

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

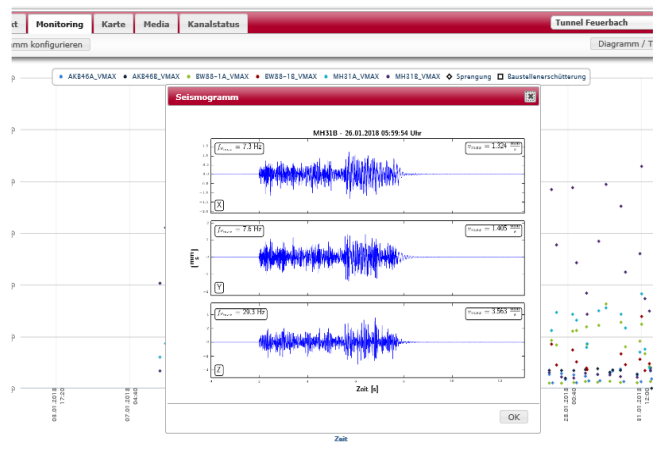
Application

- 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

<ul style="list-style-type: none"> ▪ Size ▪ Weight ▪ Mounting 	<p>120 x 80 x 20 mm</p> <p>135 g (without mounting parts)</p> <p>single mounting point in any orientation via centric mounting hole</p>
<ul style="list-style-type: none"> ▪ Digitalization <p>Sensor Type</p> <p>Recording Length</p> <p>Sampling Rate</p> <p>Frequency range</p>	<p>Triaxial MEMS accelerometer</p> <p>1 – 60 seconds per event or continuous recording</p> <p>1/4, 1/2, 1, 2, 4, 8, 16, 32, 64, 128, 256 ms</p> <p>DC (0 Hz) to Nyquist</p>
<ul style="list-style-type: none"> ▪ Measuring range 	<p>selectable 2 g, 4 g, 8 g</p>
<ul style="list-style-type: none"> ▪ Signal output and filtering 	<p>Measurand and unit of recorded signal may selected between</p> <ul style="list-style-type: none"> - Acceleration [g] - Acceleration [m/s²] - Vibration velocity [mm/s] <p>Additional signal transformation and filtering options:</p> <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
<ul style="list-style-type: none"> ▪ Data storage 	<p>Internal SD memory slot > 4GB</p> <p>For data storage in the offline mode or for data buffering during online operation</p>
<ul style="list-style-type: none"> ▪ Data Transmission <p>WLAN</p> <p>Mobile Radio</p>	<p>IEEE 802.11b/g/n 1x1 SISO (2400 MHz – 2484 MHz)</p> <p>GSM/GPRS/EDGE (900 / 1800 MHz)</p> <p>UMTS/HSPA+ (900 / 2100 MHz)</p> <p>LTE (700 / 800 / 900 / 1800 / 2100 MHz)</p>
<ul style="list-style-type: none"> ▪ Time Synchronisation 	<p>NTP / GPS</p>
<ul style="list-style-type: none"> ▪ Power Supply 	<p>5V (max. 2A) Micro-USB connector</p>
<ul style="list-style-type: none"> ▪ Environmental Conditions <p>Temperature</p> <p>Humidity</p> <p>housing</p>	<p>-25 °C to +60°C</p> <p>0 – 100 %</p> <p>IP 65</p>

DMT GmbH & Co. KG

Am TÜV 1

45307 Essen

Tel +49 201 172-1645

www.dmt-group.com · products@dmt-group.com



TÜV NORD GROUP

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@dmt-group.com

WEEE Registration Number: DE 25917380

Earth. Insight. Values.