

## DIGITAL ACQUISITION DYMAS 24 ALBEN

The Dymas 24 Alben is a multi-channel acquisition system suitable for long-term monitoring of dams and structures in general where it is required the installation of many dynamic sensors, accelerometer or velocimeters.

The digital acquisition Dymas 24 Alben allows to acquire up to 30 channels (in the standard version, up to 60 channels optional) in multiples of 6, placed in a single cabinet with wall or floor fixing.

The communication system runs via LAN; the remote connection to the system can be made via 3G modem, 4G, FIBER OPTIC, WiFi.

The software DYMASOFT, integrated with the data processing software VIBROSOFT or SOLWEB, allows to realize efficient dynamic monitoring networks.

### APPLICATION

- Civil and industrial long-term monitoring

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## TECHNICAL CHARACTERISTICS

Input channel	Up to 30 channels
Configuration	Standalone or multi-station network
Timing	Internal RTC update via GPS or remote-control, simultaneous sampling
Triggering mode	Threshold level and/or STA/LTA, selectable for each channel
Recording triggering	Internal/external trigger, continuous, scheduled. Selectable pre/post-trigger length. Recording of pick values (min-Max), according to DIN 4150 part II, internal selectable from 10 to 100s.
Data storage	DATA STORAGE 32 GB internal memory, optional external USB flash disk on request
Diagnostics	temperature, sensors test
Power consumption	5W for basic 6 channels, plus 2W for each other 6 channels group
Communication	Ethernet TCP/IP via cable, or optionally by UMTS or WIFI modem.

## 24 BIT MODULE

Converter	Individual 24-bit Sigma/Delta for each channel, with DSP each 6 channels, integrated digital antialiasing filter. Up to 30 Ch.
Channels	
Input level	+/- 10V differential Input; +/- 2,6V optional
Sensors calibration	Built-in, positive or negative edge
Campionamento	Selectable from 10Hz to 8kHz
Bandwidth	DC - 3.200 Hz
Dynamic range	> 130 dB@100Hz
Programmable gain	1-2-4-8-16-32-64-128
Filter anti-aliasing	Digital Filter FIR. Frequency attenuation by Nyquist (1/2 sample rate) >-130dB, cut frequency 0,4 of sample rate



Digital acquisition Dymas 24 Alben multi-channel (up to 36 channels, optional up to 60 channels) designed specifically for fixed installations for long-term monitoring of seismic events on civil, industrial and monumental works.



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## EXTERNAL INTERFACES

GPS	External GPS for time synchronization, RS-422 interface
Power	10 VDC to 18 VDC (automatic turn OFF <10,8 V, turn ON >12,0V with battery safe function enabled). 120/240 VAC adapter can be provided as optional.
Standard sensors	Seismometers, Force Balance and MEMS Accelerometers, Geophones, other output voltage sensors
Other sensors	4-20mA output and IEPE sensors (require optional modules)
Comm. interfaces	USB 2.0 / Ethernet port (UMTS or WIFI optional)
Other interfaces	Digital inputs/outputs

## PHYSICAL CHARACTERISTICS

Cabinet	Metallic cabinet (Protection IP65 grade or higher with additional cabinet)
Working temperature	-20°C / +70°C
Dimension	280x200x130mm up to 18CH - 280x200x160 mm
Weight	2,6 Kg
Humidity	0-100% non condensed