# DMT

#### Engineering Performance

# 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



VIB3D



DMT SAFEGUARD data publishing

### **TUVNORD**GROUP

Technical specifications	400 00 00
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
	Selectable 2 g, 4 g, o g
Signal output and filtering	Acceleration [g]
Measurand and unit of recorded signal may selected between	- Acceleration [g] - Acceleration [m/s²]
	- Vibration velocity [mm/s]
Additional signal transformation	- Automatic sensor orientation and levelling
and filtering options:	- 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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WEEE Registration Number: **DE 25917380** 



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