

## Technical description

# PeakStore410

With the PeakStore410 offers GfM the solution for almost all machine diagnostic tasks. The system was developed by experienced practitioners in the field of machine diagnosis for the real application on the field. The PeakStore410 combines simple operation and high signal quality.

The device PeakStore410 uses the eight channel collection for the data at mechanical drives. Piezoelectric accelerometers, inductive displacement sensors, resistance strain gauges (via telemetry) or simple voltage or current signals (via an adapter) are possible as sensors. The speed can also be collected for speed variable drives.

The setting up of the measurement configuration (sensor type, sensor sensitivity and measurement time) must be carried out via a personal computer. These settings will be transferred to the PeakStore410 and obtained as long as the settings are overwritten. It is possible to load several measurement configuration onto the PeakStore410, one of them must be activated via the display of the PeakStore410.

The PeakStore410 is an autarkic measurement device. A personal computer is not necessary for measurements.

The vibration data are collected with 50 kHz per channel and are stored directly on a customary intern changeable memory card. Additionally the measured speed is stored which is required for the order analysis.

The amount of the stored data depends on the size of the memory card. Later the data can be transferred to a PC via LAN or direct read-out.

The software PeakStoreCalc which is also delivered by GfM enables the calculation of spectra, order spectra, envelope curve spectra and envelope curve order spectra for normal vibration measurements.

The PeakStore410 can be programmed in an extended mode for different measuring tasks with additional inputs and outputs. These may be long-term measurements with data transfer to a PC or triggered measurements with online calculation.



### Signal inputs:

- 8 inputs for accelerometers (ICP) or sensors with voltage output ( $\pm 50$  V), sampling rate 50 kHz, bandwidths 0.1 Hz ... 21.3 kHz (-3 dB), amplitude resolution 16-bit, adjustable pre-amplifier, four-pin lemo connectors with automatic locking and unlocking
- 1 speed input, sampling rate 1 kHz, counting frequency, 32 MHz, three-pin lemo connectors

### Data collection:

- simultaneous recording of all channels
- measuring time: 26.2 s, 52.4 s, 188.7 s and start/stop till approx. 1 hour
- start (stop) measurement via the front keypad
- display of the speed during the entire duty cycle
- display of the effective vibration level of all channels in a second interval during the measurement period
- display of the measurement period, file path and measurement configuration

### Storage medium:

- CompactFlash with 2...8 GB, for 40...160 measurements with 52.4 sec

### Data exchange:

- The reading and the display of the measurement data is carried out with the software PeakStore via a network connection or by reading out the memory card.

### Power supply:

- 10...32 V DC
- the provided desk power supply delivers 15 VDC (<60 W) at 100...240 V, 50/60 Hz
- internal lithium ion battery with up to 6h duration

### Dimensions:

- height / width / depth: 80 mm / 265 mm / 300 mm
- weight: 3 kg
- total weight with carrying case and sensors: typical 9.5 kg

### Carrying Case:

- made of black impact-resistant plastic
- waterproof and dustproof
- robust, lightweight
- ergonomic handle with rubber coating
- built-in lock with a three-digit combination
- incl. removable shoulder belt
- height / width / depth: 124 mm / 549 mm / 438 mm
- net weight: ~3.8 kg

### Software:

- PeakStore (shipment), optional PeakStoreCalc, optional FAMOS Signalanalyse (© imc Messsysteme GmbH) with order analysis