

The Cecchi is a portable and compact 12-bit data acquisition system, providing 50 MHz full-waveform acquisition with 128 kSamples per channel.



CECCHI DATA ACQUISITION MODULE

Number of input channels	4
Input type	Single-ended
Impedance	1 MΩ 30 pF
3dB Bandwidth	DC to 50 MHz
Coupling	AC/DC
ADC Resolution	12 bit @ 50 MS/s (14 bits @ 3.125 MS/s, 16 bits @ 195.3125 kS/s)
Memory	128 kSamples per channel
Full-Scale range	±200 mV, ±400mV, ±800mV, ±2V, ±4V, ±8V, ±20V, ±40V, ±80V
Maximum Input Voltage	±200 Volt (DC + AC peak <10 kHz)
Input Accuracy	0.2 % ± 1 LSB
IO Connectors	BNC x 4 for analogue inputs extension connector - Sub-D 25 pin female
SNR	72 dB (12 bit), 84 dB (14 bit), 96 dB (16 bit)
Triggering	Source: Channels 1 to 4, Digital External
Triggering Modes	Rising/falling slope, inside/outside window
Level Adjustment	0 - 100% of full scale, 12 bit resolution
Hysteresis Adjustment	0 - 100% of full scale, 12 bit resolution
Resolution	0.025% (12 bits)
Pre-Trigger	0 - 131060 samples (0 - 100%, one sample resolution)
Post-Trigger	0 - 131060 samples (0 - 100%, one sample resolution)

Overview

The unit can be operated in continuous or triggered acquisition mode. Each Cecchi unit can simultaneously sample on 4-channels and multiple units can be synchronised together (master-slave setup, using a 25 pin D connector at the rear of the instrument), to provide an expanded system with a larger number of channels.

The Cecchi unit is connected to the host PC via USB (2.0 or 1.1), without the need for an external power supply.

Integrated with ASC's data acquisition and hardware control software, the USB-based Cecchi unit provides a complete data acquisition solution.



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Digital Input Trigger Level	0 - 3.3 volt (5 volt max)
PC interface	USB 2.0, 1.1
Physical dimensions	170 mm (D), 140 mm (W), 25 mm (H)
Weight	0.48 Kg
Power Requirements	From USB (and extension connector) 500 mA @ 5V max.
Operating Temperature	0°C to 50°C
Storage Temperature	-10°C to 70°C

Example Applications

- Microseismic (MS) and acoustic emission-event (AE) monitoring;
- Vibration monitoring;
- Sensor measurements;
- Research and laboratory based high-speed data acquisition;
- General applications requiring multi-channel triggering;

For more info on the CECCHI data acquisition module please contact us:

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