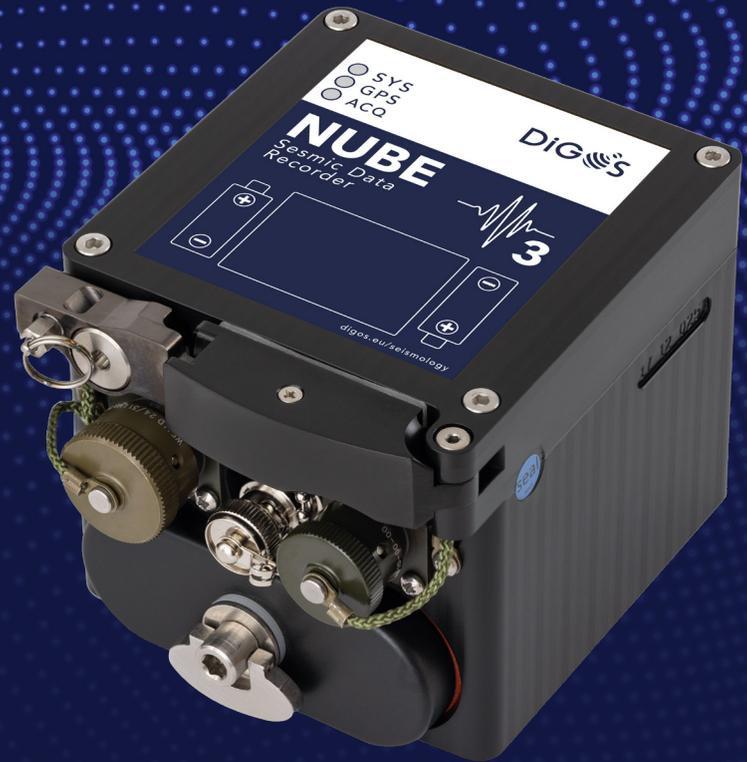


NUBE

Seismic Data Recorder - Developed for Real Field Applications

KEY FEATURES

- Ultra compact size & weight
- Easy handling for field installations
- Fast and secure data harvest by exchangeable data storage card
- Accurate time base (GNSS using GPS, Galileo, BeiDou, GLONASS)
- 2 x built in GNSS modules with internal and external GNSS antenna
- Robust, reliable and well-proven design for unattended field operation
- Works with BB seismometers, geophones, infrasound sensors, acceleration sensors
- Extremely low power consumption: 112 mW at 100 sps, cycled GNSS
- Competitive price



NUBE is a seismic data logger designed for the high-resolution acquisition of seismic signals and other geophysical parameters. Analog sensor signals are digitized and stored as precisely time-referenced measurement data for subsequent analysis.

DATA RETRIEVAL IN THE FIELD

A key feature of NUBE is simplified data retrieval during field operations. Measurement data are stored on removable storage media and can be extracted directly. This significantly reduces the time required for on-site data collection, particularly when handling large data volumes. This method of data retrieval is a targeted complement to existing solutions and is especially advantageous when:

- Measurement stations are located in remote or hard-to-access areas
- Only short maintenance or access windows are available
- A large number of measurement points or devices are operated simultaneously

- Deployments take place in high mountain regions, polar environments, or mining operations

COMPATIBILITY

NUBE is fully compatible with existing CUBE installations.

- Data formats remain unchanged
- Existing analysis and processing workflows can continue to be used
- Step-by-step migration within established monitoring networks is possible

This makes NUBE suitable both for new monitoring projects and for the targeted expansion and modernization of existing installations.

TECHNICAL SPECIFICATION

Physical Parameter	
Size	(W) 10.0 cm x (H) 8.8 cm x (D) 10.0 cm (D with sockets: 12.3 cm)
Weight	1.06 kg without / 1.34 kg with D-cell batteries
Operating temperature	-40 - 60 °C
Waterproof	1 m water 48 h
ADC	
Channels	3
Type	24 bit Delta-Sigma
Full scale input	4.098 Vpp @ gain 1
Preamp gain	1, 2, 4, 8, 16, 32, 64, 128
Sample rate [sps]	25, 50, 100, 200, 250, 400, 500, 800, 1000, 2000 (4000 experimental)
Resolution (typical)	21.7 bits @ 100 sps - gain1 - low power mode
Dynamic range (typical)	130.8 dB @ 100 sps - gain1 - low power mode
Input impedance	100 kOhm
Sensor Input voltage	Adjustable by customized breakout box according to sensor specification (add-on on request)
Time Base	
Type	GNSS synchronized free running internal quartz (GPS, Galileo, BeiDou, GLONASS)
GNSS accuracy	<1 µs
GNSS module / antenna	2 x GNSS module: 1) with internal antenna, 2) with external antenna
Free running accuracy	<0.01 ms with processing and GNSS reception (~1 minute) at least once a day <10 ms for 20 days without processing
Interface	
Type	3 LED system status real time monitoring, serial auxiliary in-out (for additional sensor modules)
Data Storage	
Storage type	SDHC card, exchangeable via flap (security: auto-stop at open flap)

Capacity	up to 2 TB (currently tested up to 512 GB)
Recording data format	raw data, continuous recording
Data Conversion	
Post processing	conversion from raw format to Mini-SEED or SEG-Y, software provided
Internal Power	
Batteries	2 alkaline D-cells
Runtime	max. runtime up to 15 days (cycled internal GPS)
Power consumption	112 mW @100 sps + cycled internal GPS
External power	
Input supply range	4.5 - 36 Vdc
Power consumption	128 mW @ 12 Vdc + 100 sps + cycled internal GPS
Connectors	
Sensor	MIL-C-2684 A12-10S
Power / Communication	MIL-C-26482 A12-10S MIL-C-26482 A10-07P
External GPS antenna	BNC female

Specifications are subject to change without notice.



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