

## FIBER OPTIC MULTI-CHANNEL SYSTEM

### Model BUS

#### APPLICATIONS

- Multi-point simultaneous dynamic measurements
- Laboratory applications
- Civil engineering short-term field testing
- New material research

#### DESCRIPTION

The Model BUS is a multi-channel, simultaneous-reading fiber optic signal conditioner with fast sampling rates and compatibility with most of Roctest Telemac's fiber optic transducers.

The BUS system is designed to offer the speed and versatility required for the most demanding experiments. The BUS system allows simultaneous multi-channel measurements at sampling rates of up to 1000 Hz. This is the ideal instrument when multi-channel, simultaneous fast data recording is required.

Each channel has its own 10-volt analog output and is independently controlled through the RS-232 communication port. The sampling rate for each channel can be set individually to 100, 500 or 1000 Hz.

The BUS system comes in a 19-inch industrial rack chassis that can incorporate from 1 to 8 channels. BUS systems can be cascaded for an even larger number of channels.



#### FEATURES

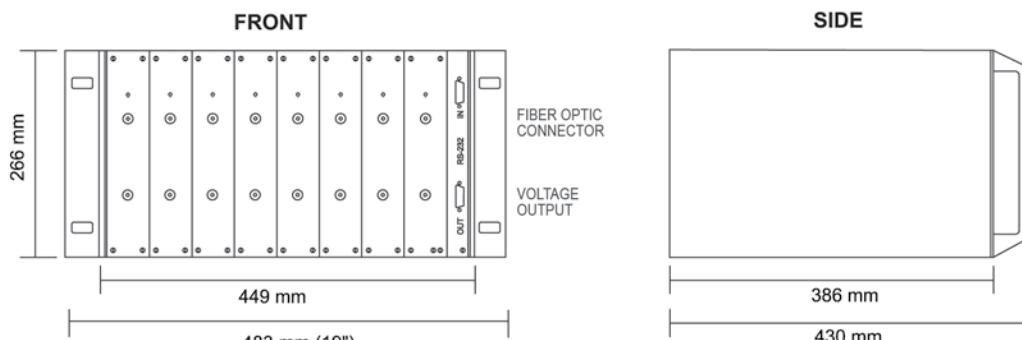
- 1 to 8 simultaneous channel
- Voltage and RS-232 communication port
- Up to 1000 Hz sampling rate
- Upgradeable number of channels

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**SPECIFICATIONS**

Dynamic range	15 000:1
Precision	0.05% of F.S.
Resolution	0.01% of F.S.
Number of channels	1 to 8
Sampling rate	100 and 500 Hz (1000 Hz optional)
Averaging	1 to 500 samples
Switching time	Parallel (simultaneous reading of each channel)
Display	None
Operating mode	RS-232 (includes software for communication with each module for setup)
Autonomy	None
Trigger mode	Single or continuous
Remote control	RS-232
Datalogging	5000 samples per channel
Analog output	±10 volts with BNC connector
Diagnostic	Yes
Upgradeability - firmware	Flash ROM upgradeable
Upgradeability - channels	From 1 to 8 channels per BUS system. BUS systems can be cascaded
Light life expectancy	~3000 hours of continuous use (MTBF)
Enclosure material	Aluminum
Operating temperature	-20 to +30°C
Enclosure dimensions	19 inches rackmount chassis with front handles
Weight	
Chassis	6.3 kg
Channel module	1.2 kg

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BUS system dimensions