LogMessage 5000 – Highest galvanic is

Extensive functions

LogMessage 5000 data loggers are universal. The LogMessage 5000 is equipped with 16 universal analog inputs. The inputs are designed to cope with high voltages between the individual channels. The LogMessage 5000 is therefore capable of the problem-free measurement of non-isolated signals.

LogMessage 5000 devices function intuitively making it easy to configure inputs, to save data, and to display data as trends. LogMessage devices are designed for permanent operation and can be depended on to perform reliably over the long term. When data security and reliability are top priorities, users choose the "Made in Germany" logger.

A range of interfaces

- LAN interface
  - Device configuration and online data transfer to PC
  - Link to UMTS-routers
  - Log memory read-out
  - Modbus TCP for data transfer using PLC
- USB interface
  - Log memory read out
- Serial interfaces
  - Customer-specific protocols (ASCII)

Offline

LAN / UMTS

USB

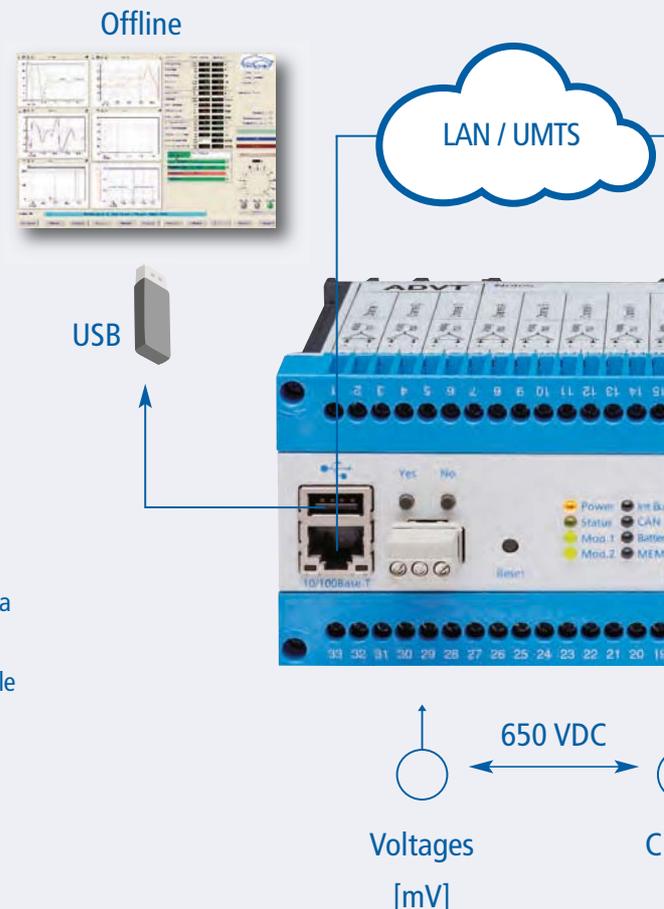## Universal sensor connection

LogMessage 5000 devices are precision instruments that can be switched via software to function with any type of sensor.

- Universal use of analog inputs for mA-, mV-signals, RTDs, or any thermocouple
- Signal rate of 0.1 Hz to 10 kHz
- Digital inputs suitable for up to 90 VDC
- Frequency inputs up to 35 kHz

650 VDC

Voltages
[mV]

Galvanic isolation included

LogMessage 5000 devices are fully protected against earth loops enabling measurements from non-isolated sources.

- All analog inputs can function as differential inputs
- Isolation voltage between analog inputs: up to maximum of 650 VDC
- Galvanic isolation between power supply and each interface
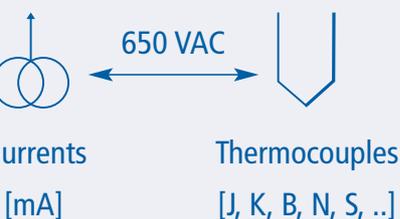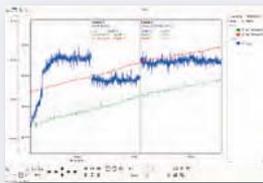- No earth loop problems

Applications

- Potentially affected measurements
- Secure data acquisition with stand alone capability
- Acquisition via universal sensor signals
- PC-independent measurement and testing

- Product testing, laboratory, R&D
- GPS data logging and remote monitoring
- Temperature data acquisition
- Mobile data acquisition

Online

650 VAC

urrents   Thermocouples

[mA]   [J, K, B, N, S, ..]

Secure data storage

The LogMessage 5000 data storage capability enables it to function without PC or network support.
- 2 GB of memory for 60 million data records
- Each measurement data record is recorded with a time-stamp (date and time – at microsecond precision)
- Measurement data can be assigned to groups and used as triggers
- No data loss in the event of power failure
- Alarm management with pre and post alarm data

Comprehensive signal processing

Software channels, configurable according to requirements, can be used for online calculation, monitoring, and many other functions. This enables data to be generated that is immediately usable.
- Online calculations performed on measurement data (e.g. temperature differentials)
- Integration functions (e.g. flows to volumes)
- Limit value monitoring with alarm functions (switching digital outputs)
- Counter function and operational data acquisition

Resolutions for demanding requirements

LogMessage 5000 is suitable for versatile measurements. All analog inputs are capable of measuring mV and mA signals, any type of thermocouples as well as RTDs. The device is equipped for precision measurement with 24-Bit ADCs.

Technical specifications are available on page 52.