

Safety vibration sensors with CANopen

TWK shows its safety vibration sensors NVA115 and NVA120 at the SPS IPC Drives 2018 in Nuremberg, Germany. The sensors save wind turbines from damages caused by vibration and feature CANopen safety.



(Photo: TWK)

The safety vibration sensor NVA/S3 is EN ISO 13849-1:2015 PLd compliant and measures accelerations from 0,05 Hz to 60 Hz up to an amplitude of 2 g. It is optimized for the use in the wind energy industry to save wind turbines from damages caused by tower or generator vibration. The impacting acceleration is evaluated through selectable frequency filters and output via the CANopen safety interface. Two secure switching contacts can be used as parametrizable limit switches for the safety chain.

The measurement value of the acceleration can be output and further processed as instantaneous or peak value, as RMS average, or as integrated value. The latter is important to execute a system shutdown if an adjustable acceleration limit is exceeded marginally, yet long-term. Regulation processes can be realized with Butterworth filters. Fourier frequency analyses that detects the frequency spectrum rounds out the wealth of NVA/S3's features.

TWK shows this sensors as well as tilt sensors, rotary encoders, and cam gears at [SPS IPC Drives 2018](#) in hall 4A at stand 111.

[CW](#)