

- ✓ DC Voltage up to 100.0000 V, 20 ppm
- ✓ DC Current up to 50.0000 mA, 50 ppm
- ✓ Full Accuracy from 13°C to 33°C
- ✓ Resistance Range 10 Ω to 300 kΩ
- ✓ Thermocouples R, S, B, J, T, E, K, N
- ✓ RTD Sensors Pt, Ni (Option)
- ✓ Frequency 0.01 Hz to 15 kHz, 50 ppm
- ✓ Frequency Meter 0.01 Hz to 100 kHz.
- ✓ RS232, Option: USB, Ethernet, IEEE488
- ✓ Rapid Value change for dynamic applications



100 V - 50 mA

**OCM160** is a precision source of DC voltages and currents, Resistor, Frequencies, RTD Sensors and Thermocouples. Very high accuracy of 20 ppm/year at voltage ranges and 50 ppm at currents as well as wide range of reference temperature are the main features of OCM160.

OCM160 is suitable for calibration and test of electric and electronic instruments during design, production or external field usage. It also permits high accuracy

simulation of RTD Temperature Sensors and Thermocouples.

The display informs about generated or measured parameters, momentary accuracy, data ports and menu parameters.

The basic version has RS232 data port. GPIB, LAN and USB are optionally available

Internal calibration procedure permits recalibration from the front panel keyboard.

## SPECIFICATIONS

DC Voltage		
Range / Resolution	Accuracy	Max. Load
0.0000-300.0000 mV	20 ppm+3 μV	50 mA
0.00000-3.000000 V	20 ppm+20 μV	50 mA
0.00000-30.00000 V	20 ppm+200 μV	50 mA
0.0000-100.0000 V	20 ppm+1 mV	25 mA

DC Current		
Range / Resolution	Accuracy	Max. Load
0.0000-25.0000 mA	50 ppm+1 μA	100 V
0.0000-50.0000 mA	50 ppm+1 μA	30 V

Frequency Output	
Range / Resolution	Accuracy
10.0000 - 200.0000 mHz	50 ppm
200.001 - 2000.000 mHz	50 ppm
2.00001 - 20.00000 Hz	50 ppm
20.0001 - 200.0000 Hz	50 ppm
200.01 - 2000.00 Hz	50 ppm
2.0001 - 4.0000 kHz	100 ppm
4.001 - 10.000 kHz	600 ppm
10.01 - 15.00 kHz	1500 ppm
<b>Output:</b> Open Collector, max. load 30V/50mA or external Pull-Up resistor to +5V	

### Internal Frequency Meater

Frequency Range: 10 mHz to 100 kHz  
 Frequency Resolution: 5½ Digits  
 Accuracy: 50 ppm

# SIMULATION

## Thermocouples Simulation

Thermocouples	R, S, B, J, T, E, K, N
Resolution	0.01 °C
Accuracy	0.1 – 0.8 °C
Cold Junction	0.02 °C

## RTD Simulation (only with OCM160)

RTD Types	Pt-100 ... Pt-1000, Ni-100 ... Ni-1000
Resolution	0.01 °C
Accuracy	0.1 – 0.2 °C

## True Resistance Decade (only with OCM160)

Resistance Range	10 Ω - 300 kΩ, 2W or 4W termination
Resolution	up to 0.0001 Ω
Accuracy	0.02 %

## General Information

Reference Temp.	23 °C ± 10 °C
Operating Temp.	+5 °C ... 45 °C
Storage Temp.	-10 °C ... 55 °C
Remote Control	RS232. Option: IEEE488, LAN, USB
Power Supply	115/230V - 50/60 Hz, 60 VA max.
Dimensions	390 x 128 x 310 mm (W x H x D)
Weight	5.5 kg

## How To Order

Data Ports	OCM160-V1xxx	RS 232
	OCM160-V2xxx	RS232, LAN, USB, GPIB
Function	OCM160i-Vxxxx	U, I, T/C, Freq.
	OCM160-Vxxxx	U, I, T/C, Freq., RTD, R
Housing	OCM160-Vxx0x	Table Version
	OCM160-Vxx1x	19" Module 3HE
Option 91	Cold Junction Compensation for T/C	

### Voltage



### Temperature



### Menu



### Recalibration

