

# **DMT Seismic Sensors for SUMMIT M Series dataloggers**

## DMT-3D/DIN

DIN-compliant seismometer for vibration measurements and seismic monitoring

The DMT-3D/DIN Sensor is the standard surface sensor used with SUMMIT M Vipa and SUMMIT M Hydra seismographs for vibration measurements and micro-seismic monitoring applications. The sensor is equipped with a parameter memory, where calibration data is stored and can be read out by SUMMIT M Vipa seismographs.

Through its weight, the sensor does not need to be additionally fastened to the ground for most measuring applications. In case of expected strong ground movement, the sensor can be stiffly mounted to the ground by a rock bolt through the central mounting hole.



#### **Key features**

- 3-component passive geophon (4.5 Hz)
- DIN 45669 compliant sensor for vibration
- Robust aluminium housing, IP67
- Frequency range: 1Hz to 315Hz (Digital compensation of low frequency response by VIPA / HYDRA seismograph)
- Sensitivity: 28 V/m/s
- Size: (L) 170 x (W) 131 x (H) 73 mm
- Weight: 2.5 kg

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## DMT-BHL3C / DMT-BHL1C

### Borehole sensors for long term / permanent monitoring installations

The DMT-BHL3C Sensor is a robust borehole sensor with steel housing for micro-seismic monitoring installations in shallow boreholes. The sensor is designed for permanent or long term installation in shallow boreholes with up to 50 bar water pressure. The sensor does not provide clamping mechanism and is therefore usually coupled to the borehole wall by sand filling (vertical borehole) or permanently cementing it to the borehole (horizontal holes).



### **Key features**

- Three or single component passive sensor
- Robust steel housing
- Water pressure: up to 50 bar
- Available as 28 Hz omnidirectional and 4.5 Hz directional (horizontal or vertical) version
- Sensitivity: 28 V/m/s
- diameter: 50 mm
- permanently attached signal cable.
- Available as ATEX certified explosion proofed version

## DMT-BHR3C / DMT-BHR1C

Retrievable borehole sensor with clamping for temporary monitoring installations

The DMT-BHR3C retrievable borehole sensor is designed for temporary installations in short boreholes, e.g. for micro-seismic monitoring applications inside underground mines and tunnelling projects. During installation, the sensor is oriented inside the borehole with the installation rod and the clamp is released for stiff coupling to the borehole wall.



### Key features

- Three or single component passive sensor
- Robust housing
- Water pressure: up to 10 bar
- Available as 28 Hz omnidirectional and 4.5 Hz directional (horizontal or vertical) version
- Sensitivity: 28 V/m/s
- Borehole diameter: 65 to 75 mm
- permanently attached signal cable.
- Available as ATEX certified explosion proofed version