StaneO

More than 10 years of experience
for your measurements

D6BB-DIN – D9-DIN

Fixed station
Broad-band 3/6 channel DIN rail digitizers

www.staneo.fr

D6BB-DIN – D9-DIN

Broad-band 3/6 channel DIN rail digitizers

INDUSTRY STANDARDS AND...NON STANDARD FEATURES

D6BB-DIN and D9-DIN are 6/9 channel seismic data-loggers designed by **StaneO** to fit the requirements of permanent observation. Hardware and software are based on industry standards allowing user-friendly site installation and data collection setup.
D6BB-DIN or D9-DIN based solutions are cost effective.

Mechanics designed for easy installation
- 35mm DIN rail mounting (EN 50022)
- 3.81mm (0.15") connectors
- up to 9 channels in a single device

Data conversion designed for performance and versatility
- above standard 146dB dynamic range
- broad-band ready (incl. digital interface)

Data retrieval and monitoring developed for complete network integration
- native MiniSEED format : no conversion software needed !
- SEEDLink protocol (SeisComP/slinktool ready) and FDSNWS for data retrieval : no add-on or third-party plugin
- SNMP/HTTP protocol (NAGIOS-ready) for control and monitoring

And more features
digital sensors, analog auxiliary I/O, GPS daisy-chaining, wide network connectivity...

Applications
permanent seismic monitoring including broadband stations, structural/building monitoring, multi-parameter stations, long-term micro-seismic monitoring ...

SEISMIC INPUTS
Channels: 6 (D6BB-MOB), or 9 (D9-MOB)
Synchronous: yes
Conversion: sigma-delta 32bits
Full scale: 40Vpp at gain 1
Impedance: 16/32kΩ
Hardware gain: 1 to 64
LSB: 9.31nV at gain 1
Dynamic range: 146dB/133dB at 100sps[1]
Sampling rates: 1sps to 2000sps

SENSOR SUPPORT
Most sensors predefined, control lines include: mass center, calibration signal, calibration enable, lock, unlock, power
Active high/low control lines: yes
Control lines level:user defined
Digital interface: RS232
Mass position: 3 channels, +/-10V

TIMING
GPS: 12 channels
Time accuracy: <1µs, <100µs
Long term drift: 0 (GPS-locked)
Power management: continuous/duty cycle

HEALTH STATE
Analog inputs/outputs: 3/1
Internal monitoring: power supplies, internal temperature
Environment: PTU3xx ready Arduino ready (custom sensors using a normalized API)

DATA STORAGE & RETRIEVAL
Format: MiniSEED 32bits, steim-1
Internal storage: 16GB flash
Data management: ECC (BCH),true wear levelling
Retrieval: integrated FDSNWS SEEDLink server version 3
External storage: USB-storage (vfat/ext2)

COMMUNICATION
Interfaces: GSM/GPRS, SIGFOX, Ethernet, serial, USB-net, Bluetooth, WiFi, SMS, GSM/GPRS, SIGFOX
Quick setup: HTTP (integrated web server)
Remote monitoring: SNMP

MECHANICS
Enclosure: DIN 12 units, IP20
Connectors: USB-A/ USB-B, 3.81 pitch (0.15") screw terms
Weight: 350g (700g with GPS)
Power Consumption (12V):
- min: 750mW (6 channels at 100sps, continuous recording on internal flash, GPS always on for <1µs accuracy, no communication, no digital sensor)
- max: 2.5W (same as above but continuous data transmission over Ethernet)

[1]full scale sine wave above shorted input

September 2015 - Specifications subject to changes without notice