CROPICO MTS CE

Milliohmmeter 4 Terminal Test Standards

The Milliohmmeter Test Standards are designed for the simple and easy calibration of low resistance ohmmeters and Kelvin/Thomson bridges. The true four terminal resistance values are switch selected and provision is made for + and - full scale values. A four terminal zero value may also be selected, thus making zero and full scale calibration of instruments simplicity itself. Two models are available, the MTS1A which has 11 values from $1m\Omega$ to $100~k\Omega$ and the MTS2 which has 10 values from $400~\mu\Omega$ to $400~k\Omega$, making it ideally suited for the calibration of digital instruments with a long scale length of 4000~or~6000~count.

The Test Standards are housed in a rugged bench portable aluminium case with tilt handle. The internal standards are manufactured from premium quality resistance wire with low temperature and load coefficient. For the selection of the standards, a special switch of our own construction is used ensuring a long and trouble free operating life. The units are supplied complete with a calibration certificate.



True 4 Terminal Standards

Switch Selectable Values

Polarity Reversal Switch

Four Terminal Zero

High Current Capability

Two Models Available

MTS1/A

Resistance Value (Ω)	Uncertainty of adjustment at 20°C	Dissipated Max Watts	Current Max A	Typical Temp. Coeff. 15 to 20°C
100 kΩ	±0.01%	0.1	1 mA	<10 ppm
10 kΩ	±0.01%	0.1	3 mA	<10 ppm
1 kΩ	±0.01%	0.6	25 mA	<10 ppm
100 Ω	±0.01%	0.6	75 mA	<10 ppm
19 Ω	±0.01%	0.43	150 mA	<10 ppm
10 Ω	±0.01%	0.45	212 mA	<10 ppm
1.9 Ω	±0.01%	0.475	500 mA	<10 ppm
1 Ω	±0.01%	0.56	750 mA	<10 ppm
100 mΩ	±0.01%	0.625	2.5 A	<10 ppm
10 mΩ	$\pm 0.05\%$	0.25	5 A	<10 ppm
1 mΩ	±0.05%	0.1	10 A	<10 ppm

MTS2

Resistance Value (Ω)	Uncertainty of adjustment at 20°C	Dissipated Max Watts	Current Max A	Typical Temp. Coeff. 15 to 20°C
400 kΩ	±0.01%	0.1	0.45 mA	<10 ppm
$40~\mathrm{k}\Omega$	±0.01%	0.1	1.5 mA	<10 ppm
$4~\mathrm{k}\Omega$	±0.01%	0.1	5 mA	<10 ppm
$400~\Omega$	±0.01%	0.1	15 mA	<10 ppm
$40~\Omega$	±0.01%	0.1	50 mA	<10 ppm
4 Ω	±0.01%	0.1	150 mA	<10 ppm
$400~\mathrm{m}\Omega$	±0.01%	0.1	500 mA	<10 ppm
$40~\mathrm{m}\Omega$	±0.01%	0.1	1.5 A	<10 ppm
$4~\mathrm{m}\Omega$	±0.1%	0.4	10 A	<10 ppm
400 μ Ω	±0.1%	0.04	10 A	<10 ppm

Terminals

4 mm binding posts will accept spade tags and 4 mm banana plugs. Low thermal emf types are used for the potential connections.

Working Temperature

5 ... 40°C

Storage Temperature

5 ... +50°C

Switches

Special combination switch with low thermal gold/silver contacts for the potential selection and low resistance contacts for the current selection.

Dimensions

215 x 88 x 250 mm (W D H) 1/2 19" Rack 2U High 467 x 374 x 216 mm packed in card carton Weight

2.8 kg approx. (3.5 kg packed in card carton).

MTS1A: 1 m Ω to 100k Ω & MTS2: 400 $\mu\Omega$ to 400 k Ω

Supplied Complete with Calibration Certificate