

DMT WindSafe® VIB^{3D}

Cost-effective tower vibration measurement

Main features

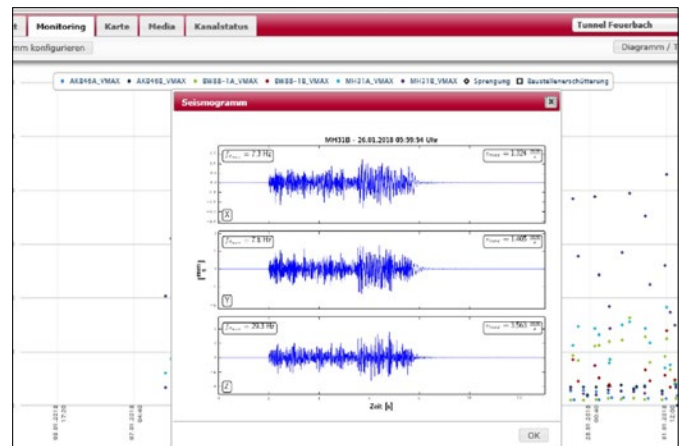
- Intelligent MEMS based 3-component acceleration sensor
- Continuous or triggered recording with individually adjustable trigger thresholds
- Straightforward installation supported by automatic levelling
- Data transmission by LTE / WLAN
- GPS/network time base
- Web-frontend integrated in DMT SAFEGUARD for system administration and parameter setup
- Cloud based data visualization and alarm messaging
- Enables cost effective deployment of large networks

Application

- Monitoring of WTG towers movements with independent data acquisition and telemetry
- Data acquisition for detailed load spectra analysis
- Structural monitoring of infrastructure and buildings
- General vibration monitoring



VIB^{3D}



DMT SAFEGUARD data publishing

Technical specifications	
Size	120 x 80 x 20 mm
Weight	135 g (without mounting parts)
Mounting	single mounting point in any orientation via centric mounting hole
Digitalization	
Sensor Type	Triaxial MEMS accelerometer
Recording Length	1 – 60 seconds per event or continuous recording
Sampling Rate	1/4, 1/2, 1, 2, 4, 8, 16, 32, 64, 128, 256 ms
Frequency range	DC (0 Hz) to Nyquist
Measuring range	
	selectable 2 g, 4 g, 8 g
Signal output and filtering	
Measurand and unit of recorded signal may be selected between	<ul style="list-style-type: none"> - Acceleration [g] - Acceleration [m/s²] - Vibration velocity [mm/s]
Additional signal transformation and filtering options:	<ul style="list-style-type: none"> - Automatic sensor orientation and levelling - Fixed, pre-defined sensor orientation - As is / raw sensor signal - Dynamic DC-offset removal
Data storage	
	Internal SD memory slot > 4GB for data storage in the offline mode or for data buffering during online operation
Data Transmission	
WLAN	IEEE 802.11b/g/n 1x1 SISO (2400 MHz -2484 MHz)
Mobile Radio	GSM/GPRS/EDGE (900 / 1800 MHz) UMTS/HSPA+ (900 / 2100 MHz) LTE (700 / 800 / 900 / 1800 / 2100 MHz)
Time Synchronisation	
	NTP / GPS
Power Supply	
	5V (max. 2A) Micro-USB connector
Environmental Conditions	
Temperature	-25 °C to +60°C
Humidity	0 – 95 %
Housing	IP 65

Subject to technical changes

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Disposal information:
Our products are subject to the WEEE directive.
DMT has committed itself to take back all
electrical and electronic components sold
and to dispose of them professionally.
Please contact: products@dm-group.com

WEEE Registration Number: **DE 25917380**

