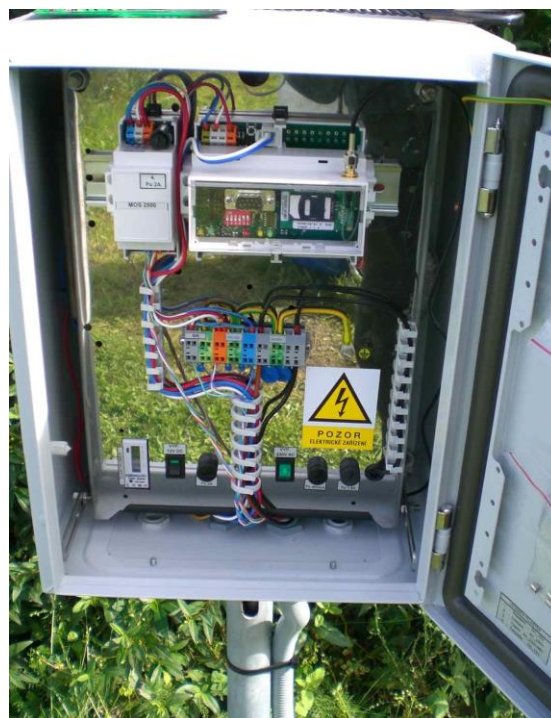


METEOS6 Measuring Station

Basic characteristics

- This measuring station has been developed for measurements in meteorology. It works also under extreme climatic conditions.
- The modular architecture enables to increase the number of inputs and prepare their range precisely for a specific application.
- The advantage of this measurement system is its great versatility of applications, which is accomplished by using various variants of measuring modules and by the possibility of connecting several modules in a single system with one modem for the long-distance data transmission. This makes the system applicable in extensive measuring systems and also as a data logger for just one detector, e.g. an automatic rain gauge.
- The way of processing and evaluation of the measured meteorological elements meets the standards of the Czech Hydrometeorological Institute (ČHMÚ) and recommendations of the World Meteorological Organization (WMO).



- It enables to certify the calibration of inputs. The calibrating parameters of each element of the measuring chain can be separately stored in the station memory.
- There is the possibility of power supply from an independent power source.

Examples of processing of some selected meteorological elements:

Temperatures	instantaneous values, minima, maxima, averages
Wind speed and directions	vector averages, extreme values, ...
Precipitation	sums per selected interval, minute precipitations sums
Global sun radiation	instantaneous value, average value or integrated value
Atmospherical pressure	absolute value, relative value

Technical parameters :

Number of channels: - three possibilities	METEOS 649 - 4 analog inputs, 9 logical inputs, 1 logical output, DIN M6 design METEOS 661 - 6 analog inputs, 1 logical input, 1 logical output, DIN M6 design METEOS 669 - 6 analog inputs, 9 logical inputs, 1 logical output, DIN M6 design	
Assortment of analog inputs	PT 100 PT 500 PT 1000 NI 100 NI 500 NI 1000	$\pm 2,5 \text{ mV} \dots \pm 20 \text{ mV}$ $-60 \text{ mV} \dots +100 \text{ mV}$ 0-20 mV 0-1 V 0-5 V 0-10 V 0-20 mA 4-20 mA
Logical inputs:	Input level 5 – 12 V Variant with 1 logical input: 1 pulses counter Variant with 9 logical inputs: 3 pulses counters, 6 logical inputs (inputs state, time duration)	
Diagnostic inputs	Battery voltage Minimal battery voltage	
Communication	RS232 duplex, 9600..115200 Bd, 8 data bit, 1 stop bit, without parity GPRS modem (possibility of permanent operation or switch-on during selected intervals, data hosting for access to data) Possibility to connect more measuring modules to one network with one GPRS modem Possibility usage of RS232/Ethernet convertor for WiFi transmission	
Accuracy	PT100,500,1000, NI100,500,1000 $\pm 0.1^\circ\text{C}$ Voltage and current inputs $\pm 0.05\%$ from range	
Measuring interval I (interval of data saving)	1, 5, 10, 15, 30, 60 minutes (adjustable)	
Memory	Size Capacity	6 x 256kB or 512kB EEPROM 32768 records by 10 minutes (~228 days) at 6 inputs 14 values in one record Values are in 16-bit resolution
Other	Backed up real time circuit	
Calibration	For analog inputs: values of actual calibration for measuring channels and sensores can be saved separately in station memory	
Supply voltage for electronic	12 V DC	
Consumption:	- operational (electronic only without sensors) 25 mA -in „sleeping“ mode (sensors with power supply from measuring module are disconnected) 0,2 mA	
Operating temperature	-40 °C ... + 60 °C	
Design of measuring part	Standard box on DIN trim – 6 modules, 9 modules	
METEOS6 box	Different according heating of sensors	
Dimensions (cm) IP code Supply voltage Battery	with heating 40x30x20 IP55 230V AC 18 (7,2) Ah	without heating 30x20x15 IP55 11 – 15V DC (solar cell) 7,2 Ah