MH-10 Microhmmeter



Description

The MH-10 digital microhmmeter is a portable instrument controlled by a microprocessor and it is used as a high precision reading unit that can measure very low resistances of circuit breaker contacts, keys, conductive bars, transformer coils and motors, weld points, etc., with test currents ranging from 1 mA to 10 A.

The MH-10 microhmmeter operates with the 4-arm method (Kelvin bridge), so that it avoids the effects of resistance on injection cables. The test current can be adjusted by the operator and the values are obtained by comparing them with highly stable internal patterns. The results will be displayed on an alphanumerical display that is very easy to read.

Features

Power supply characteristics Sealed rechargeable battery 12 V - 7 A · h Built-in charger Yes Mains power supply Yes Fuse protection Schurter, type SPT 5 x 20 (Time-lag) 5 A / 250 Vac High circuit-breaking capacity Measurement features Power of the stance measurement ranges 0-2 000 μΩ > 10 A 0-20 μΩ > 10 A 0-20 μΩ > 10 A 0-20 μΩ > 10 μΩ A 0-20 μΩ A 1 μΩ A 10 μΩ A 0-20 μΩ A 10 μΩ A 10 μΩ A 0-20 μΩ A 10 μΩ		
Built-in charger Yes Mains power supply Yes Fuse protection Schurter, type SPT 5 x 20 (Time-lag) 5 A / 250 Vac High circuit-breaking capacity Measurement features Resistance measurement ranges $0.200 \mu\Omega > 10 A$ $0.20 m\Omega > 10 A$ $0.20 m\Omega > 10 A$ $0.20 m\Omega > 10 M$ $0.20 m$	Power supply characteristics	
Mains power supplyYesFuse protectionSchurter, type SPT 5 x 20 (Time-lag) 5 A / 250 Vac High circuit-breaking capacityMeasurement features $0-2\ 000\ \mu\Omega$ > 10 A $0-200\ m\Omega$ > 100 mA $0-200\ m\Omega$ > 10 mA $0-$	Sealed rechargeable battery	12 V - 7 A·h
Fuse protection Schurter, type SPT 5 x 20 (Time-lag) 5 A / 250 Vac High circuit-breaking capacity Measurement features Resistance measurement ranges $ \begin{array}{cccccccccccccccccccccccccccccccccccc$	Built-in charger	Yes
Fuse protectionHigh circuit-breaking capacityMeasurement features0-2 000 $\mu\Omega$ > 10 A 0-20 m Ω > 10 A 0-200 m Ω > 10 A 0-200 m Ω > 10 mA 0-200 m Ω > 100 mA 0-200 Ω > 100 mA 0-200 Ω > 1 mAResolution1 $\mu\Omega$ for 10 ATest voltageUp to 10 Cdc for 1 A open circuitBasic accuracy \pm 0.2 % of the value measured \pm 2 digitsDisplayAlphanumerical, with 4 ½ digitsCommunicationsSerial data outputRS.232 at 4 800 bpsBuild featuresDimensions378 x 308 x 175Weight8.8 kg (including accessories)Degree of protectionIP 54 with the cover closedAmbient conditionsOperating temperature-5 +50 °CStorage temperature-25 +65 °CRelative humidity95 % (non-condensing)Maximum operation height3 000 m above sea levelStandards	Mains power supply	Yes
Resistance measurement ranges	Fuse protection	
Resistance measurement ranges	Measurement features	
Test voltage Basic accuracy ± 0.2 % of the value measured ± 2 digits Display Alphanumerical, with 4 ½ digits Communications Serial data output RS.232 at 4 800 bps Build features Dimensions 378 x 308 x 175 Weight 8.8 kg (including accessories) Degree of protection IP 54 with the cover closed Ambient conditions Operating temperature -5 +50 °C Storage temperature -25 +65 °C Relative humidity 95 % (non-condensing) Maximum operation height 3 000 m above sea level Standards	Resistance measurement ranges	$0-20 \text{ m}\Omega > 10 \text{ A}$ $0-200 \text{ m}\Omega > 1 \text{ A}$ $0-2 \text{ 000 m}\Omega > 100 \text{ mA}$ $0-20 \Omega > 10 \text{ mA}$
Basic accuracy ± 0.2 % of the value measured ± 2 digits Display Alphanumerical, with 4 ½ digits Communications Serial data output RS.232 at 4 800 bps Build features Dimensions 378 x 308 x 175 Weight 8.8 kg (including accessories) Degree of protection IP 54 with the cover closed Ambient conditions Operating temperature -5 +50 °C Storage temperature -25 +65 °C Relative humidity 95 % (non-condensing) Maximum operation height 3 000 m above sea level Standards	Resolution	1 μ Ω for 10 A
Display Alphanumerical, with 4 ½ digits Communications Serial data output RS.232 at 4 800 bps Build features Dimensions 378 x 308 x 175 Weight 8.8 kg (including accessories) Degree of protection IP 54 with the cover closed Ambient conditions Operating temperature -5 +50 °C Storage temperature -25 +65 °C Relative humidity 95 % (non-condensing) Maximum operation height 3 000 m above sea level Standards	Test voltage	Up to 10 Cdc for 1 A open circuit
Communications Serial data output RS.232 at 4 800 bps Build features Dimensions 378 x 308 x 175 Weight 8.8 kg (including accessories) Degree of protection IP 54 with the cover closed Ambient conditions Operating temperature -5 +50 °C Storage temperature -25 +65 °C Relative humidity 95 % (non-condensing) Maximum operation height 3 000 m above sea level Standards	Basic accuracy	± 0.2 % of the value measured ± 2 digits
Serial data output Build features Dimensions 378 x 308 x 175 Weight 8.8 kg (including accessories) Degree of protection IP 54 with the cover closed Ambient conditions Operating temperature -5 +50 °C Storage temperature -25 +65 °C Relative humidity 95 % (non-condensing) Maximum operation height 3 000 m above sea level Standards	Display	Alphanumerical, with 4 1/2 digits
Build features Dimensions 378 x 308 x 175 Weight 8.8 kg (including accessories) Degree of protection IP 54 with the cover closed Ambient conditions Operating temperature -5 +50 °C Storage temperature -25 +65 °C Relative humidity 95 % (non-condensing) Maximum operation height 3 000 m above sea level Standards	Communications	
Dimensions 378 x 308 x 175 Weight 8.8 kg (including accessories) Degree of protection IP 54 with the cover closed Ambient conditions Operating temperature -5 +50 °C Storage temperature -25 +65 °C Relative humidity 95 % (non-condensing) Maximum operation height 3 000 m above sea level Standards	Serial data output	RS.232 at 4 800 bps
Weight 8.8 kg (including accessories) Degree of protection IP 54 with the cover closed Ambient conditions Operating temperature -5 +50 °C Storage temperature -25 +65 °C Relative humidity 95 % (non-condensing) Maximum operation height 3 000 m above sea level Standards	Build features	
Degree of protection IP 54 with the cover closed Ambient conditions Operating temperature -5 +50 °C Storage temperature -25 +65 °C Relative humidity 95 % (non-condensing) Maximum operation height 3 000 m above sea level Standards	Dimensions	378 x 308 x 175
Ambient conditions Operating temperature -5 +50 °C Storage temperature -25 +65 °C Relative humidity 95 % (non-condensing) Maximum operation height 3 000 m above sea level Standards	Weight	8.8 kg (including accessories)
Operating temperature -5 +50 °C Storage temperature -25 +65 °C Relative humidity 95 % (non-condensing) Maximum operation height 3 000 m above sea level Standards	Degree of protection	IP 54 with the cover closed
Storage temperature -25 +65 °C Relative humidity 95 % (non-condensing) Maximum operation height 3 000 m above sea level Standards	Ambient conditions	
Relative humidity 95 % (non-condensing) Maximum operation height 3 000 m above sea level Standards	Operating temperature	-5 +50 °C
Maximum operation height 3 000 m above sea level Standards	Storage temperature	-25 +65 °C
Standards	Relative humidity	95 % (non-condensing)
	Maximum operation height	3 000 m above sea level
IEC 61010-1/990, IEC 61010-1/992 amendment 2, IEC 61326-1, IEC 1000-4-2	Standards	

References

Description	Туре	Code
Microhmmeter (Thomson bridge)	MH-10	P60711



MH-100e

Digital microhmmeter up to 100 A



Description

The **MH-100e** digital microhmmeter is a portable instrument controlled by a microprocessor and it is used as a high precision reading unit that can measure very low resistances of circuit breaker contacts, keys, conductive bars, transformer coils and motors, weld points, etc., with test currents ranging from 1 mA to 100 A.

The MH-100e microhmmeter operates with the 4-arm method, so that it avoids the effects of resistance on injection cables. The test current can be adjusted by the operator and the values are obtained by comparing them with highly stable internal patterns. The results will be displayed on an alphanumerical display that is very easy to read.

Features

Power supply characteristics	
Power Supply	Network 100 - 130 V o 220-240 V
Internal batery	Built-in. Rechargeable (for measurements with test current of up to 10 A)
Measurement features	
Test current	1 mA, 10 mA, 100 mA, 1 A, 10 A, 100 A. Each current can be adjusted between 0 and 100% of its nominal value
Resistance measurement ranges	0-2000 $\mu\Omega$ to 100 A 0-20 $m\Omega$ to 10 A 0-200 $m\Omega$ to 1 A 0-200 $m\Omega$ to 1 A 0-2000 $m\Omega$ to 100 mA 0-20 Ω to 10 mA 0-200 Ω to 1 mA
Resolution	$0.1~\mu\Omega$ to $100~A$ $1~\mu\Omega$ to $10~A$ $1~\mu\Omega$ to $10~A$ $10~\mu\Omega$ to $1~A$ $100~\mu\Omega$ to $100~mA$ $1~m\Omega$ to $10~mA$ $10~m\Omega$ to $1~mA$
Test voltage	Up to 10 Vdc (open circuit) to 1A
Basic accuracy	R < 0.5 m : \pm (0.5% of the mean value) R > 0.5 m : \pm (0.20% of the mean value)
Printer	No
Communications	
Serial data output	RS-232 at 4800 bps
Build features	
Dimensions	502 x 394 x 190 mm
Weight	Approximately 14 kg
Protection degree	IP 54 with the cover closed
Ambient conditions	
Operating temperature	-5 +50 °C
Storage temperature	-25 +65 °C
Relative humidity	95 % (non-condensing)
Maximum operation height	3 000 m above sea level
Standards	
IEC 61010 : 1990, IEC 61010-1 : 1992	

References

Description	Туре	Code
Digital microhmmeter up to 100 A	MH-100e	P60713

