

Process Calibrator OC-505

- ✓ Current Output 0/4 - 24mA, Source/Sink
- ✓ Voltage Output 0-24V
- ✓ mV Outputs 0-28mV and 0-560 mV
- ✓ DIN Thermocouples J, K, N, R, S, T, B, E
- ✓ RTD Sensors Ranges -200 ... 850°C
- ✓ Resistance Range up to 3kOhm
- ✓ Multimeter $\pm 2V$ to $\pm 200V$ DC and $\pm 100mA$
- ✓ Calibrates and measures simultaneously
- ✓ Steps, Ramps or direct value entry
- ✓ Datalogger Function

Model OC505 is a hand held Calibrator-Multimeter for generation of currents 0/4-24mA in Source or Sink Mode and Voltages 0-24VDC. External voltages $\pm 2V$, $\pm 20V$ and $\pm 200VDC$ (selected ranges or auto range) and currents up to $\pm 100mA$ can be measured simultaneously with the generated calibrating signals.

Other functions are the generation of mV-Signals, Simulation of DIN-Thermocouples, Generation of Resistances and Simulation of RTD Temperature Sensors. The measured voltage or current can be logged in free selectable time intervals. The graphics can be displayed at the LCD display or uploaded to the PC via an USB terminal.

mV Voltages 0-28mV or 0-560mV for calibration of strain gauges amplifiers, transmitters and small signal instruments. The output voltage can be resolved up to 0.001mV.

Thermocouples J, K, N, R, S, T, B, E are simulated across the entire DIN ranges. The temperature value is entered from the keyboard and shown at the Display. The automatic compensation of the junction can be switched off upon demand.

RTD Thermometers are simulated across the entire DIN range. The temperature value is entered from the keyboard and shown at the Display.

Ohm Source is a generator of resistance values up to 3000 Ohm. The resistance value can be entered from the keyboard and shown at the Display.

Datalogger function for the multimeter input signals has selectable storing time intervals. The data are stored in the display reading values.

The calibrator is powered from internal rechargeable battery which permits up to 8 hours uninterrupted operation with 20mA current output and the backlight switched off.

All ranges and functions can individually be calibrated from the keypad by utilizing internal calibration procedure.



SPECIFICATIONS

CALIBRATOR

DC-A	0/4 - 24 mA	Source or Sink, Resolution 0.001mA.
DC-V	0 - 24 V	Resolution 0.001V.
mV Outputs	0-28 mV 0-560mV	Resolution 0.001mV. Resolution 0.01mV.
Value Selection	Direct entry: Steps: Ramps:	From the keypad, 5 Digit resolution. selectable, e.g. 4-8-12-16-20-24 mA. Raising or falling ramps with selectable steps
Thermocouples	-200 °C up to max. °C:	J (870 °C), K (1370 °C), N (1300 °C), R (1760 °C), S (1760 °C), T (390 °C), B (1820 °C), E (1000 °C).
RTD Thermometer Resistors	Pt-100, 200, 500, 1000 45 Ohm to 3000 Ohm	-200 °C to 850 °C Resolution 0.5 Ohm
Accuracy	DC-V, DC-I Thermocouples RTD Ohm Source	± (0.05% from value + 0.05% from range) ± (0.05% from value + 1 °C) ± (0.05% from value + 0.5 °C) ± (0.05% from value + 0.5 Ohm)

MULTIMETER

2 V DC	Impedance: 1.38 M Ohm
20 V DC	Impedance: 593 k Ohm
200 V DC	Impedance: 563 k Ohm
100 mA DC	Impedance: 10 Ohm
Accuracy	± (0.05% from value + 0.05% from range)

The voltage can be measured in firm preselected ranges or in an automatic ranging mode.
The current can be measured in a firm range 100mA.

The Calibrator and the Multimeter operate simultaneously.

FURTHER SPECIFICATIONS

Temperature Coefficient
± 25ppm / K

Multimeter Sampling Time
2 samples per second.

Datalogger Storing Time
15 seconds up to 24 hours

Supply
Internal rechargeable Battery permits 8h uninterrupted operation with 20mA current output.

Terminals
4mm gold plated plugs and thermocouple Cu socket.

ACCESSORIES
Main Charger 95 - 240VAC
Cable Set red and black
Calibration Sheet
Owner's Manual
Carrying Case



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