SIGNAL GEOFÍSICA LTDA
CNPJ: 36445743/0001-12
Telefone: (41) 99560-2470
e-mail: signal@signalgeofisica.com
Av. São José, 618 - Cristo Rei, Curitiba - PR, 80050-350

SUMMIT M Vipa Vibration & Seismic Monitoring System

SUMMIT M Vipa is a three-channel seismic station designed for vibration monitoring with an additional channel for noise monitoring. The station has built-in lithium-ion battery, making **SUMMIT M Vipa** an excellent solution for autonomous mobile measurements. The presence of remote control with automatic data transmission allows to connect several stations via Ethernet or using a radio channel to create a vibration monitoring network. High-resolution 24-bit ADC provides high dynamic range and ultra-sensitive vibration monitoring for both continuous and triggered recording.

DMT-3D/DIN is a seismometer used with **SUMMIT M Vipa** system for vibration and microseismic monitoring. The sensor is equipped with three geophones with a frequency range from 1 to 315 Hz. Due to its weight, for most applications, the device does not require additional mounting, but if necessary, it can be fixed above the central mounting hole with a bolt. For ease of setup and installation, the seismometer has a built-in level.

Available Extension / Accessories:

- Seismology extension - increased sensitivity and dynamic range of > 122 dB, additional sample rates: 125 Hz 250 Hz, 500 Hz, optional SeedLink server
- Printer - external serial protocol printer
- Alarm switch - external relays for switching external alarm devices, can operate via digital I/O interface of VIPA or remotely via mobile network

SIGNAL GEOFÍSICA LTDA
CNPJ: 36445743/0001-12
Telefone: (41) 99560-2470
e-mail: signal@signalgeofisica.com
Av. São José, 618 - Cristo Rei, Curitiba - PR, 80050-350

- Intelligent sensor supply - external sensor supply for connecting third party ICP-type sensors

Technical Specifications	
Channels	3 channels (X-, Y-, Z- vibration) 1 aux-channel (acoustic)
Sample Interval	1 kHz, 2 kHz, 5 kHz, 10 kHz
Frequency range	DC - 5 kHz
Recording mode	Continuous or event based
Trigger mode	Amplitude threshold for each channel, trigger also on KB and vector sum
Record length	1 sec to 60 sec per file
Pre-trigger length	0 sec to record length-1
Output sample resolution	32 bit
Signal input range	± 5 V (10 V_{pp}) differential input (optional ± 20 V on request)
Measurement range	Up to 175 mm/s with standard sensor DMT-3D/DIN, larger ranges on request
Time synchronisation	Internal GPS module (ext. Antenna), absolute time accuracy : < 10 µs
Data storage	Internal 4GB (larger on request) or external USB-mass-storage device
Instantaneous dynamic range	≥ 113 dB @ 1000 Hz sample rate
Crosstalk rejection	≥ 110 dB (between all channels)
Total harmonic distortion	≤ -100 dB
Common mode rejection	≥ 105 dB
Data communication	100base-TX Ethernet, internal LTE/EDGE/GSM modem
Internal battery	Li-Ion, typical life time >40 hours
External power supply	9-18 V DC (optional 9-36 V) max 15 W during battery charge
Display	Colour graphical LCD with 320 x 240 resolution
Dimensions	30 x 25 x 12 cm
Weight	3.6 kg

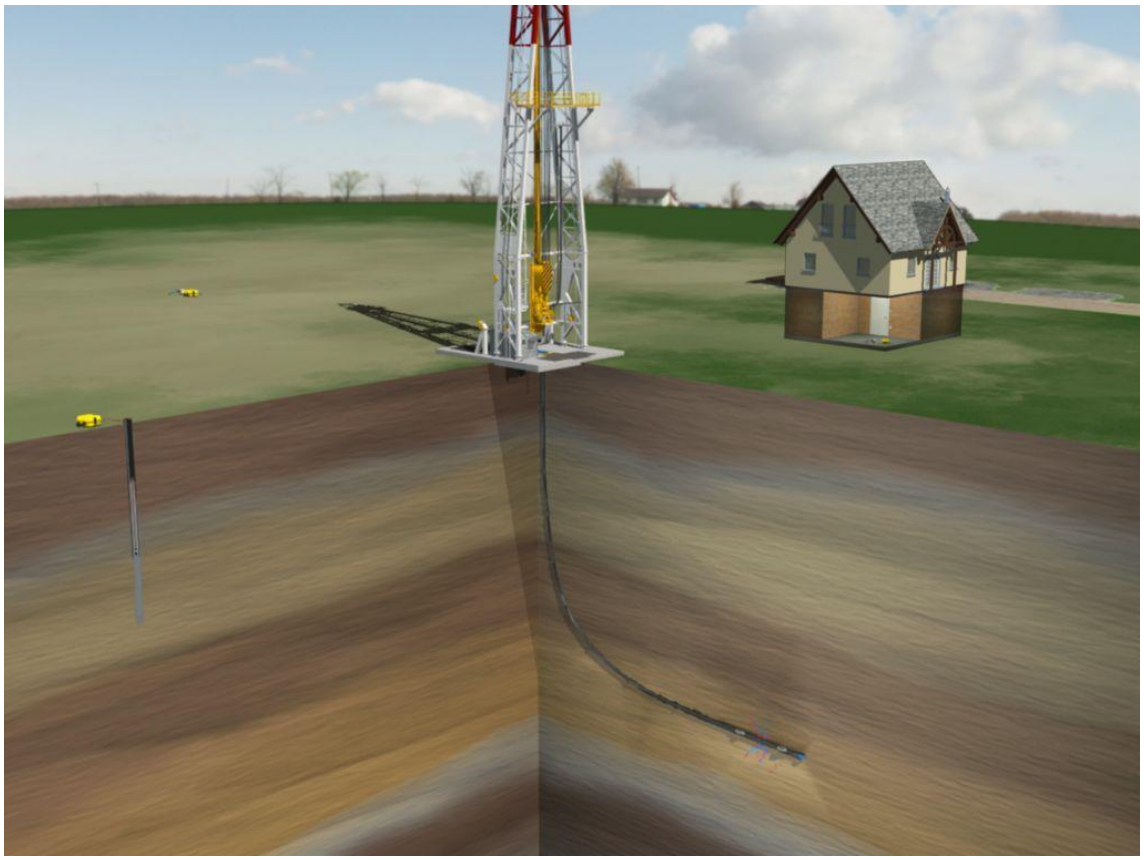
SIGNAL GEOFÍSICA LTDA
CNPJ: 36445743/0001-12
Telefone: (41) 99560-2470
e-mail: signal@signalgeofisica.com
Av. São José, 618 - Cristo Rei, Curitiba - PR, 80050-350

Environmental specifications	
Operation temperature	-20°C to + 70°C
Humidity range	0 – 95 %
Protection class	IP 67
Case	Solid waterproof housing deployable in any surface environment

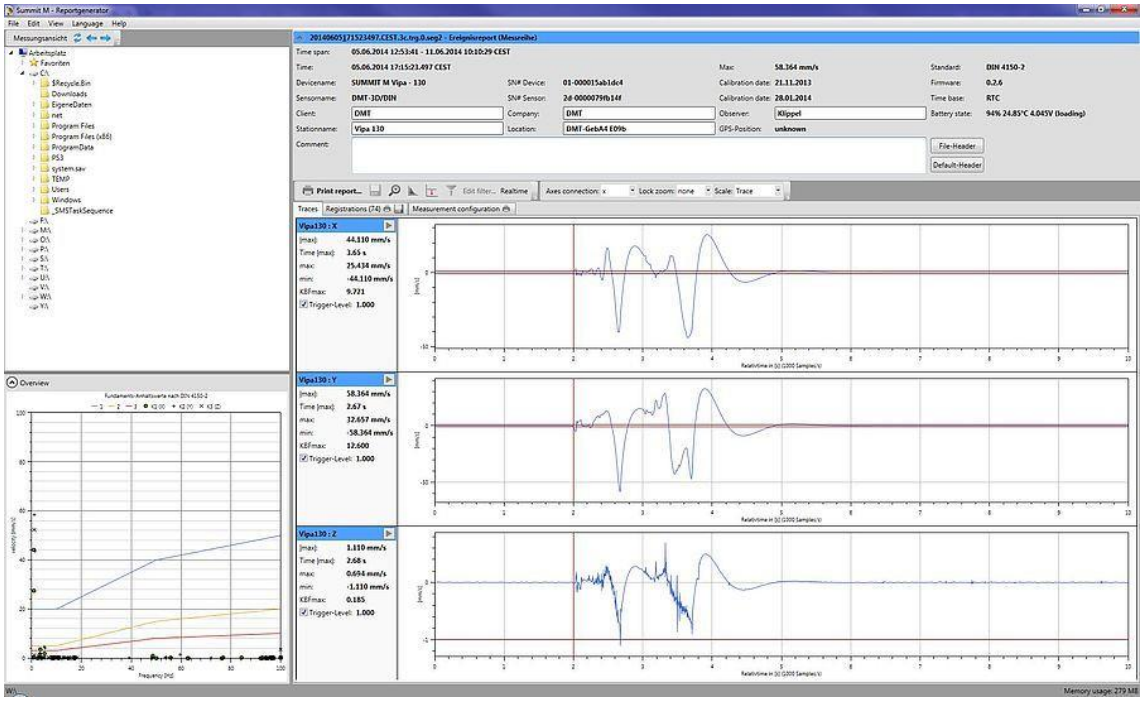
Connectors	
USB	External storage on memory stick or hard disk drive
Ethernet-LAN	Router, switches, PC
Mobile Antenna	External mobile GSM antenna
GPS Antenna	External GPS antenna for precise time stamp
Vibration sensor	-External geophone vibration sensor -3D sensor or splitted sensors, borehole sensors -12 V DC power supply provided for active sensors
AUX Channel	Additional recording channel, e.g. for microphone - 12 V DC power supply - Switchable phantom power (24 V / 48 V) for microphones
Digital IO	Multipurpose IO for accessories (alarm devices, trigger devices,..)
Serial IO	External RS232 for external printer
Power	External 9-18 V DC (optional 9-36 V DC)

SIGNAL GEOFÍSICA LTDA
CNPJ: 36445743/0001-12
Telefone: (41) 99560-2470
e-mail: signal@signalgeofisica.com
Av. São José, 618 - Cristo Rei, Curitiba - PR, 80050-350

SIGNAL GEOFÍSICA LTDA
CNPJ: 36445743/0001-12
Telefone: (41) 99560-2470
e-mail: signal@signalgeofisica.com
Av. São José, 618 - Cristo Rei, Curitiba - PR, 80050-350



SIGNAL GEOFÍSICA LTDA
CNPJ: 36445743/0001-12
Telefone: (41) 99560-2470
e-mail: signal@signalgeofisica.com
Av. São José, 618 - Cristo Rei, Curitiba - PR, 80050-350



SIGNAL GEOFÍSICA LTDA
CNPJ: 36445743/0001-12
Telefone: (41) 99560-2470
e-mail: signal@signalgeofisica.com
Av. São José, 618 - Cristo Rei, Curitiba - PR, 80050-350

SIGNAL GEOFÍSICA LTDA
CNPJ: 36445743/0001-12
Telefone: (41) 99560-2470
e-mail: signal@signalgeofisica.com
Av. São José, 618 - Cristo Rei, Curitiba - PR, 80050-350