M-602/602A *Programmable Resistance Decade*

- **Resistance range from 0.1Ω to 10 MΩ with accuracy 0.02 %**
- **Temperature coefficient < 25 ppm/°C**
- **Max. load 2W (120V or 0.6A)**
- **RTD (Pt, Ni) simulation with accuracy 0.2 °C**
- **2, 3, 4 – wire connection**
- **Power supplying from power line adaptor or from internal battery**
- **Interface RS - 232 (IEEE488 optionally)**
- **Table version (19“ module as option)**

M-602 resistance decade is determined for testing of ohmmeters and electronic units of temperature meters with resistance temperature sensor. The decade is especially suitable for automated testing of heat meters.
Thanks to good accuracy and remote control feature M-602 decade can be used in calibration laboratories, production lines, service centers and development departments. For use in industry is designed version in 19“ module with height 3HE.
Among advantages belongs features like simple control from the front panel, indication of set-up values on LCD display, resistance and temperature modes, battery or power line operation, remote control via RS-232 or IEEE488 bus.

MEATEST

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Technical data

Resistance range	:	10 Ω - 300 kΩ / 100 mΩ - 10 MΩ (version M-602A)
Temperature range for Pt sensors	:	-200.000 °C … 850.000 °C (-328 °F … 1562 °F)
Temperature range for Ni sensors	:	-60.000 °C … 300.000 °C (-76 °F … 572 °F)
Types of simulated sensors	:	Pt100 … Pt1000, Ni100 … Ni1000 (version M-602) Pt10 … Pt20000, Ni10 … Ni20000 (version M-602A)
Resolution	:	0.001 Ω až 1 kΩ) for M-602 version 0.00001 Ω až 0.1 kΩ) for M602A version 0.01 °C for Pt, Ni sensors
Temperature standards	:	IEC 751 (1,3850 for IPTS68) IEC 751 (1,3851 for ITS90) US (US/JIS) (1,3916) DIN 43760 (6180 for Ni sensors)
Temperature coefficient	:	< 25 ppm/ °C
Maximal dissipation power	:	2 W
Maximal current, voltage	:	0.6A or 120 Vdc / 50 Vac
Connection	:	2, 3, 4 wires
Period of battery operation	:	6 hours
Range of reference temperatures	:	+18 °C … +28 °C
Range of operating temperatures	:	+5 °C … +45 °C
Storing temperatures	:	-10 °C … +60 °C
Housing	:	metal
Dimensions	:	W 364 mm, H 111 mm, D 316 mm (without holder)
Weight	:	4.5 kg

Isolation resistance between signal outputs and housing : > 2 GΩ (at 500Vdc)

Resistance accuracy (M-602 version)

Range	Accuracy
10.000 Ω - 199.999 Ω	0.05 % + 15 mΩ
200.000 Ω - 9.999 kΩ	0.02 %
10.000 kΩ - 50.0 kΩ	0.05 %
50.1 kΩ - 100.0 kΩ	0.1 %
101 kΩ - 300 kΩ	0.5 %

Resistance accuracy (M602A version)

Range	Accuracy
0.1 Ω - 199.999 Ω	0.05 % + 15 mΩ
200.000 Ω - 2.00000 MΩ	0.02 %
2.0001 MΩ - 10.0000 MΩ	0.05 %

Pt sensor simulation accuracy

Range	Pt10-Pt200	Pt201 – Pt10000
-200.00 … -0.01 °C	0.2 °C	0.2 °C
0.00 … 850.00 °C	0.2 °C	0.2 °C

Ni sensor simulation accuracy

Range	Ni10-Ni200	Ni201 – Ni10000
-60.00 … -0.01 °C	0.2 °C	0.1 °C
0.00 … 300.00 °C	0.1 °C	0.1 °C

Content of delivery

M-602/602A Programmable Resistance Decade
Power line adaptor
RS-232 cable
Demo application program
Operation manual

Versions

Interface	M602-V1xxx - RS232 M602-V2xxx – IEEE488
Short/Open	M602-Vx0xx - without M602-Vx1xx – with Short/Open positions
Housing	M602-Vxx0x – table version M602-Vxx1x - module 19“, 3HE M602-Vxx2x – table version with holder
Power supplying	M602-Vxxx0 – power line adaptor M602-Vxxx1 – battery + power line adaptor