

## PANEL THERMOMETER

### type EMT-200



- for use with a wide assortment of temperature sensors
- range overload and sensor fault indication
- two programmable multifunction alarms with relay outputs
- RS-232 or RS-485 communication interface galvanically separated from input circuit
- data logging software for PC: **Logger** and **Logger-9**
- configuration via front panel keyboard or interface
- access control function

The EMT-200 type is a microprocessor thermometer designed for installation in a control panel. It is used with a wide assortment of RTD and thermoelectric temperature sensors. It is equipped with two multifunction programmable alarm circuit to control output relays. The EMT-200 thermometer is easy to program. Menu driven operating commands are displayed on a dual 4-digit LED to allow easy setting of process parameters. This thermometer has a built-in serial communication interface which allows reading and programming of the process parameters by a computer. A printer with a serial input can be connected to the EMT-200 type thermometer directly. It has built in non-volatile memory for 300 measurement results. The access control function provides protection from un-authorized operators. 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. Program **Logger-9** enables the simultaneous visualization for several (at most 9) EMT-200-RS-485 thermometers connected to a common RS-485 bus. It is possible to order the CD-ROM with both applications for extra charge, or free of charge download from the web page [www.czaki.pl](http://www.czaki.pl).

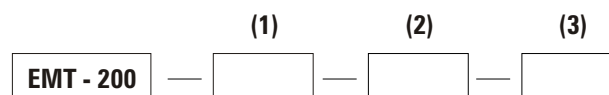
### TECHNICAL DATA

Sensor type, measuring range	according to the table
Resolution	0,1°C up to +400°C 1°C over +400°C
Accuracy ( $T_A = 23^\circ\text{C} \pm 5^\circ\text{C}$ )	$\pm (0,002 \times  T  + 0,3^\circ\text{C} + 1 \text{ digit})$ T - read temperature value
Pt100, Ni100 bias current	0,2 mA
Display	LED, height of digits 13 mm, red
RS-232 / RS-485 speed transmission	600, 1200, 2400, 4800, 9600 bps
Alarm outputs (2 independent)	SPDT relay contacts 5 A, 250 V AC / 24 V DC
Standard power supply	230 V AC +10% -15%, 50 Hz, 3 VA
Optional power supply	24 V AC, 24 V DC, 12 V DC, 110/115 V AC
Ambient temperature $T_A$	0°C... +45°C
Mounting window dimensions (height x width)	44 x 91 mm
Dimensions (height x width x depth) / weight	48 x 96 x 128 mm / 400 g

Sensor type	Range [°C]
<b>B</b> PtRh30-PtRh6	400...1800
<b>R</b> PtRh13-Pt	200...1600
<b>S</b> PtRh10-Pt	200...1600
<b>N</b> NiCrSi-NiSi	-100...1300
<b>K</b> NiCr-NiAl	-100...1200
<b>J</b> Fe-CuNi	-100...1000
<b>T</b> Cu-CuNi	-100...230
<b>Pt100<sup>(1)</sup></b>	-100...850
<b>Ni100<sup>(1)</sup></b>	-60...180

<sup>(1)</sup> 2 or 3 wire connection

### ORDERING CODE



- (1) Serial interface, if other then RS-232  
 (2) Power supply, if other then 230 V AC  
 (3) Additional accessories

**RS-485**  
**24VAC, 24VDC, 12VDC, 110/115VAC**  
**LOGGER** - CD-ROM with applications: Logger and Logger-9

**Example for order:** EMT-200-RS-485 panel thermometer for use with Pt100, Ni100 resistance sensors and thermocouples: T, J, K, N, S, R, B equipped with serial communication interface RS-485.