

Monitoring station

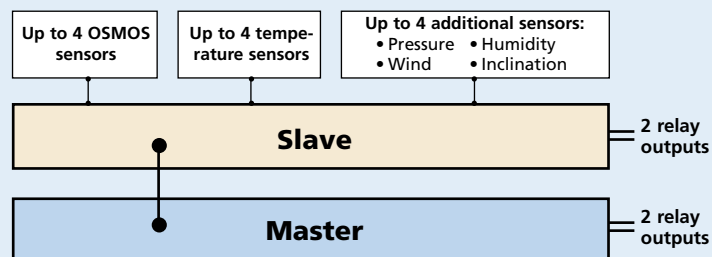


Description

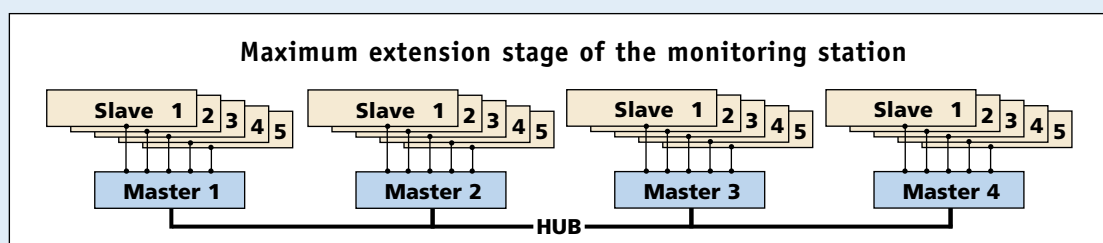
A specially developed signal processing unit is used for measuring, evaluating and displaying signals from the OSMOS fiber-optic sensors. It has a modular design and consists of two components: master and slave. The slave registers measurement values from the sensors, while the master processes and displays signals and performs communications with peripheral devices. Up to four OSMOS fiber-optic sensors, four temperature sensors and four analog signal transducers can be connected to a slave. Up to five slaves can be connected to a master via a bus (RS 485). Up to four masters can be networked together, thus allowing a measurement and evaluation of up to 20 slaves with a total of 80 fiber-optic sensors, 80 temperature sensors and 80 additional sensors for variables such as pressure, humidity, wind and inclination.

Applications

Minimum configuration of the monitoring station



Maximum extension stage of the monitoring station



Technical specifications

Master and Slave

Ambient temperature:	-40°C & +80°C, without climatisation
Service life:	> 10 years
Emergency power supply:	24 V, 1.6 A, with charge control for an external battery
Specification:	EN61010
Housing:	19" plug-in module, one rack unit

Master

Operating voltage:	100 V to 260 V AC or 24 V DC, 30 W power consumption
Outputs:	24 V, 1.6 A for a slave 10/100 Base T Ethernet interface RS 232 serial interface Analog modem 2 relays, 24 V, 0.1 A changeover
Signal processing:	Connection of up to five slaves Dynamic average values, 10 ms to 1 s interval, configurable Toroidal-core memory for 300 dynamic average values, 3 s to 300 s Static average values, 100 s to 86,400 s (1 day), configurable
Alarms:	Dynamic ($\Delta I/\Delta T$), static with 4 thresholds, configurable Information supply locally via a relay or externally via e-mail, SMS, fax, SNMP trap, configurable
Storage:	Dynamic average values if required, or transgression of threshold values Static average values as standard
Display:	Dashboard, X-Y graph, polar graph, table
Communications:	With up to 3 further masters and 5 slaves http, telnet, SNMP, SMTP, FTP, TCP/IP, PPP, SMS, Fax
Disc storage capacity:	20 GB - During dynamic measurements + Master's maximum extension sufficient for 10 days. - During static measurements (1 value / hour)+ Master's maximum extension sufficient for 9500 years.

Slave

Operating voltage:	24 V DC, 1.6 A
Inputs:	4 fiber-optic sensors, 2 to 39 dB, 25 dB dynamics, 0.001 dB resolution, 0.005 dB accuracy, 100 Hz scanning rate 4 temperature sensors, Pt1000, 0.1 °C resolution, ΔT 0.1 °C accuracy, 0.5 °C absolute, 10 Hz scanning rate 4 voltage inputs for additional sensors, 0 V to 10 V DC, 16 bit resolution, 100 Hz scanning rate
Outputs:	RS 485 interface, 2 relays, 24 V, 0.1 A changeover

Order

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Type: <input type="text" value="M"/> M Master	Type: <input type="text" value="M"/> M	Type: <input type="text" value="S"/> S Slave	Type: <input type="text" value="S"/> S
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