

VIBRO MONITORING UNIT: *Kit Warning*

Rugged, small, low power

Fully respect of standard guidelines UNI 4150-3, DIN 45669-1 and UNI 9916

24 bit multichannel sampling

10 Hz – 10 KHz sample rate

Bandwidth DC - 4 kHz

Continuous and/or triggered recording

Built-in calibration function

2 Gb internal memory

Geophones and/or accelerometers connection

▲ **DYMAS** high resolution dynamic acquisition system can operate as vibrational or microseismic unit. It fully respects international standard **DIN 45669-1**.

▲ **DYMAS** è un sistema di acquisizione digitale ad alta risoluzione da 6 canali, in grado di operare come acquisitore vibrazionale o microsismico nel rispetto delle normative di riferimento internazionali **DIN 45669-1**.

▲ **DYMAS** is aimed for buildings vibration monitoring and it has the features you need in a simple and economic package, allowing to set properly triggers aimed to early warning system via sms, Mod. Master) or alarm.

▲ **DYMAS** è uno strumento adatto al monitoraggio di vibrazioni su edifici e di eventi sismici. Inoltre permette il settaggio di opportune soglie di allarme e il conseguente avviso mediante SMS (Mod. Master) o Segnale acustici e luminosi in una versione semplice ed economica.

▲ **DYMAS** is integrated with **DYMASOFT*** software allows to manage the acquisition systems, visualization and data download and (optionally) with **VIBROSOFT** software for data processing according with **DIN and UNI** guidelines.

(*Optionally **sNAKA** software for ground characterization and seismic local amplitude)

▲ **DYMAS** è fornito di un software **DYMASOFT*** che permette la gestione dell'unità, la visualizzazione e scarico dati e (opzionale) del software **VIBROSOFT** per l'analisi dati secondo norme **DIN e UNI**.

(*Opzionale software **sNAKA** per caratterizzazione dei siti e amplificazione sismica locale)

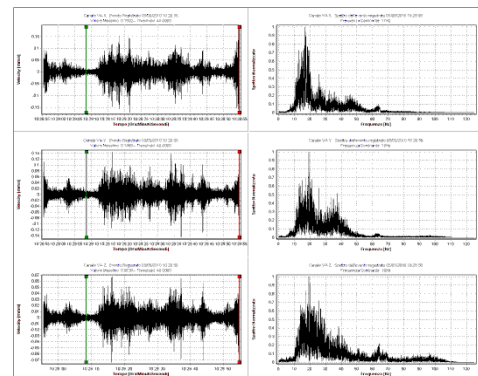
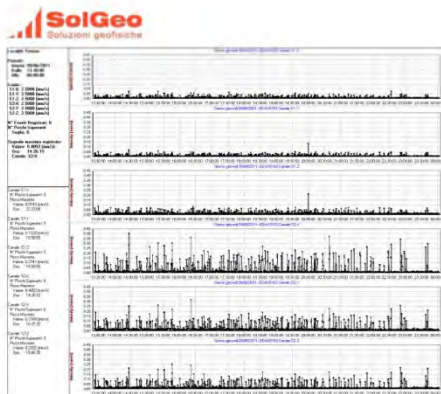


▲ DYMASOFT Software

Using **DYMASOFT** you can easily:

- Select and visualize minimum & maximum values
- Select and visualize recorded events
- Perform spectral analysis and standard processing of selected time window on recorded signals

- DYMASOFT** perfette in modo facile e veloce di:
- selezionare e visualizzare i valori minimi e massimi.
 - Selezionare e visualizzare gli eventi registrati
 - Effettuare un'analisi spettrale e il processing su opportune finestre di tempo selezionate



Maximum and Minimum values within 60s windows length
Registrazione dei valori Massimi e Minimi per finestre temporali di 60 secondi

Spectrum analysis on single chosen event
Analisi spettrale su un singolo evento scelto

TECHNICAL FEATURES

SYSTEM

Input channels	From 1 to 6 sensor channels digital recorder each unit
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 from 1 to 100s
Data storage	2 Gb internal memory card for 6 channel group (till to 32GB optional)
Diagnostics	Battery voltage, temperature, sensors test
Power consumption	1 W for 6 channel group (active)
Communication	USB2.0

24 BIT MODULE

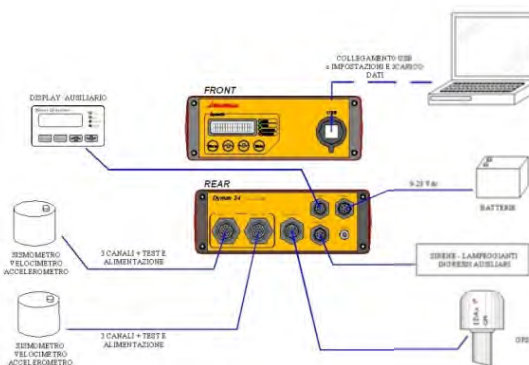
Converter	Individual 24-bit Sigma/Delta per each channel, with DSP each 6 channels, integrated digital antialiasing filter
Channels	6 channels each unit
Input level	5Vpp, 20Vpp, differential Input
Calibration	Built-in
Sampling	Selectable from 10 Hz to 10,000 Hz
Bandwidth	DC – 4,000 Hz
Dynamic range	> 130 dB
Programmable gain	1-2-4-8-16-32-64-128
Filter Anti Aliasing	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	10VDC to 30 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 sensors (optional)	Microphone, GPS
Other interfaces	USB

PHYSICAL CHARACTERISTICS

Temperature	-20 °C - +50 °C
Dimensions (LxWxH)	25 cm x 21 cm x 7,5 cm (6 channels)
Weight	3,50 kg (6 channels)



VELOGET SEISMOMETER



Surface seismometer class I, extremely compact and rugged package IP65. it conform to reference standards UNI 4150-3, DIN 45669, UNI 9916 and UNI 9614. Suitable for both vertical and horizontal applications. it comes with a female connector or with cable permanently attached for permanent installations. it has high dynamic. Furthermore a particular system on bottom allows to fix it on floor and wall and three little screws allow to put it perfectly horizontal. the internal electronic performs also the functional tests.

Sismometro tridirezionale di classe I, conforme alle normative DIN 4150, DIN 45669-1, UNI 9916 e UNI 9614. Estremamente compatto e alloggiato in contenitore metallico IP65, dotato di piedini regolabili e bolla di controllo. È dotato di connettore militare o cavo per installazioni fisse. E' costituito da terna geofonica linearizzata elettronicamente, con dinamica superiore a 130dB. Un particolare sistema sulla piastra di fondo permette il fissaggio a parete con unico tassello e le tre viti di regolazione garantiscono la messa in bolla. L'elettronica interna prevede la gestione dei test funzionali, programmabili dall'acquisitore.

Model	Solgeo VELOGET.3D (2D, 1D optional)
Sensors	3, orthogonal (Z, N, E)
Frequency Range	Selectable 1-80 Hz +0.5 dB or 1-315 Hz +0.5 dB
Limit range	Selectable 12.5 mm/s or 125 mm/s
Dynamic range (typical)	>130 dB
Output constant	Selectable 40 V/m/s or 400 V/m/s
Deviation of theoretical transfer function	+/- 0.4 dB – Classe 1 (DIN 45699-1)
Internal test	Impulsive +/- 10mm/s – independent to each channel
Power supply	+ 10....+18 Vcc
Power consumption	240 mW
Dimension (L x H x La)	150 x 100 x 75 mm
Weight	1.6 Kg