M 194

High Resistance Decade



HIGHLIGHTS

- Resistance range $10.00 \text{ k}\Omega$ $100.0 \text{ G}\Omega$
- Resistance accuracy 0.1 to 1 %
- Operating voltage to 6 kVDC
- Short current mA meter
- Hot switching
- Timing function
- RS232 (optionally USB, IEEE488, Ethernet)

DESCRIPTION

M194 High Resistance Decade is based on M6xx Series Real-Resistance Programmable Decades, providing cutting-edge performance, user-friendly calibration of resistance ranges as well as test meter ranges, timer and short current testing of UUTs. Main feature of M194 is adjustable high resistance decade in continuous range from 10 k Ω to 100 G Ω with 4 digit resolution. Designed for maximum operating voltages of up to 6 kVDC this decade is great for calibration of meggers, megaohmmeters and insulation testers. Accuracy from 0.1%.

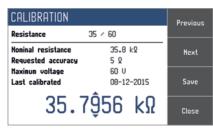
Full remote control and automated calibration support is a standard for all Meatest instruments. On top of that, M194 comes with 4 interfaces (RS232, USB, LAN and GPIB) to match your system more easily.

MAIN DISPLAY

Resistance

RESISTANCE 16:41:55 ▼GND OFF 10.00 GΩ Recuracy Max Voltage Test Voltage Test Voltage Test Voltage

Recalibration



SPECIFICATION

Accuracy & limits

Resistance range	Accuracy*	Maximum DC test voltage**	Test voltage accuracy
10.00 kΩ-99.99 kΩ	0.1 %	65 V	0.5 % + 2 V
100.0 kΩ-999.9 kΩ	0.1 %	315 V	0.5 % + 2 V
1.00 ΜΩ-1.99 ΜΩ	0.1 %	1 250 V	0.5 % + 10 V
2.00 ΜΩ-9.999 ΜΩ	0.1 %	2 500 V	0.5 % + 10 V
10.00 ΜΩ-99.99 ΜΩ	0.1 %	6 000 V	0.5 % + 10 V
100.0 ΜΩ-999.9 ΜΩ	0.2 %	6 000 V	0.5 % + 10 V
1.000 GΩ-9.999 GΩ	0.5 %	6 000 V	0.5 % + 10 V
10.00 GΩ-100.0 GΩ***	1.0 %	6 000 V	0.5 % + 10 V

^{*} Accuracy is valid within reference temperature range 23 ± 2 °C with RH < 50%. ** Maximum measured DC test voltage is 5% over the specified range. *** 1 minute settling time for full accuracy.

SHORT function (short current testing)	Current range: Input resistance: Current meter accuracy:	0.00-10.00 mA DC 100 Ω nom. 0.2 % + 25 μA
GENERAL DATA	Reference temperature: Operating temperature: Storage temperatures: Temperature coefficient: Reference humidity: Humidity coefficient: Terminals: Remote control: Dimensions: Power supply:	2125 °C 540 °C -10 °C50 °C 10 % of specification per °C outside the reference temp. range < 70 % RH, < 50 % RH above 10 G Ω 2 % of specification per % RH, 5 % above 10 G Ω Gold plated terminals 4 mm RS232 interface (optionally USB, LAN, IEEE488) 390 x 128 x 425 mm (W, H, D), 4.5 kg 115/230 V, 50/60 Hz
Ordering codes	Bus	M194-V1xxx - RS232 M194-V2xxx - RS232, USB, LAN, GPIB
	Housing	M194-Vxx0x - table version M194-Vxx1x - module 19", 3HE