METEOS7 Measuring Station

<u>Basic charakteristic</u>

▪ **This measuring station has been developed for measurements in meteorology. It works also under extreme climatic conditions.**

▪ **There is an extensive range of analog and logic inputs, supplemented with a data input.**

▪ **Various types of sensors and measurement systems with a data output can be connected to the station.**

▪ **The way of processing and evaluation of the measured meteorological elements meets the standards of the Czech Hydro meteorological 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**

Station box

Front panel with terminal blocks

Back panel with power supply components (front panel is tilted)

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 **- analog inputs** **- logical inputs** **- data inputs** **- diagnostic inputs**		10 12 1 1
Assortment of analog inputs	PT 100 PT 500 PT 1000 NI 100 NI 500 NI 1000	± 2,5 mV .. ±20 mV -60 mV..+100mV 0-20 mV 0-1 V 0-5 V 0-10 V 0-20 mA 4-20 mA
Logical inputs:		Input level 0 - 12 V 0 - 5 V
Diagnostic inputs		Battery voltage Minimal battery voltage
Communication	- RS232 duplex, 9600 ..115200 Bd, 8 data bit,1 start bit, without parity - Ethernet - GPRS modem (possibility of permanent operation or switch-on during selected intervals)	
Accuracy for Pt100 input		± 0.1°C
Accuracy for voltage and current inputs		± 0.05% from range
Memory	Size	2 MB EEPROM
	Capacity	24576 records by 10 minutes (~170 days) 30 values in one record Values are in 16-bit resolution
Calibration	For analog inputs: values of actual calibration for measuring channels and sensores can be saved separately in station memory	
Supply voltage for electronic		11.. 20 V DC
Consumption: **- operational (electronic only without sensors)** **- in „sleeping" mode (sensors with power supply from measuring module are disconnected)**		60 mA 49 mA
Other	Real time circuit backed up special battery	
Display		Actual date and time Battery voltage Presence of charging voltage and heating voltage Selected instantaneous measured values (configurable) Others (ID Station, IP address….)
IP code **METEOS 7 in box (40x30x20cm) with bushing)**		IP 55
Operating temperature		- 40 °C ... + 60 °C