

## DMT WindSafe VIB<sup>3D</sup>

### 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

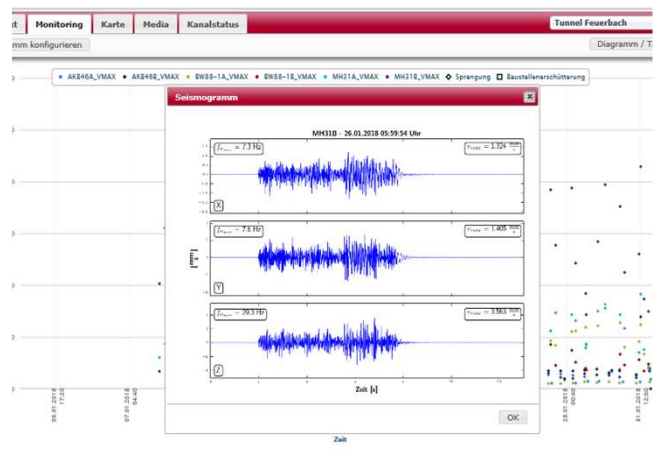
#### Application

- 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<sup>3D</sup>



DMT SAFEGUARD data publishing



## Technical Specifications

<ul style="list-style-type: none"> <li>▪ <b>Size</b></li> <li>▪ <b>Weight</b></li> <li>▪ <b>Mounting</b></li> </ul>	<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"> <li>▪ <b>Digitalization</b></li> </ul> <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"> <li>▪ <b>Measuring range</b></li> </ul>	<p>selectable 2 g, 4 g, 8 g</p>
<ul style="list-style-type: none"> <li>▪ <b>Signal output and filtering</b></li> </ul>	<p>Measurand and unit of recorded signal may selected between</p> <ul style="list-style-type: none"> <li>- Acceleration [g]</li> <li>- Acceleration [m/s<sup>2</sup>]</li> <li>- Vibration velocity [mm/s]</li> </ul> <p>Additional signal transformation and filtering options:</p> <ul style="list-style-type: none"> <li>- Automatic sensor orientation and levelling</li> <li>- Fixed, pre-defined sensor orientation</li> <li>- As is / raw sensor signal</li> <li>- Dynamic DC-offset removal</li> </ul>
<ul style="list-style-type: none"> <li>▪ <b>Data storage</b></li> </ul>	<p>Internal SD memory slot &gt; 4GB</p> <p>For data storage in the offline mode or for data buffering during online operation</p>
<ul style="list-style-type: none"> <li>▪ <b>Data Transmission</b></li> </ul> <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"> <li>▪ <b>Time Synchronisation</b></li> </ul>	<p>NTP / GPS</p>
<ul style="list-style-type: none"> <li>▪ <b>Power Supply</b></li> </ul>	<p>5V (max. 2A) Micro-USB connector</p>
<ul style="list-style-type: none"> <li>▪ <b>Environmental Conditions</b></li> </ul> <p>Temperature</p> <p>Humidity</p> <p>housing</p>	<p>-25 °C to +60°C</p> <p>0 – 100 %</p> <p>IP 65</p>

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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

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