

RTD Simulator and Resistance Decades OCM-602 and OCM-602A



- ✓ Direct Resistance selection from 100 m Ω to 10 M Ω
- ✓ Resolution 0.00001 Ω
- ✓ Direct Temperature selection for Pt and Ni Sensors
- ✓ Resistor Accuracy ± 0.02 °C
- √ Temperature Coefficient < 25ppm/K
 </p>
- ✓ Power dissipation 2W, 120V, 0.6A
- ✓ Selection with Keyboard or RS 232 or IEEE488
- ✓ Low Resistance Simulation
- ✓ Calibration of Instruments, Controllers, Regulators...

OCM-602 and OCM.602A are high accuracy and high stability resistance decades. They are designed as a temperature simulator as well as programmable resistance decades.

In the temperature mode the instruments simulate RTD Sensors within a range from -200 °C to +850 °C. Thermometers Pt-10 to Pt-20000 and Ni-10 to Ni-20000 can be selected. The required temperature value is entered with the keyboard or via the data port. The corresponding resistance is available at 2, 3 or 4 output terminals.

In the variable resistance mode the instrument permits a direct selection of resistance in a range from 0.1 Ω to

10 M Ω . The resolution depends on the resistance value selected. The highest resolution is 0.00001Ω . The selected resistor is available at 2 or 4 output terminals.

A Soft Manager for Windows at a diskette is suitable for communication via RS232 or IEEE488 Data Bus. It permits the selection of the sensor type, adjusting of the temperature or the resistance from a PC or from a supervising controller. An LCD display informs about the selected parameters and the control status.

OCM-602 is supplied from internal rechargeable battery. The mains charger is enclosed to the shipment.

SPECIFICATIONS

Resistance Ranges: Model OCM-602: $10~\Omega$ - $300~k\Omega$ Model OCM-602A: $100~m\Omega$ - $10~M\Omega$

Max. Power Dissipation: 2W, 0.6°, 120VDC or 50VAC

Temperature Settings: Pt: -200.000 ... 850.000 °C (-328 ... 1562 °F)

Ni: -60.000 ... 300.000 °C (-76 ... 572 °F)

RTD Simulation: Pt-100 ... Pt-1000, Ni-100 ... Ni-1000 Model OC-602

Pt-10 ... Pt-20000, Ni-10 ... Ni-20000 Model OC-602A

Temperature Norms: PTS 68, IST 90

Pt - Sensors: DIN (1,385), US (1,392) Ni - Sensors: DIN 43760 (6 180)

Temperature Ranges: Reference Temperature: 18 ... 28 °C

Operation Temperature: 5 ... 40 °C Storing Temperature: -10 ... 50 °C

Tempco: < 25 ppm/ °C

Terminals: 2, 3 and 4 terminal outputs, gold coated

Entry: Keyboard, RS-232 or IEEE488

Supply: Internal rechargeable battery, 6h operation. Uninterrupted mains operation

with a Battery charger 100-240V/50-60 Hz enclosed

Cabinet: Aluminum cabinet 325 x 111 x 316 mm (W x H x D), weight 6,5 kg

OCM-602		
RANGE	ACCURACY (FROM VALUE)	
10 Ω - 200 Ω	0.05 % + 15 mΩ	
200 Ω - 10 kΩ	0.02 %	
10 kΩ - 50 kΩ	0.05 %	
50 kΩ - 100 kΩ	0.1 %	
100 kΩ - 300 kΩ	0.5 %	

OCM-602 A		
RANGE	ACCURACY (FROM VALUE)	
0.1 Ω - 200 Ω	$0.05~\% + 15~\text{m}\Omega$	
200 Ω - 2 ΜΩ	0.02 %	
2 ΜΩ - 10 ΜΩ	0.05 %	

Simulation Pt			
RANGE	Pt10 - Pt200	Pt201 - Pt10000	
-200 0 °C	0.02 °C	0.02 °C	
0 850 °C	0.03 °C	0.04 °C	

Simulation Ni			
RANGE	Ni10 - Ni200	Ni201 - Ni10000	
-60 0 °C	0.2 °C	0.1 °C	
0 300 °C	0.1 °C	0.1 °C	