



Measuring and indication block is complex which includes measuring multi-channel transmitter TK-6M and touch operator panel with special software.

Block is designed for thermocouples (TC), resistance temperature detectors (RTD), instrument shunts and sensors with unified current output signals measuring, handling, registration, indication and transferring. Block indicates data on touch TFT screen as tables, charts, diagrams, symbolic circuits.

Block has RS-485 interface (Modbus RTU protocol) and 4 relay.

Setting up performs via special software

(is supplied with transmitter).

- Max count of measuring inputs – 16.
- Operator panel diagonal – 5,6", 7", 10" или 15".
- Measuring data and alarms archive.
- Archive max size – 32 Gb.
- Archive reading via USB-flash or RS-485 interface.
- Input and output circuits are galvanic isolated.
- 3- or 4-wire RTD connection.
- Cold junction temperature compensation:
 - external sensor connecting;
 - internal sensor;
 - receiving from external meter over RS-485 interface, Modbus RTU protocol.
- 4 NO relay.
- 2 galvanic isolated RS-485 interfaces, Modbus RTU protocol.
- Input types and count are defined by customer requirements.

SCOPE OF SUPPLY

- measuring multichannel device(s) **TK-6M**;
- touch operator panel.

SPECIFICATION

- Thermocouples K, L, S, B
- RTDs:
 - platinum ($W_{100}=1.3850$ and $W_{100}=1.3910$) Pt50, Pt100, Pt500
 - copper ($W_{100}=1.4260$ and $W_{100}=1.4280$) Cu50, Cu100
- Unified current input ranges, mA 0..5; 0..20; 4..20
- Instrumental shunt ranges, mV 0..90
- TC temperature measuring error, °C, up to:
 - K, L in -150..0°C range $\pm(0,25 \cdot 10^{-2} \cdot |t| + 0,5^*)$
 - K, L in 0..800 (1300)°C range $\pm(0,1 \cdot 10^{-2} \cdot |t| + 0,5^*)$
 - S 5,0*
 - B 7,0
- RTD temperature measuring absolute error, °C, up to
 $\pm(0,1 \cdot 10^{-2} \cdot (t+273) + 0,5)$
- Unified current signal measuring reduced error, %, up to $\pm 0,25$
- Constant current voltage measuring reduced error, %, up to $\pm 0,5$

- Baud rate, kbps 9,6; 19,2; 38,4; 57,6; 115,2

* - error increasing on 2,0 °C when internal sensor of cold junction temperature is used.

ADDITIONAL INFORMATION

- Operating temperature range +5°C ..+50°C
- Dust and moisture protection..... IP40
- Power supply (24±2) VDC
- Power consumption, VA, up to 8
- Overall dimensions (W×H×D), mm:
 - measuring transmitter TK-6M 119×62×250
 - operator panel with 7" screen..... 204×150×37
 - operator panel with 10" screen..... 310×230×54
 - operator panel with 15" screen..... 407×314×49

