Temperature data logger for 3x thermocouples, 1x external Pt1000 probe and 1x internal sensor, with built-in 4G modem

code: U0246G

Datalogger is designed to record temperature from three thermocouples, one Pt1000 probe and one internal temperature sensor. In case of exceeded set limits, SMS and JSON messages can be sent via 4G data connection. Measured values can be sent to the internet storage COMET Cloud, which is a complete monitoring, alarm and analysis system.

It is also possible to set the regular sending of JSON messages to COMET Database, the sending interval is adjustable. Alarms are also indicated locally by LED, LCD and acoustically by built-in beeper.
The recording is performed in a non-volatile electronic memory. The data can be transferred to a PC via included USB-C cable.

The device **includes Traceable calibration certificate** with declared metrological traceability of etalons is based on requirements of **EN ISO/IEC 17025 standard.**

Technical data

TEMPERATURE SENSOR - internal probe	
Measuring range	-20 to +60 °C
Accuracy	±0.6°C
Resolution	0.1 °C
Response time of temperature measurement (temperature step 20°C, air flow approximately 1m/s)	t63 < 6 minutes; t90 < 15 minutes
TEMPERATURE SENSOR - external probe Pt1000	
Measuring range	-200 to +260 °C
Accuracy	±0.2°C; ±0,2 % of the measurement value in a range of +100 to +260 °C
Resolution	0.1 °C
Response time t90 of temperature measurement (temperature step 20°C, air flow approximately 1m/s)	according to the connected probe
TEMPERATURE SENSOR - THERMOCOUPLE TYPE B, J, K, N, S, T	
Measuring range for thermocouple K and N	-200 to +1300 °C
Measuring range for thermocouple J	-200 to +750 °C
Measuring range for thermocouple S	0 to 1700 °C
Measuring range for thermocouple B	250 to 1800 °C, cold junction is not compensated
Measuring range for thermocouple T	-200 to +400 °C
Measuring range of DC voltage	-70 to +70 mV
Accuracy for types J, K, N, T	± (|0,3 % of the measurement value|+1,5 °C)
Accuracy for types B and S	± (|0,5 % of the measurement value| +5 °C)
Accuracy for DC voltage	± 70 µV
Resolution	0,1 °C

Response time	according to the connected thermocouple
GSM MODEM PARAMETERS	
LTE Cat 1	LTE FDD/GSM/GPRS/EDGE
Supported network types	GSM/GPRS/EDGE 900/1800 MHz LTE FDD B1/B3/B5/B7/B8/B20
GENERAL TECHNICAL DATA	
Operating temperature	-30 to +70 °C
Channels	3x thermocouple, 1x external Pt1000
Memory	500,000 values in noncyclic logging mode; 350,000 values in cyclic record mode
Recording interva	adjustable from 1 s to 24 h
Interval for measuring and evaluating alarms	adjustable 1 s, 10 s, 1 min
Recording mode	noncyclic - data logging stops after filling the memory cyclic - after filling memory oldest data is overwritten by new
Real time clock	year, leap year, month, day, hour, minute, second
Power	rechargeable Li-Ion battery A8200, 3.6V/5200mAh
Protection class	IP20
Dimensions	61 x 93 x 53 mm, with antenna 120 x 93 x 53 mm
Weight	approx. 270 g
Warranty	3 years