

DYMAS 24 ALBEN UNIT

The DYMAS24-ALBEN is a multichannel seismic data recorder acquisition system suitable for long term monitoring with stable configuration inside dams and structures.

This system allows to join up to 48 channels in multiples of 6 positioned in a single metallic cabinet provided for wall or floor fixing.

Communication is available through direct LAN communication system from recorder. The Recorder can be configured for Remote connectivity to central control room through various communication medium options such as Fiber Optic Concentrator, HSDPA / UMTS, GPRS/GSM, 3G, WiFi and VHF. Communication medium is chosen based on network design and mediums available.

The management software DYMASOFT, integrated with VIBROSOFT data processing software allows to build up efficient dynamic monitoring networks.

8GB internal SD memory is standard & optionally available up to 32GB.

DYMAS ALBEN system can be configured for 6/12/18/24/30/36/42/48 channel data acquisition.

System can also be configured with higher AH batteries for autonomous operation in case of lack of power backup and solar power panels.



Features:

- Up to 48 channels
- Standard guidelines UNI 4150-3, DIN45669-1, UNI 9916
- 24 bit multichannel sampling
- 10Hz - 10KHz sample rate
- Bandwidth DC - 4 KHz
- Continuous and/or triggered recording
- Built-in calibration function
- From 8GB up to 32GB internal SD memory
- Seismometers and/or accelerometers connection



Specifications :

SYSTEM

Input Channels:	Up to 48 channels
Configuration:	Standalone or multi-station network
Timing:	Internal RTC updated via GPS or remote control – simultaneous sampling
Triggering Mode:	Threshold level and/or STA / LTA, selectable for each channel
Recording Mode:	Internal/external trigger, continuous, selectable post- trigger length Recording of weighted pick values (min-Max), according to DIN 4150 part II, selectable 1 to 100s
Data Storage:	8 GB internal memory card for 6 channel group (up to 32GB optional)
Diagnostics:	Battery voltage, temperature, sensors test
Power Consumption :	2W for 6 channel group (active)
Communication:	Ethernet TCP/IP via cable/wireless, modem GPS, USB2.0, UMTSH-SDPA

24 BIT MODULE

Converter Channels Input Level:	Individual 24-bit Sigma/Delta per each channel, with DSP each 6 channels, integrated digital antialiasing filter Up to 48 Ch. 5Vpp, 20Vpp, differential Input
Calibration:	Built-in
Sampling:	Selectable from 10Hz to 8KHz
Bandwidth:	DC – 4,000 Hz
Dynamic Range:	> 134 dB
Programmable Gain Filter Anti Aliasing:	1-2-4-8-16-32-64-128 Digital Filter FIR. Frequency attenuation by Nyquist (1/2 sample rate) > –120dB, cut frequency 0.4 of sample rate

EXTERNAL INTERFACES

GPS Antenna:	GPS time synchronization, RS-422 interface
Power:	10 VDC to 18 VDC (adapter 120 / 240 V AC optional), automatic turn OFF when battery <10.2 V, turn ON >11.8V
Seismic Sensors:	Seismometers, Accelerometers Force Balance, ICP, Piezoelectrics, MEMS, Geophones
Other Interfaces:	Ethernet TCP/IP via radio wireless, modem, GPS, fiber optic concentrator

PHYSICAL CHARACTERISTICS

Container Features:	Metallic cabinet, protection IP65
Working Temperature:	-20 °C ~ +70 °C
Dimensions (LxWxH):	650x400x250mm or 400x400x250
Weight:	15Kg
Umidity:	0-100% non condensed

