Measuring System UMS 4

Fauser
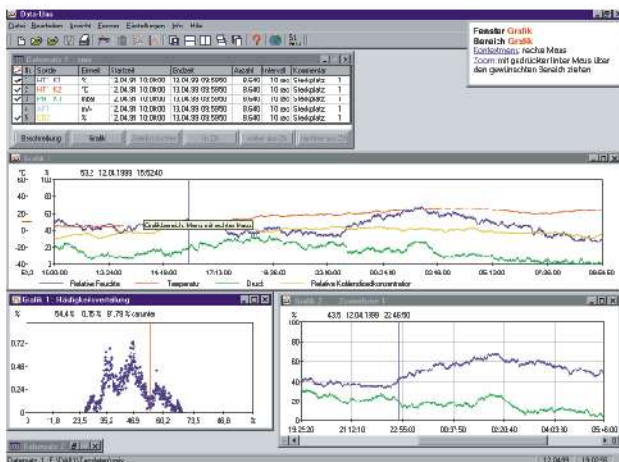Elektrotechnik

UMS 4 - the future-oriented measuring system

- Modular measuring system for a wide range of applications
- Continuous expansion of the large range of sensors
- Open measuring system for new measured quantities
- Powerful measured data collection
- Firmware of the device always up-to-date thanks to updates carried out via PC
- Software updates for UMS 4 and DATA-UMS on the Internet

UMS 4 - offers operating convenience

- Switch on the device, plug in the sensor, and the measured values are displayed
- You can change sensors during operation thanks to automatic recognition
- Only one device has to be operated in order to measure various quantities
- All user-defined settings and the measured data are maintained even if the battery is changed

- Comfortable administration of measured data using the PC program DATA-UMS

UMS 4 - flexible and professional

- Change of sensors in no time
- Development of customised sensors
- Adaptation to your requirements and measuring projects through individual configuration
- Display and control via a comfortable menu interface

UMS 4 - the intelligent solution

- All measuring sensors are controlled by micro controller
- Efficient data reduction achieved through different modes of storage
- High operational safety achieved through automatic self-testing

UMS 4 - powerful and precise

- 4 sensor slots for 16 analogue or 64 digital inputs
- 16-bit precision A/D converter
- High accuracy of measurement through calibration of the sensors
- Storage capacity for 114,688 values in up to 64 measurement series

UMS 4 - for mobile applications

- Long-term readiness for use achieved through power-saving mode
- Mignon batteries/accumulators in the slider, can be exchanged in no time

UMS 4 - as output device

- Acoustic signalling of measured quantities
- An acoustic signal is generated when limit values are exceeded
- 4 analogue/digital outputs for controlling and adjusting
- Serial interface for data transfer

UMS 4 - Price and performance

- Measuring device and data logger all in one
- Multi-purpose measuring system instead of many individual measuring devices
- Service for all components from one supplier

Overview of the sensors:

- **Basic quantities:** Digital signals, voltage (AC/DC), current, resistance, frequency, and many more...
- **Electromagnetic fields:** Constant and alternating electric and magnetic fields, high-frequency radiation
- **Temperature, humidity, pressure:** Temperature via thermocouple and Pt 100, etc.; air and material humidity; pressure
- **Gases:** Gas concentration of oxygen, carbon monoxide, and many more...
- **Chemical quantities:** pH value, redox value, conductivity, dissolved oxygen
- **Flow:** in gases and liquids via vane probe and thermoanemometer
- **Light, sound:** Illuminance, sound level
- **Radioactivity:** Alpha-, beta- und gamma radiation
- **Customised sensors:** Further measured quantities and specially developed devices upon request
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Comfortable menu interface

The menu interface of UMS 4 enables you to access all functions of the device quickly and easily via a pull-down menu and input forms.

The function menu includes different windows for presenting your measured data. In the overall display, the measured values of all active measurement channels are displayed in parallel rows that can be scrolled up and down in a window. In the individual display, you can configure an individual display window for each type of sensor; this window displays information like for example alternative units, combinatory quantities, minimum value, maximum value, mean value and analogue bar graph display. The frequency spectrum can be displayed for periodic measured quantities and individual frequencies can be registered by connecting up filters.

The main menu enables you to configure the measuring system UMS 4. Sensor control, the configuration of outputs, audio oscillator and the setting of device-specific parameters like for example sampling rates, energy-saving mode, and many more... can be carried out easily here. As far as the sensor control is concerned, you have to make the settings for the display, the ranges of measurement and limit values of the measuring sensors and the calibration of these.

The menu for saving data offers a wide range of options for registering measured data with a capacity of 114,688 values. Here you can control when to start/stop the recording process manually or via a timer and also various recording modes for data reduction and a prolongation of the operating time. This menu enables you to manage up to 640 measurement series as well as to transfer the data to the PC.

Technical data UMS 4

Display	Four-line LCD display
Inputs	4 measuring probes with up to 4 measurement channels per probe
Outputs	2 analogue/digital, 2 TTL
Interface	Serial RS 232
Resolution ADC	16 Bit
Accuracy	± 0,05% ±2 digits
Memory	RAM: 4 Mbit
Power supply	4 Mignon ,AC-Adapter
Operation Temp.	0..50 °C
Operation Hunidity	10..90%
Dimensions	250 x 129 x 60 mm
Weight	690 g (incl. battery)

Subject to technical alterations