InnoBeamer

USB Data Acquisition Devices for VibroMatrix

Properties

- Inputs for 2 sensors with IEPE interface as well as 1 r.p.m. sensor
- Supports intelligent sensors with TEDS
- Supply of all sensors
- Data transfer to PC by USB
- Supplied by USB interface of PC
- 4 decade input ranges
- 24 Bit analog-digital-conversion
- Synchroneous measurement with several devices
- Cases can be interlinked by means of connectors
- For signals from 0.1 to 40 000 Hz (InnoBeamer X2) resp. from 0.1 to 3200 Hz (InnoBeamer LX2)

Application

The InnoBeamer makes digital real-time vibration measurement easy! It is automatically recognized by the PC and digitizes the sensor signals for the VibroMatrix measurement system. Transferring the sensor signals to the PC is carried out without loss as a permanent data stream.

The InnoBeamer is supplied by PC's USB host interface and on its part supplies the connected sensors. External power supply is not required, field measurement by means of a notebook is possible without any problems.

The InnoBeamer supports synchroneous data acquisition beyond device's borders. This way, devices can flexibly work alone or be combined to multichannel-systems.

Sensors with integrated data sheet (TEDS) are automatically recognized by the InnoBeamer. All required sensor data is read electronically, operating errors are avoided.

The InnoBeamer is a high-precision measuring instrument in a small format.

Technical Data

Model		InnoBeamer X2	InnoBeamer LX2
Equipment		2x AC analog input, IEPE, TEDS 2x Digital trigger input 1x Supply photoelectric/contrast scanner 1x Optional power supply	
AC Analog Input			
Standard Configuration		AC input + IEPE supply	
IEPE supply can be switched off		By software	
TEDS: Internal sensor data sheet is transmitted		Yes, acc. to IEEE 1451.4	
IEPE Power Supply for Sensor	mA	2.8	
IEPE Compliance Voltage	V	22	
Number of Channels		2	
Input Resistance	MΩ	> 1	
A/D Conversion		24 Bit, 96 kHz per channel	24 Bit, 8 kHz per channel
Signal Frequency (-3dB)	Hz	0.1 .. 40 000	0.1 .. 3200
Measuring Ranges	mV	±8000, ±800, ±80, ±8	
Actual wideband noise	µV	5 (0.1 .. 40 000 Hz)	5 (0.1 .. 3200 Hz)
Measuring Error	%	< 2	
Connector		BNC	
Digital Trigger Input			
Standard Configuration		Input for external phase reference signal	
Level	V	0 .. 24	
Number		2	
Switching threshold High-Low	V	1.5	
Minimum pulse length	µs	12	40
Supply for external sensors (additional to IEPE)			
Supply Voltage	V	13.5	
Supply Current	mA	35 (150 when supplied externally)	
InnoBeamer Characteristics			
USB Standard		2.0 and higher	
Synchronous Data Acquisition of Several Devices		Yes, by synchronisation cable	
Supply		5V by USB cable, optional 10 .. 30 V externally	
Supply Current	mA	475 (@ 5V, with 2 IEPE sensors and supply photoelectric/contrast scanner)	
Operating Temperature	°C	-20 .. +55	
Relative Humidity	%	< 95, without condensation	
Dimensions Width x Height x Depth	mm	115 x 39 x 105	
Mass	gr.	350	

Changes without prior notice

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