G-TECH

VimoNet X4

4-Channel Dynamic Signal Data Logger & Transmitter / Spectrum Analyzer



Test & Measurement

- 4-channel synchronous analog inputs
- 1 TTL tachometer input channel
- Ethernet digital data output:
  - > Overall vibration value / Time waveform / Spectrum analysis
  - > Multi-device synchronization, expandable up to 32 channels
- Compatible with NOVIAN spectrum analysis software
- Supports online monitoring and predictive maintenance systems



Condition Monitoring

- 4-channel synchronous analog inputs
- 1 TTL tachometer input
- Multiple digital / analog I/O interfaces for controller communication:
  - > 8 digital input channels
  - > 8 overall value analog outputs
  - > 8 alarm relay outputs
  - > 1 high-speed machine crash detection relay (response time < 1 ms)
- PLC integration for real-time process monitoring
- Compatible with monitoring systems and databases for big data analytics





Features

- **Multi-channel Dynamic Measurement**
  Equipped with four analog input channels supporting accelerometers, displacement sensors, and more, enabling simultaneous multi-channel dynamic signal acquisition.
- **Digital Data Processing**
  Built-in microprocessor, memory card, and network interface. Enables real-time front-end computation and storage, with data transmission to cloud systems.
- **Dynamic Measurement Type (TM)**
  Remote mode: functions as a dynamic data acquisition card (DAQ)
  Standalone mode: operates as a data logger and transmitter
- **Condition Monitoring Type (CM)**
  Provides digital and analog I/O interfaces with alarm trigger contacts. Connects with PLCs and controllers to enable intelligent manufacturing.

Specifications

Type		Test & Measurement	Condition Monitoring
Analog Input	Number of Channels / Input Range	4 channels / ±5 V (±10 V optional)	
	Coupling	AC / DC / IEPE (4 mA, 20 V)	
	Bandwidth / Maximum Sampling Rate	20 kHz / 102.4 kS/s	
	Resolution / Noise	24-bit / < 55 μVrms	
	Input Impedance	1 MΩ	
TTL Tachometer Input		1 channel, max. frequency 10 kHz	
Digital Input		—	8 channels, 0–24V
Analog Output		—	8 channels: current type (4–20mA) or voltage type (0–10V)
Alarm Relay Output	Number of Channels	—	8 alarm contacts + 1 collision detection contact
	Rated Power Supply	—	0.1A 24VDC
	Response Time	—	10ms (collision detection contact < 1ms)
	Contact Type	—	normally closed (NC)
Digital Data Transmission		Ethernet, RJ45 × 2	
USB	TYPE-A	USB Flash Drive	
	Micro-AB	+5 V power supply / data	
Multi-unit Synchronization		Optical fiber connection (SC, 1310 nm), synchronization of up to 8 units,	
System Information		transmission distance up to 1 km	
	Processor	OMAP-L138 @ 456 MHz	
	Data Storage Capacity	32 GB	
	Data Types	Time waveform, spectrum, overall vibration values (displacement,	
		velocity, acceleration in accordance with ISO-TR-17243, ISO-10816)	
	Operating Temperature	-10°C to 60°C	
	Dimensions	173 × 113 × 56 mm	163mm x 108mm x 55mm
	Mounting Method	DIN rail mounting	
	LED Indicators	LED indicators: Green – Power / IEPE enabled; Red – Fault	
	Power Consumption	4 W	8W
	Power Supply Type	DC+24V	

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