounding terminal and secondary terminals**:
At least 1500 V AC for 1 minute
- Between secondary terminals**:
At least 500 V AC for 1 minute

* Primary terminals indicate power terminals and relay output terminals.

** Secondary terminals indicate analog I/O signal and Communication O/P.

Insulation resistance: 20MΩ or more at 500 V DC between power terminals and grounding terminal

Physical

Transmitter

Mounting	DIN rail
Dimension	70(W) x 75(H) x 110(D) mm
Weight	240g
Wiring	2.5mm ²
Enclosure Material	ABS plastic

Environmental

Transmitter

Operating Temperature	0 to 55°C
Operating Humidity	40 to 95% RH (non-condensing)

Ordering code

Model	No of Channel		Measurement		Supply		Output type		Option	
VT7S12	1	Single	OR	RMS	A	85 to 265 VAC/ 125-300VDC	C	4 -20mA	N	None
			OP	Peak	B	18 to 36 VDC	D	0 -20mA	1	RS485
	2	Dual	PP	Peak to Peak			E	1-5V		
							F	0-5V		
						G	0-10V			

Compatible Sensor (Optional-On request)

Sensor Mounting	Stud / Pad mounting
Sensor Type	ICP
Sensor Output	100mV/g

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All specifications are subject to change without notice due to continuous improvements.
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