

PANEL THERMOMETER

type EMT-220



- for use with temperature sensors
 resistors: Pt100, Ni100
 thermocouples: J, K, N, T, S, R, B
- linearization of the sensor characteristics
- range overload and sensor fault indication
- two programmable multifunction alarms with relay outputs
- optional extension module: analog output or serial communication interface
- data logging software for PC: **Logger** and **Logger-9** (for EMT-220-RS-232 and EMT-220-RS-485)

EMT-220 is a programmable thermometer designed for use with a wide assortment of temperature sensors. Sensor type is configured by the user. Two independent relay outputs allow for alarm or simple control functions. This meter can be equipped with optional module galvanically separated from input circuit: analog output or serial communication interface. Windows® application program **Logger** allows for the visualization of the temperature read out on the screen of the monitor, printing graphs and saving to the file (EMT-220-RS-232 and EMT-220-RS-485). Program **Logger-9** enables the simultaneous visualization for a several (at most 9) of EMT-220-RS-485 thermometers connected to a common RS-485 bus. It is possible to download both applications from the web page www.czaki.pl.

TECHNICAL DATA

Sensor type, measuring range	according to the table
Resolution: thermocouples S, R, B	1°C
other sensors	0,1°C (T < 1000°C) 1°C (T > 999,9°C)
Accuracy (T _A = 23°C)	according to the table
Ambient temperature drift: thermocouples	± 0,015% / °C
thermoresistors	± 0,005% / °C
Accuracy of cold junction compensation	± 1,5°C
Pt100 and Ni100 bias current	0,2 mA
Pt100 and Ni100 connection	2 or 3 wires
Display	LED, height of digits 20 mm, red (green on demand)
Alarm outputs (2 independent)	SPDT relay contacts 5 A, 250 V AC / 24 V DC
Power supply	80 ÷ 250 V AC 50..60 Hz, 3 VA
Ambient temperature T _A	0...+50°C
Mounting window dimensions (height x width)	44 x 91 mm
Dimensions (height x width x depth) / weight	48 x 96 x 103 mm / 200 g
Additional accessories (1 of 2 options):	
analog output	0...10V, 0...20mA and 4...20mA
serial interface RS-232 or RS-485	2400 bit/s

Sensor type	Range [°C]	Accuracy *
Pt100	-200...660	±0,2°C / ±0,1%
Ni100	-60...180	±0,1°C / ±0,1%
B PtRh30-PtRh6	400...1800	±3,0°C / ±0,2%
R PtRh13-Pt	200...1600	±2,0°C / ±0,2%
S PtRh10-Pt	200...1600	±2,0°C / ±0,2%
N NiCrSi-NiSi	-100...1300	±0,8°C / ±0,1%
K NiCr-NiAl	-100...1200	±0,5°C / ±0,1%
J Fe-CuNi	-100...1000	±0,5°C / ±0,1%
T Cu-CuNi	-100...250	±1,0°C / ±0,2%

* greater of 2 values

ORDERING CODE

(1) (2)

EMT - 220 — —

(1) Additional accessories(1 of 2 options)

A
RS-232 or RS-485

analog output (0...20 mA, 4...20 mA and 0...10 V)
 serial communication interface

(2) LED colour, if other then red

green