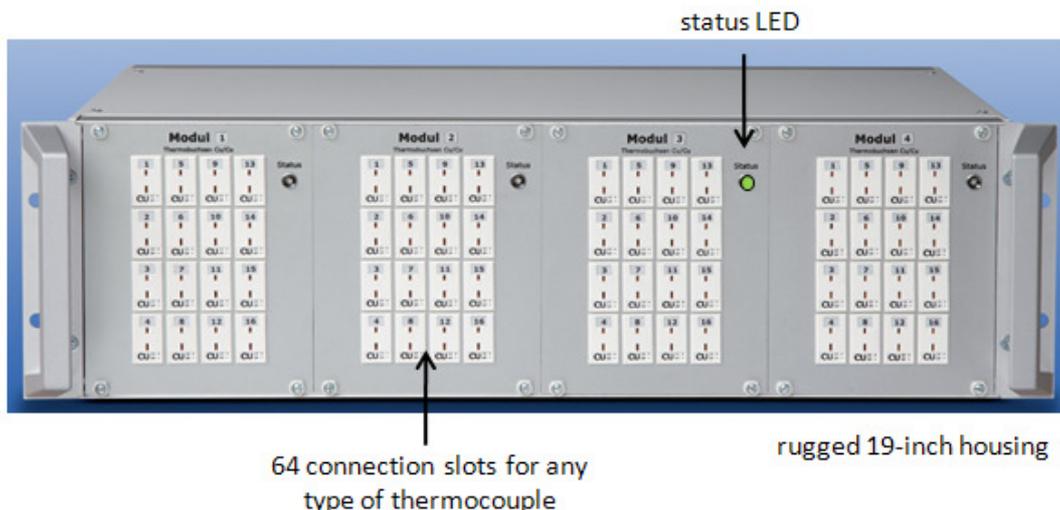


64KTM

All inclusive device for multi-channel temperature measurement

- Universal thermocouple connection
- Scaling as required / high number of channels
- Compact construction and high precision



Applications:

The system was developed to provide multi channel solutions for temperature measurement using thermocouples. Typical users are those from R&D and laboratories who need to acquire highly precise temperature measurements. Easy to use and universal thermo connectors enable quick and simple attachment of the various types of thermocouple.

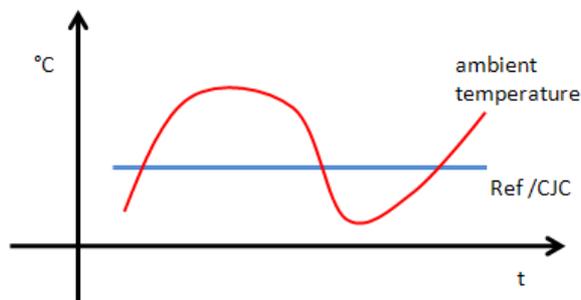
Traditional areas of use are at test stations for gas turbines or boilers. The system is also suitable for temperature measurement in ovens, heating chambers or climate cabinets.

Overview of technical specifications

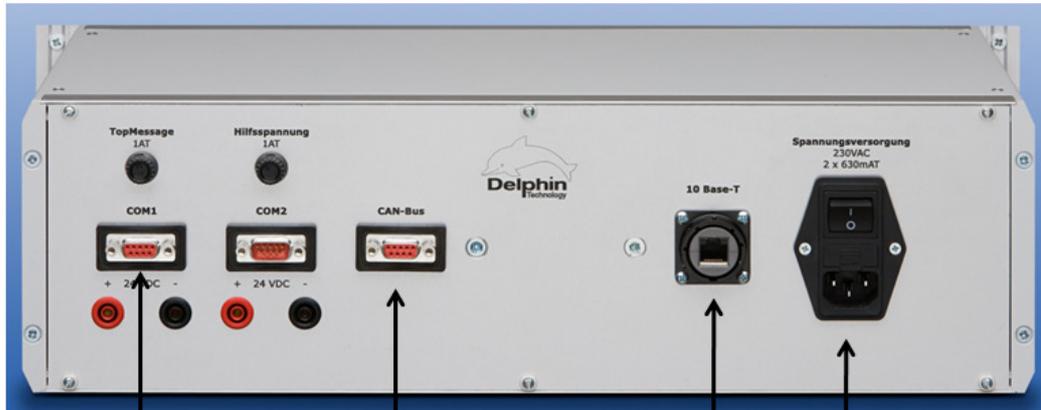
Weight	9.0 kg
Dimensions	19"(W45 x H14 x D27cm)
Inputs	64
Configuration	Individually for each input
Thermocouples:	K, E, N, L, J, S, U, R, T
Precision	0.2K absolute
Internal data memory	1GB (128 million data records)
Interfaces	Ethernet, TCP/IP Modbus TCP/ RTU Profibus DP-Slave
Resolution	24bit Sigma Delta
Cold junction compensation	0.1K

Measurement accuracy: 0.2K absolute

The measurement technology being used is intended for extremely precise measurement acquisition. Differential inputs with 110V isolation and galvanic separation prevent measurement errors from earth loops. Inbuilt network filters for 50Hz or 60Hz networks suppress any power supply interference. The specially developed cold junction compensation serves to isolate measurements from environmental interference and ambient temperature fluctuations.



The reference temperature is measured using a class A, 4-wire RTD. This then enables an accuracy of 0.2K absolute to be achieved.



Serial ports for Modbus
RTU, ProfiBus-DP
ASCII, etc...

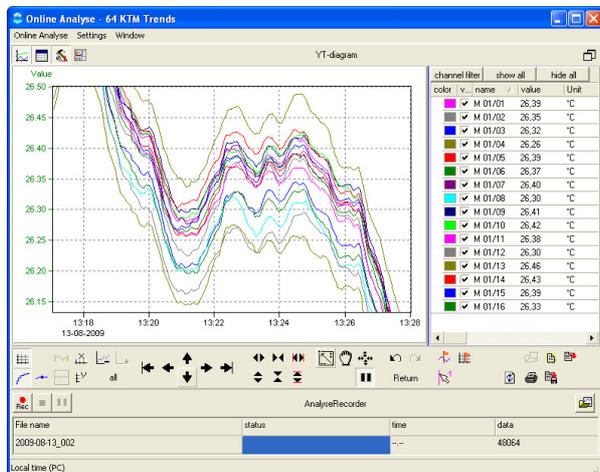
CAN-Bus for extension
devices

Ethernet interface for
network operation

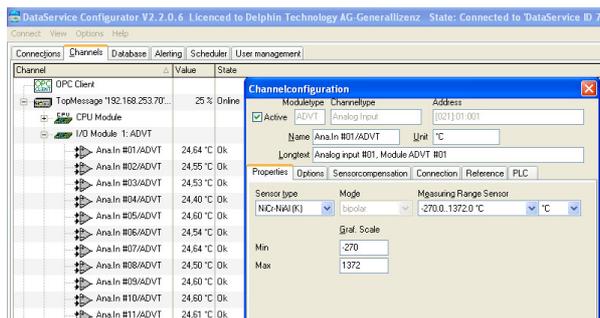
230 VAC power supply with
network filter

Evaluation software

A special feature of the system is its user friendly configuration and evaluation software. **ProfiSignal** provides an extensive range of analysis tools. The software also supports Excel export and drivers for LabVIEW and DasyLab.



For the configuration software, the analog inputs are simply set to the relevant thermocouple. It is also possible to connect different types of thermocouple for varied operations.



Storage

The 64KTM is equipped with a partitionable internal memory for up to 128 million data records. The memory's independent data recording capability provides data security for long-term measurement runs.

Monitoring and alarm functions

Many channels can be set up for limit values, calculations and event processing. These channels enable the computation of characteristic values during measurement runs. This also includes the calculation of moving averages and enables monitoring and alarm functions. The system is able to transmit e-mails or portray limit value violations within an alarm table.

Scaled and extendable

The basis versions is set up for 64 channel operation. The modular design enables several units to be connected so that several thousand channels can be processed.

The measurement device is equipped with an Ethernet interface. This means easy integration into the company network. Data evaluation can then take place conveniently at any PC workstations.