

# MTS

## Easy to use milliohmmeter 4 terminal test standards with + and - full scale values

The MTS range of milliohmmeter test standards are designed for the simple and easy calibration of low resistance ohmmeters and Kelvin/Thomson bridges. The four terminal resistance values are switch selected and provision is made + and - full scale values. A four terminal zero value may also be selected, thus making zero and full scale calibration of instruments simplicity itself.

Three models are available, the MTS1A which has 11 values from  $1\text{m}\Omega$  to  $100\text{k}\Omega$  and the MTS2 has 10 values from  $400\mu\Omega$  to  $400\text{k}\Omega$ , making it ideally suited for the calibration of digital instruments with a long scale length of 4,000 or 6,000 count. The MTS3 is designed for easy calibration for units such as the Cropico DO7010, where a pulsed current is produced. 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 coefficients. The units are supplied complete with a calibration certificate.

### Key Features

- True 4 terminal standards
- Switch selectable values
- Polarity reversal switch
- Four terminal zero
- Three models available:  
MTS1A:  $1\text{m}\Omega$  to  $100\text{k}\Omega$   
MTS2:  $400\mu\Omega$  to  $400\text{k}\Omega$   
MTS3:  $5\text{m}\Omega$  to  $5\Omega$
- Supplied complete with calibration certificate

### Ideal For

- Service/calibration departments



## Technical Specifications

### MTS1A

Resistance Value	Uncertainty of Adjustment at 20°C	Power Max (W)	Current Max (A)	Typical Temperature Coefficient
100kΩ	±0.01%	0.1	1mA	<10ppm/°C
10kΩ	±0.01%	0.1	3mA	<10ppm/°C
1kΩ	±0.01%	0.6	25mA	<10ppm/°C
100Ω	±0.01%	0.6	75mA	<10ppm/°C
19Ω	±0.01%	0.43	150mA	<10ppm/°C
10Ω	±0.01%	0.45	212mA	<10ppm/°C
1.9Ω	±0.01%	0.475	500mA	<10ppm/°C
1Ω	±0.01%	0.56	750mA	<10ppm/°C
100mΩ	±0.01%	0.625	2.5A	<10ppm/°C
10mΩ	±0.05%	0.25	5A	<10ppm/°C
1mΩ	±0.05%	0.1	10A	<10ppm/°C

### MTS2

Resistance Value	Uncertainty of Adjustment at 20°C	Power Max (W)	Current Max (A)	Typical Temperature Coefficient
400kΩ	±0.01%	0.1	0.5mA	<10ppm/°C
40kΩ	±0.01%	0.1	1.5mA	<10ppm/°C
4kΩ	±0.01%	0.1	5mA	<10ppm/°C
400Ω	±0.01%	0.1	15mA	<10ppm/°C
40Ω	±0.01%	0.1	50mA	<10ppm/°C
4Ω	±0.01%	0.1	150mA	<10ppm/°C
400mΩ	±0.01%	0.1	500mA	<10ppm/°C
40mΩ	±0.01%	0.1	1.5A	<10ppm/°C
4mΩ	±0.1%	0.4	10A	<10ppm/°C
400μΩ	±0.1%	0.04	10A	<10ppm/°C

### MTS3

Resistance Value	Uncertainty of Adjustment at 20°C	Current max 2 seconds (A)	Typical Temperature Coefficient
5Ω	±0.05%	1A	<10ppm
500mΩ	±0.05%	10A	<10ppm
50mΩ	±0.05%	10A	<10ppm
5mΩ	±0.1%	10A	<10ppm

The MTS3 is not intended to be used for measurements where a continuous current is used

#### Terminal

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

#### Working Temperature

+5 to +40°C

#### Storage Temperature

+5 to +50°C

#### Switches

Combination switch with low thermal contacts for the potential selection and low resistance contacts for the current selection



Thank you for reading this data sheet.

For pricing or for further information, please contact us at our UK Office, using the details below.



**UK Office**

**Keison Products,**

**P.O. Box 2124, Chelmsford, Essex, CM1 3UP, England.**

**Tel: +44 (0)330 088 0560**

**Fax: +44 (0)1245 808399**

**Email: [sales@keison.co.uk](mailto:sales@keison.co.uk)**

Please note - Product designs and specifications are subject to change without notice. The user is responsible for determining the suitability of this product.