

product datasheet

BUS System



Key features

1 to 8 simultaneous channel

Voltage and RS-232 communication port

Up to 1 000 Hz Sampling Rate

19" Rack Mount chassis

Upgradable number of channels

Compatible with all FISO's fiber optic transducers

Applications

Multi-points dynamic strain measurements

Laboratory uses

Civil engineering

New material research

Hazardous environments

High temperature environments

Aerospace applications

THE BUS SYSTEM IS A MULTI-CHANNEL, SIMULTANEOUS-READING FIBER-OPTIC SIGNAL CONDITIONER WITH FAST SAMPLING RATES AND COMPATIBILITY WITH THE ENTIRE LINE OF FISO'S FIBER-OPTIC TRANSDUCERS.

FISO Technologies' 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 and fast data recording is required.

Through the use of a white-light cross-correlator (U.S. Patents 5,392,117 and 5,202,939), the BUS System determines the absolute cavity length of FISO Technologies' Fabry-Perot fiber-optic transducers with astonishing accuracy, providing highly accurate and reliable measurements.

The BUS System is compatible with all of FISO's fiber-optic transducers, including strain, pressure, temperature, displacement, and force and load transducers.

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.

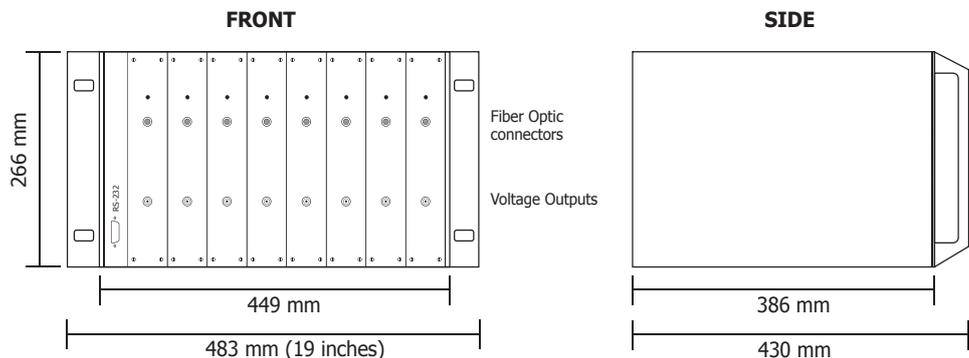
The BUS System comes in a 19-inch industrial rack chassis that can incorporate from 1 to 8 channels. BUS Systems can be cascaded for an even larger number of channels.

specifications



Number of channels:	1 to 8
Compatibility:	Compatible with all of FISO's line of fiber-optic transducers
Sampling rate:	100 and 500 Hz (1 000 Hz optional)
Averaging:	1 to 500 samples
Switching time:	Parallel (simultaneous reading of each channel)
Precision:	0.05% of full scale
Resolution:	0.01% of full scale
Dynamic range:	15 000 : 1
Display:	None
Operating mode:	RS-232 (includes software for communication with each module)
Autonomy:	None
Trigger mode:	Single or continuous
Remote control:	RS-232 (9600 Bauds)
Data logging:	5 000 samples per channel
Analog output:	± 10 Volts with BNC connector
Diagnostic:	Yes
Upgradability – firmware:	Flash ROM Upgradable
Upgradability – channels:	- From 1 to 8 channels per BUS System. - BUS Systems can be cascaded
Light life expectancy:	~ 3 000 hours of continuous use (MTBF)
Weight:	Chassis: 6.3 Kg Channel module: 1.2 Kg
Enclosure material:	Aluminum
Enclose dimensions:	19 inches rack mount chassis with front handles
Operating temperature:	-20 °C to 30 °C

BUS System dimensions



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