AE Sensors B.V.
Postbus 9084
3301 AB Dordrecht
Tel.: +31 (0)78 6213152
Fax: +31 (0)78 6213146

orbit

Process Calibrator OC505

- √ Current Output 0-22mA, Source/Sink
- √ Voltage Output 0-25V
- √ mV Outputs 0-28mV and 0-560 mV
- √ DIN Thermocouples J, K, N, R, S, T, B, E
- √ RTD Simulator -200 … 850ºC
- √ Resistance Range up to 3kOhm
- √ Multimeter ±2V to ±200V DC and ±100mA
- √ Measurements of fast Transients
- √ Datalogger Function (Option)

Model OC505 is a hand-held Calibrator-Multimeter for the generation of currents 0-22mA in Source or Sink Mode and voltages 0-25VDC. External voltages ±2V, ±20V and ±200VDC (selected ranges or auto range) and currents of up to ±100mA can be measured simultaneously with the generated calibrating signals.

Further functions are the generation of mV-Signals, the simulation of DIN-Thermocouples, the generation of Resistances and RTD Temperature Sensors. Up to eight fast input signals -Transients- can be measured, memorized and shown on the display as graphics or uploaded to a PC.
Datalogger function for the calibrator output and the multimeter input signals can be activated. Both signals are stored as tables and shown as graphics at the LCD display. By using the supporting program the data can be transferred to the PC and shown as tables and graphics.

For fast checking or calibration of Process Transmitters the calibrator output can be used for the input, whereas the output from the Transmitter will be measured by the Multimeter. The results are shown on the display immediately.

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, and E are simulated across the entire DIN ranges. The output is via T/C plug with automatic compensation of the junction. The compensation can be switched-off.

RTD Thermometers Pt-100 … 1000 and Ni-1000 are simulated across the entire DIN range.

Resistance Source is a generator of resistance values from 45 to 3000 Ohm with 0.5Ohm resolution.

Datalogger: The generated calibrator signal and the measured signal at the multimeter input will be stored as tables with date and time added. The interval is selectable from 2 sec. to 24h. The data can be transferred to a PC, shown as tables and graphics and handled under Windows and Excel.

Transients: Eight memory slots are available for storing of fast signals at the multimeter input. Each transient can individually be shown at the LCD display, transferred to a PC, shown as tables and graphics and handled under Windows and Excel.

OC505 is powered from an internal rechargeable battery which permits operation of up to 8 hours.
All ranges and functions can be calibrated individually from the keypad.
The Terminals are 4mm gold plated plugs, a T/C connector is used for Thermocouple outputs.

AE Sensors B.V.
Postbus 9084
3301 AB Dordrecht
Tel.: +31 (0)78 6213152
Fax: +31 (0)78 6213146

SPECIFIFCATIONS - CALIBRATOR

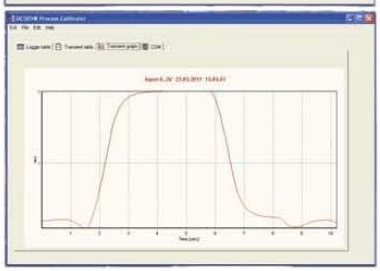
DC-A	0 - 22 mA	Source or Sink, Resolution 0.001mA.
DC-V	0 - 25 V	Resolution 0.001V.
mV Outputs	0-28 mV	Resolution 0.001mV.
	0-560mV	Resolution 0.01mV.
Value Selection	Direct entry:	From the keypad, 5-Digit resolution.
	Steps:	Freely selectable, rising or falling.
	Ramps:	Raising or falling ramps with 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	Pt-100, 200, 500, Pt-1000	-200 °C to 850 °C
	Ni-1000	-60 °C to 170 °C
Resistors	45 Ohm to 3000 Ohm	Resolution 0.5 Ohm
Accuracy	DC-V, DC-I	± (0.05% from value + 0.1% from range)
	Thermocouples	± (0.5 to 2 °C)
	RTD	± (0.1% from value + 0.5 °C)
	Ohm Source	± (0.1% from value + 0.5 Ohm)
Temp. Coefficient:	± 25ppm / K	

SPECIFIFCATIONS - 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	± (0.1% from Range + 1 Digit)	
Sampling time	2 samples / sec.	

DATALOGGER

The generated signals at the calibrator input and the signals at the multimeter input are stored as tables, with date and time added from internal RTC.A measuring Window and two Time Intervals can be set. When the input signal is within the window, the data are stored with one interval. Outside the window they are stored with the second interval. The data can be uploaded to a PC and shown as tables and graphics. The Soft Manager supports the communication under Windows.
Example: Calibrator output Pt-100 is applied to a Process Transmitter with 0-10V output connected to the Multimeter input.



TRANSIENTS

Fast signals at the Multimeter input can be stored in up to 8 memory slots with a sampling rate of 1ms. Each Transient contains 256 points and can be assigned to a time period selectable from 0.25s to 300s. The trigger level is programmable

OC505 with all accessories

ACCESSORIES
Mains Charger 95 - 240VAC
Two Signal Cables red and black
Calibration Sheet, Owner's Manual
Carrying Case.

AE Sensors BV
Jan Valsterweg 92
3315 LG Dordrecht
www.aesensors.nl