

μ Series

Field Bus Measurement Technology for Use in Physically Challenging Environments

The μ series comprises a range of compact measurement modules connected via CAN. Examples of supported features include temperature measurements with thermocouples and resistive sensors, a whole range of testing bridges and active transducers as well as the acquisition of frequency- and time-based signals.



Environmental Conditions

As the μ series requires little space and features an extremely sturdy design, it is perfect for use in harsh application environments. It enables reliable measurements in extremely high or low environmental temperatures as well as in moist and dirty conditions, or where vibrations have to be tolerated.

Data Acquisition

The μ modules are supported by the SMT system software PEA. This makes it easy and fast to integrate them into complex SMT systems. In the case of pure CAN applications, it is also possible to record and evaluate measure data with standard CAN tools. The software that is required for configuring the modules is available for free.

Perfect in Practice

Their extremely low power consumption as well as a whole range of mounting possibilities underline the modules' suitability for practical, regular use. CAN and power supply are combined on one connector and can thus be fed through from module to module. This enables simple wiring with point-to-point connections and standard cables.

softing

PEA

SMT

μ Series

AREAS OF IMPLEMENTATION

- Measurements on chassis, power train and exhaust emissions system
- Battery-operated test equipment

ADVANTAGES

- Reduced cabling thanks to measured value acquisition on the measurement object
- Greater accuracy thanks to measured value acquisition in close proximity to the measuring point
- Decentral system assembly with limited space
- Low demands made of energy supplies in mobile use
- Flexible mounting possibilities
- Data acquisition regardless of proprietary measuring software

Data Sheet

Technical Data

μT10K.2

Transducer	Thermocouple Type K
Measurement range	-50°C ... 1350°C
Uncertainty (initial specification)	≤ ±2K over temperature range (at 10Hz)
Transducer identification	THID
Data rate	Max. 100SPS, can be set
Galvanic isolation	Per channel

μT06Pt.1

Transducer	PT100
Measurement range	-50°C ... 600°C
Uncertainty (initial specification)	≤ ±0,15K over temperature range (at 10Hz)
Transducer identification	Transducer memory
Data rate	Max. 100SPS, can be set
Galvanic isolation	Per channel

Power

Supply voltage	6-48V (DC), reverse polarity protected
Power consumption	Max. 450mW (μT10K.1) Max. 600mW (μT06Pt.1)

Mechanics

Dimensions	116mm x 60mm x 25mm (μT10K.2) 116mm x 60mm x 25mm (μT06Pt.1)
Weight	300g (μT10K.2) 280g (μT06Pt.1)

Environmental Conditions

Storage	-30°C ... +120°C
Use	-30°C ... +120°C

Order Numbers

μT10K.2	10-channel temperature acquisition for thermocouple of type K
μT06Pt.1	6-channel temperature acquisition for PT100 temperature sensors
μA04.1	4-channel measurement module for active transducers
μB04.1	4-channel bridge amplifier
μD04.1	4-channel rev counter