

STS vibration monitoring for detection and prevention

STS VibeRate IP65 is a cost effective, highly flexible vibration monitoring system. A field tested and proven system, VibeRate IP65 can be implemented in any application where precision monitoring of vibration is required including dynamometer maintenance testing, fault, and failure monitoring, driveshaft and driveline imbalance or failures, engine operation and misoperation monitoring and many more. The system comes configured with one to four channels in an IP65 enclosure.

VibeRate IP65 is capable of operating in remote, unattended, and harsh environments. Simple to install and operate, it can trigger built-in relay based on alarm levels. Smart time delay functionality prevents false trips or triggering of the alarm functions due to transient increases in vibration level during normal operation

Your benefits

The VibeRate IP65 vibration monitoring system provides early warning detection to minimize damage to expensive test articles and equipment as well as costly test cell downtime.

- High measuring accuracy
- Programmable shutdown limit
- Fast response time, suitable for high dynamic test cycles
- Discrete interface gives universal compatibility with data acquisition and automation systems
- EtherCAT permits additional control and data
- SCALE component for Morphee assures seamless integration
- Longterm stability and reliability
- Low maintenance
- Easy to install
- Close to the measurement location, reduced EMI susceptibility



Technical Data

CONTROLLER

Description	Your benefits
Application	Vibration monitoring & detection
Analog output	1x 4..20mA (max. velocity of all connected sensors)
Digital output	1x Normally closed dry-contact (alarm level triggered)
Digital input	1x Reset alarm
Control element	<ul style="list-style-type: none">• Control power indicator• Reset Alarm pushbutton• With alarm indicator
Operating voltage	24VDC ($\pm 10\%$)
Current consumption	< 0.5A
Number of channels	4 sensors (capacitive or piezo)
Included sensors	2 capacitive accelerometers
Communication	EtherCAT
Morphee Integration	Yes – SCALE device (optional)
Enclosure rating	IP65

ACCELEROMETER

Description	Your benefits
Sensing principle	Capacitive
Measuring range	± 25 g
Frequency range	0 – 10kHz
Linearity deviation	$\leq 0.2\%$
Ambient temperature	- 20 – + 80 °C
Protection	IP67
Mounting (included)	M5x20 (Torx 15) screw; 32ft cable with connector

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