

## High Resistance Dekade OCM194



- $\checkmark$  Range 10 kΩ to 100 GΩ
- ✓ Operation Voltage up to 6kV
- ✓ Keyboard and RS 232 operation
- ✓ Option USB, IEEE488, Ethernet
- ✓ Switching under full Voltage load up to 6kV
- ✓ Accuracy 0.1 to 1%
- ✓ Function TIMER
- ✓ Short Current Measurements
- √ 19" Front Lens

**OCM194** is a high voltage resistance decade for calibration of Teraohmmeters, Megaohmmeters, Isolation Measuring Instruments and Instruments for verification of Revision Instruments with resistance ranges up to 100 G $\Omega$ . Excitation Voltage up to 6kV can be applied. The basic unit is the programmable high resistance decade with additional circuitry permitting measurements of DC voltage and short currents generated by the unit under test.

OCM194 permits also verification of Timer Function of Security Tester, Isolation Instruments, HIPT Tester and other within the resistance range from  $10k\Omega$  to  $100G\Omega$ . The output can be loaded between 65V and 6000V, depending on selected resistance values.

The decade can be operated from the front panel keyboard or from the data ports RS232. Additional ports GPIB, LAN and USB can be optionally ordered.

The high accuracy and the possibility of remote control permit applications in laboratories, automatic calibration lines, service departments and design center. 3HE module is optionally available for 19" rack.

The Orbit Controls CALIBER Software can be used for automated calibration.

## **Accuracy and Ranges**

Resistance Ranges	Accuracy *	Maximum Voltage**	Tests Voltage
Resistance Nanges	(%)	(V)	Accuracy
10.00 kΩ - 99.99 kΩ	0.1	65	0.5% + 2V
100.0 kΩ - 999.9 kΩ	0.1	316	0.5% + 2V
1.00 ΜΩ - 1.99 ΜΩ	0.1	1250	0.5% + 10V
2.00 MΩ - 9.999 MΩ	0.1	2500	0.5% + 10V
10.00ΜΩ - 99.99 ΜΩ	0.1	6000	0.5% + 10V
100.0 MΩ - 499.9 MΩ	0.2	6000	0.5% + 10V
$500.0 \ M\Omega - 999.9 \ MΩ$	0.2	6000	0.5% + 10V
1.000 GΩ - 9.999 GΩ	0.5	6000	0.5% + 10V
10.00 GΩ - 19.99 GΩ	1.0	6000	0.5% + 10V
20.00 GΩ - 100.0 GΩ***	1.0	6000	0.5% + 10V

<sup>\*</sup> Accuracy is valid for the Reference Values 23±2°C and <50% r.F.

<sup>\*\*</sup> Maximum Test Voltage applied is 5% above the specified values.

<sup>\*\*\*</sup> Full accuracy is achieved 1 minute after applying the test voltage.

Function SHORT Short Current Measurement

Current Range: 0.000 - 10.000 mADC

Input Impedance:  $100 \Omega \pm 10\%$ Accuracy:  $0.2\% + 25 \mu A$ 

**Test Voltage Voltmeter** 

Accuracy:

integrated in the Display, Resolution 3 Digits  $10.00 \text{ k}\Omega$  to  $999.9 \text{ k}\Omega$ : 0.5% + 2V  $1.000 \text{ M}\Omega$  to  $100.0 \text{ G}\Omega$ : 0.5% + 15V

**General Specifications** 

Warm-up time: 15 minutes

Reference Values: Temperature 23 ± 2°C, relative humidity < 50%

Temperature Coefficient:

**Humidity Coefficient:** 

13°C - 33°C: Correction 0.1x specified accuracy at ref. temperature /°C Additional uncertainty due to humidity coefficient in range 50 to 70 % RH:

0.02 x specified accuracy / % RH for range 100.0 M $\Omega$  to 9.99 G $\Omega$  0.02 x specified accuracy / % RH for range 10.0 G $\Omega$  to 100.0 G $\Omega$ 

Working Temperature:  $23 \pm 10^{\circ}$ C @ r.F. < 70%

Storage Temperature: -10 °C to +55 °C Supply: 115/230V - 50/60Hz

Dimensions: 390 x 128 x 310mm (B x H x T)

Weight: 4.5kg



## **Ordering Information:**

<u>Data Port:</u> <u>Case</u>:

 OCM194-V1xxx
 RS232
 OCM194-Vxx0x
 Table Version

 OCM194-V2xxx
 RS232, USB, LAN, GPIB
 OCM194-Vxx1x
 19", 3HE

**ORBIT CONTROLS AG** 

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