

Meghohmmeter Models 1030, 1040 and 1045

Description

- ✗ Test voltage combinations 250V, 500V and 1000V
- ✗ Insulation measurements to 200M ohm
- ✗ Automatic discharge for operator safety
- ✗ Multi-line 4000 count backlit digital display with analog bargraph
- ✗ Resistance, 200mA continuity and alarm functions
- ✗ Timer function for easy DAR and PI measurements
- ✗ Over-molded slip-proof holster for rugged field use
- ✗ IEC 1010, 600V Cat.III



	Model 1030	Model 1040	Model 1045
Insulation Test			
Test Voltage	250V, 500V	500V, 1000V	250V, 500V, 1000V
Range	250V: 50k-2000MΩ 500V: 100k-2000MΩ	500:100k-2000MΩ 1000V: 200k-2000MΩ	250V: 50k-2000MΩ 500V: 100k-2000MΩ 1000V: 200k-2000Ω
Short Circuit Current	5mA	5mA	5mA
Accuracy	3% ± 2ct	3% ± 2ct	3% ± 2ct
Automatic Discharge	Yes	Yes	Yes
Continuity			
Range	250V: 0.00-20.00Ω	250:100k-2000mΩ	250V: 50k-2000mΩ
Short Circuit Current	>20 mA	>200 mA	>200 mA
Accuracy	3% ± 1ct	3% ± 1ct	3% ± 1ct
Automatic Discharge	Yes	Yes	Yes
Resistance			
Range	-	0.0-400kΩ	0.0-400kΩ
Open Voltage	-	7-9V	7-9V
Accuracy	-	3% ± 1ct	3% ± 1ct
Voltage Test			
Voltage Range	0-800V AC/DC	0-600V AC/DC	0-600V AC/DC
Voltage Warning Ind.	>25V	>25V	>25V
Accuracy	+3%	+3%	+3%
Test Inhibition	Yes >25V	Yes >25V	Yes >25V
Current Measurement			
Range	10mA-200mA	10mA-200mA	10mA-200mA
Display			
Display Size	3"x3" (54.3mmx73mm)	3"x3" (54.3mmx73mm)	3"x3" (54.3mmx73mm)
Digital Display	4000 Count	4000 Count	4000 Count
Analog Bargraph	34 segments	34 segments	34 segments
Backlight	-	Blue Electroluminescent	Blue Electroluminescent
General Specifications			
Power Supply	6x1.5V AA (NEDA 15A)	6x1.5V AA (NEDA 15A)	6x1.5V AA (NEDA 15A)
Dimensions(LxHxW)	8.31"x4.26"x2.36" (211x108x60mm)	8.31"x4.26"x2.36" (211x108x60mm)	8.31"x4.26"x2.36" (211x108x60mm)
Weight	29.05oz (830g)	29.05oz (830g)	29.05oz (830g)
Temperature Range	-10 ^o to 131 ^o F (-10 ^o to + 55 ^o C)	-10 ^o to 131 ^o F (-10 ^o to + 55 ^o C)	-10 ^o to 131 ^o F (-10 ^o to + 55 ^o C)
Protection Index (IP)	IP54 (NEMA 3)	IP54 (NEMA 3)	IP54 (NEMA 3)
Patent Pending	Yes	Yes	Yes
Safety			
IEC 1010-1 (EN61030-1)	600V, Cat.III	600V, Cat.III	600V, Cat.III
EMC (EN50081-1, EN50082-1)	Yes	Yes	Yes
UL, CSA, VDE, GS	Pending	Pending	Pending
CE Mark	Yes	Yes	Yes
Insulation Test Compliance			
IEC61557	Yes	Yes	Yes
VDE 0413	Yes	Yes	Yes
To Order			
Model 1030 Cat#2116.89	(Digital with Analog Bargraph, 250V, 500V)		\$389.00
Model 1040 Cat#2116.92	(Digital with Analog Bargraph and Alarm, 500V 1000V)		\$459.00
Model 1045 Cat#2116.93	(Digital with Analog Bargraph, Alarm and Timer, 250V, 500V, 1000V)		\$529.00

Accessories include an optional switched Test Probe which may be fitted for all measurements. The probe remotely acts as a test button. The Remote Test Probe also incorporates a light to brighten dark testing areas. An AC current probe may be used with megohmmeters. These current probes enable RMS current load measurements and leakage measurements from 10mA to 200mA. Please Call for this and other optional accessories.



5000 V Meghommeter Model 5100/5110

Description

Megohmmeter Models 5100 and 5110 perform high resistance tests in medium to high voltages to 5000 V DC, with direct high resistance readings up to 3,000,000MΩ. They are designed for use on transformers, motors, cables, generators, insulators and wiring installations. Rugged safety yellow case is weatherproof for field, utility, and industrial use.



Specifications

Model	Model 5100	Model 5110
Test Voltage	500, 1000, 2500, 5000V	500, 1000, 2500, 5000V
Range	30 to 30,000 MΩ 3 to 3000GΩ	Operating Range: 3 to 3000MΩ 3 to 3000GΩ Measurement Range: 30 to 3000MΩ 3 to 3000GΩ
Resistance Range	10 to 30,000 kΩ Accuracy:5% reading	10 to 30,000 kΩ Accuracy:5% reading
Voltage Test	0 to 600 V AC Accuracy:3% FS	0 to 600 V AC Accuracy: 3% FS
Power Supply	Rechargeable 12 V NiCad battery, or AC supply, 110/220V, 47 to 450Hz AC	
Scale	Two overlapping scales, 4.7 (119mm) for each range	Color-coded scales:Red, low insulation;Orange, average insulation;Green, high insulation
Dimensions	9.8 x 10.2 x 15.4"(250 x 260 x 390 mm)	
Weight	14.8 lbs (6.7kg)	
To Order	Model 5100 includes user manual, set of three leads, hex key, battery, and AC line cord Cat#1396.07 \$3249.00 Model 5110 includes user manual, set of three leads, hex key, battery, and AC line cord Cat#1396.08 \$3795.00	

500 V Megommeter Model 1210 1000 V Megommeter Model 1250

500V Megohmmeter Model 1210N (not pictured)

The compact Megohmmeter Model 1210N performs insulation and resistance measurement tests at 500 V DC in the most demanding environments. The Model 1210N features a die cast aluminum case in safety yellow with O-ring construction to protect against water and dust, large, direct-reading scale, and folding crank.This dependable, hand-cranked meter is ideal for use on motors, cables, and electrical wiring installations.

1000V Megohmmeter Model 1250N

Megohmmeter Model 1250 tests insulation resistance to 1000 V DC, and is designed for use in harsh environments. Rugged taut band meter movement and die-cast aluminum case sealed against water and dust ensure years of reliable field operation.The Model 1250 is a multivoltage, multirange hand-crank with easy operation and steady voltage outputs for consistent readings. It is well suited for a broad range of plant and field service applications, including acceptance testing and preventive maintenance of motors, cables and switchgears.



Specifications

Model	Model 1210			Model 1250		
Insulation Test	DC Test Voltage: 500 V	Megohm Range: 0.5 to 5.5 MΩ 5.5 to 200MΩ	Accuracy 2.5% FS	DC Test Voltage: 250V 500 V	Megohm Ranges: 250 V: 1 to 11 MΩ 11 to 500MΩ 500 V: 1 to 11 MΩ 11 to 500 MΩ 1000 V: 10 to 110 MΩ 110 to 5000MΩ	Accuracy: 2% FS
Resistance Test	DC Test Voltage 1 mA constant current	Kilohm Range 0 to 45kΩ 45 to 500Ω	Accuracy 2.5% FS			
Continuity Test	DC Test Voltage: 5 mA constant	Ohm Range: 0 to 9Ω 9 to 100Ω	Accuracy 2% FS			
Voltage Test	Voltage Range 0 to 600V AC		Accuracy 3% FS	Voltage Range: 0 to 600 V AC		Accuracy: 3% FS
Scale	Direct reading on all ranges;3" black on white			Direct reading on MΩ and voltage scales;3" black on white		
Test Voltage Indicator	Amber LED indicates proper test voltage & crank speed			Green LED indicates proper test voltage & crank speed		
Autorange	Red LED indicates autorange			Red LED indicates autorange		
Power Supply	Hand-cranked			Hand-cranked		
Dimensions	4.7 x 4.7 x 5.1"(120 x 120 x 130)			4.7 x 4.7 x 5.1"(120 x 120 x 130)		
Weight	3.3 lbs (1.5 kg)			3.3 lbs (1.5 kg)		
To Order	Model 1210 includes user manual, carrying strap with lead pouch, three color-coded leads, ground lead, two insulated alligator clips and test probe. Cat#1326.01 \$649.00 Model 1250 includes user manual, carrying strap with lead pouch, three color-coded leads, ground lead, two insulated alligator clips and test probe Cat#1326.02 \$679.00					

AmpFlex[™] - Flexible Current Probes

- Measure from 0.5 Arms to 30,000 Arms
- Lengths from 24" to 60" standard
- Accuracy - 1% of reading
- Shape Memory[™] allows pre-forming before use
- Very low phase shift error
- Single and dual range models standard

The AmpFlex[™] is a flexible current probe designed to take measurements where standard clamp-ons cannot: in tight breaker panels, around large buss bars, around cable bundles, and even wrapped around irregular shapes. The AmpFlex[™] sensor has an output for direct readings on DMM's, Loggers, Oscilloscopes, and Power Quality Instruments. For enhanced safety, we designed a Shape Memory[™] feature to pre-shape the sensor which eliminates the need to reach around a live conductor.

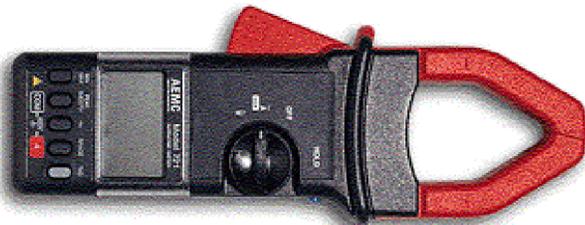


AEMC[®] Instruments offers over 30 models to measure from 0.5A to 30,000A, and in lengths of 24, 36, 48 and 60 inches.

Current Range - Output Signal	Sensor Length Diameter							
	Part Number		Part Number		Part Number		Part Number	
	24"/8"	Price	36"/11"	Price	48"/15"	Price	60"/19"	Price
30A - 100mV/A	2112.14	\$299.00	-	-	-	-	-	-
200A - 1 mA/A	2112.20	\$269.00	-	-	-	-	-	-
300A - 10 mV/A	2112.29	\$299.00	-	-	-	-	-	-
300A - 1 mV/A	2112.24	\$279.00	-	-	-	-	-	-
30/300A - 100/10 mV/A	2112.88	\$319.00	-	-	-	-	-	-
500A - 1 mV/A	2112.34	\$284.00	-	-	-	-	-	-
50/500A - 10/1 mV/A	2112.93	\$309.00	-	-	-	-	-	-
1000A - 1 mV/A	2112.39	\$299.00	2112.41	\$399.00	2112.42	\$499.00	-	-
100/1000A - 10/1 mV/A	2112.98	\$319.00	2113.00	\$419.00	2113.01	\$519.00	-	-
3000A - 1 mV/A	2112.46	\$319.00	2112.48	\$419.00	2112.49	\$519.00	-	-
300/3000A - 10/1 mV/A	2113.05	\$339.00	2112.00	\$439.00	2112.01	\$539.00	-	-
6000A - 0.1 mV/A	2112.62	\$569.00	2112.64	\$669.00	2112.65	\$769.00	2112.66	\$869.00
600/6000A - 1/0.1 mV/A	2113.19	\$589.00	2113.21	\$689.00	2113.22	\$789.00	2113.23	\$889.00
10,000 A - 0.1 mV/A	2112.70	\$769.00	2112.72	\$869.00	2112.73	\$969.00	2112.74	\$1069.00
1000/10,000 A - 1/1.0 mV/A	2113.27	\$789.00	2112.02	\$889.00	2112.03	\$989.00	2113.29	\$1089.00
30,000 A - 0.1 mV/A	2112.78	\$999.00	2112.80	\$1099.00	2112.81	\$1199.00	2112.82	\$1299.00
3000/30,000 A - 1/0.1 mV/A	2113.33	\$1019.00	2113.35	\$1119.00	2113.36	\$1219.00	2113.37	\$1319.00

Clamp-On Harmonic Meter Model 721

- Designed for traditional and non-linear loads
- Simple clamp-on operation with power quality features
- Accurate True RMS readings of A and V
- Direct reading of %THD, %DF, CF and Peak
- Recording mode for Min, Max, Avg, Max Peak
- Works with oscilloscopes as a harmonic and current transducer



The Model 721 combines the simplicity and familiarity of digital clamp-ons with today's critical information on power quality and harmonics.

Operation is simple and direct, with no menus, calculations or complex analyzer procedures. Select Amps or Volts on the rotary dial, connect, and measure. The push of a button gives additional information. You can troubleshoot and measure power quality with the ease of using a digital clamp-on - simply, safely, and economically.

To Order: Model 721 Cat#1208.52 includes leads, two test probes, two grip probes, insulated banana to BNC connector, battery, user manual and hard carrying case. \$495.00

Clamp-On Harmonic Meter Model 725

- Designed for traditional and nonlinear loads
- Simple clamp-on operation with power quality functions
- Accurate TRMS amps or volts (AC or AC + DC)
- Accurate DC measurements (A or V)
- Recording mode, min, max, avg, max peak
- Direct reading %THD, %DF, CF Peak (+ or -)
- Individual harmonic orders 1-25th A or V
- Smooth function for stable readings
- Automatic or manual ranging
- Peak measurements (AC or DC) (+ or -)



The Clamp-On Harmonic Meter Model 725 is a portable, battery operated power quality instrument. The Model 725 combines the simplicity and familiarity of digital clamp-ons with today's critical information on power quality and harmonics. Operation is simple and direct. Select Amps/Volts, AC or DC on the rotary dial, connect, and measure. The push of a button gives additional or more specific information. You can troubleshoot and measure power quality and harmonics with the ease of using a digital clamp-on, simply, safely and economically.

To Order: Model 725 Cat#2111.39 includes clamp on meter, batteries, two 5ft. leads, two grip probes, user manual and hard carrying case. \$895.00

CURRENT MEASUREMENT & GROUND RESISTANCE TESTERS



Clamp-On Multimeter Models 701/703

Description

Clamp-on Multimeters Models 701 and 703 are general purpose professional clamp-ons. A strong mechanical case design, quality materials (GE Lexan), full ranges, and compliance to international safety and quality standards ensure a professional and reliable measuring tool. Both models are autoranging, providing AC current and AC volts, plus DC volts, ohms, continuity with a beeper, and a diode test function. The Model 703 also includes a frequency function.



Specifications

Model		Model 701	Model 703 (TRMS)
AC Current	Range	1 A to 700 A	1 A to 700 Arms
	Resolution	0.1 A and 1 A	0.0 A and 1 A
	Basic Accuracy	2% R ± 0.5 A	2% R ± 0.5 A
	Input Impedance	1MΩ	1MΩ
AC Volts	Range	1 to 600 V	1 to 600 Vrms
	Resolution	0.1 V and 1 V	0.1 V and 1 V
	Basic Accuracy	1% R	1% R
	Input Impedance	1MΩ	1MΩ
Frequency	Range	NA	0 to 4 kHz
	Resolution	NA	1 Hz
	Basic Accuracy	NA	0.1%
	Hz Pick-Up	NA	form A or V
DC Volts	Range	1 to 600 V	1 to 600 V
	Resolution	0.1 V and 1 V	0.1 V and 1V
	Basic Accuracy	0.5% R	0.5% R
	Input Impedance	1MΩ	1MΩ
Ohms	Range	0 to 4kΩ	0 to 4kΩ
	Resolution	0.1Ω and 1Ω	0.1Ω and 1Ω
	Basic Accuracy	1% R	1% R
Continuity	Range	0 to 40Ω	0 to 40Ω
	Beeper	below 40Ω	below 40Ω
Diode Test	Range	0 to 4V	0 to 4V
	Resolution	0.1 V	0.1 V
	Open Voltage	4.4 V	4.4V
Power Supply	9 V alkaline battery		
Dimensions	10 x 3.8 x 1.7"(252 x 97 x 44 mm)		
Weight	17 oz (500 g)		
Jaw Size	1.7"(accommodates two 500MCM, one 750 MCM)		
To Order	Model 701 Cat#1207.51 Includes test leads, battery, user manual and soft carrying case \$129.00 Model 703 Cat#1207.53 Includes test leads, battery, user manual and soft carrying case \$159.00		

Ground Resistance Tester 4500

Description

Measures ground resistance (2- and 3-point) and soil resistivity (4-point)
Step voltage tests and touch potential measurements
High 20 kiloOhm range for soil resistivity measurements
Fall-of-potential method
Selectable: three test currents and five resistance ranges
Measures very low resistance on large grounding systems and grids
May be used for continuity tests on bonding



The Digital Ground Resistance Tester Model 4500 is designed for measuring very low resistance on large grounding systems, such as ground grids and ground mats. It rejects high levels of interference voltages at DC or 60 Hz and its harmonics, and can be used under difficult conditions such as high stray current or excessive auxiliary electrode resistance.

Ground Resistance Tester 4610 Kit

Description

Digital Ground Resistance Tester Model 4610 & 4610 Kit
Fall-of-potential method
Measures ground resistance (2- and 3-point and soil resistivity (4-point)
Step voltage tests and touch potential measurements
Autoranging: automatically selects the optimum range
Designed to reject high levels of noise and interference
Extremely simple to operate: connect press read
LED on face plate informs operator of high input noise, high auxiliary rod resistance and fault connections.
Battery Powered
Rugged dust proof and rain proof field case
May be used also for continuity test on bonding
Color coded terminals
CE Mark



4610 Specifications

Model	Model 4610 Kit		
Ranges	20Ω	200Ω	2000Ω
Resolution	10 mΩ	100 mΩ	1Ω
Test Current Range	10mA	1mA	0.1mA
Accuracy	2% reading + 2 cts		3% reading + 2 cts
Operating Frequency	128 Hz square wave		
Maximum Auxiliary Electrode Resistance	Range	Current	Voltage Circuit
	20Ω	3Ω	60 kΩ ± 25 kΩ
	200Ω	30Ω	60 kΩ ± 25 kΩ
	2000Ω	50Ω	60 kΩ ± 25 kΩ
Power Supply	Six 1.5V "AA" alkaline batteries		
Display	7 segment LCD, .71", 3-1/2 digit, 2000 counts		
Dimensions	8.7 x 5.4 x 5.9 (220 x 136 x 150mm)		
Weight	2.9 lbs (1.3kg)		
To Order	Cat# 2114.95 Includes four T-shaped ground rods, two 300-ft leads on reels with wind-up handles, 90-ft lead, 16-ft lead, batteries, user manual and carrying case. \$1495.00		

4500 Specifications

Model	Model 4500				
Ranges	2	20	200	2000	20k
Resolution	1m	10m	0.1	1	10
Test Current Ranges	2 mA, 10 mA, 50mA				
Accuracy	± 2% of reading ± 1 ct from 10% to 100% of range				
Operating Frequency	128 Hz square wave				
Maximum Auxiliary Electrode Resistance	Ry: 50 kΩ on 20Ω, 200Ω, 2000Ω and 20 kΩ ranges:				
	5kΩ on 2Ω range				
	Rz: 2 mA range: 15kΩ				
	10 mA range: 3000Ω 50 mA range: 600Ω				
Power Supply	Built-in rechargeable battery, or external 12V DC				
Display	7 segment LCD, .71", 3-1/2 digit: 2000 counts				
Dimensions	15.75 x 10.2 x 9.8"(400 x 260 x 250 mm)				
Weight	14 lbs (6.5kg)				
To Order	4500 includes user manual.				

Optional Accessories

Ground Resistance Test Kit Model 100.525 includes two 500-ft leads on reels, 30-ft lead, and two T-shaped ground rods in carrying bag. \$2250.00
Supplement Kit for Soil Resistivity Model 100.526 includes two 100ft leads and two T-shaped ground rods \$269.00

Clamp-On Ground Resistance Tester 3710/3730

Description

Simple and fast clamp-on operation - no leads, no auxiliary rods or spacing requirements. Direct reading of ground resistance from 1 to 1200 ohms. Direct reading of continuity and ground loop resistance. Direct reading of ground leakage current from 1 mA to 30. Arms New jaw design with large 32 mm (1.25") window accommodates up to 1000 MCM cables Alarm function (3730 only) Memory function (3730 only)



The Ground Resistance Tester Models 3710 and 3730 measure ground rod and small grid resistance through any season, without the use of auxiliary ground rods.

Clamp-on ground resistance testers are used in multi-grounded systems without disconnecting the ground under test. The Models 3710 and 3730 simply clamp around the ground conductor or rod and measure the resistance to ground. By performing measurements on intact ground systems, the user also verifies the quality of the grounding connections and bonds. Resistance and continuity of grounding loops around pads and buildings may also be measured.

Specifications

Model 3710/3730		Ground Resistance		
Measurement Range	Range	Resolution	Accuracy	
Autoranging	1 to 50Ω	0.1Ω	±(1.5% + 0.1Ω)	
	50 to 100Ω	0.5Ω	±(2.0% + 0.5Ω)	
	100 to 200Ω	1Ω	±(3.0% + 1Ω)	
1.0 to 1200Ω	200Ω to 400Ω	5Ω	±(6.0% + 5Ω)	
	400 to 600Ω	10Ω	±(10% + 10Ω)	
	600 to 1200Ω	50Ω	+n/a	
		Ground or Leakage Current		
Measurement Range	Range	Resolution	Accuracy	
Autoranging	1 to 300mA	1mA	±(2.5% + 2 mA)	
	1mA to 30.00 A AC	0.001 A	±(2.5% + 2 mA)	
	3.00 A to 30.00	0.01 A	±(2.5% + 20mA)	
To Order	Model 3710 includes battery, user manual, calibration loop, and carrying case. Cat# 1221.01 \$1895.00			
	Model 3730 includes battery, user manual, calibration loop, and carrying case. Cat#1221.02 \$2195.00			

Digital Micro-Ohmmeter Model 5600

Description

Digital low resistance ohmmeter - 10 A test current, 0.25% basic accuracy - 1m Ohms resolution - Rechargeable NiCad battery with built-in charger - Overload and input fuse protection - Rugged field case - CE Mark

The Micro-Ohmmeter Model 5600 performs reliable low resistance measurements with test currents to 10 A and resolution to one micro-ohm.

The Model 5600 uses a four-wire Kelvin bridge method, which eliminates test lead resistance for a measurement accuracy of a 0.25%. A reverse polarity switch compensates for the effect of DC voltage interference on the accuracy and permits reading averaging. A built-in circuit filters against AC signals.



Model	Model 5600					
Range	200μΩ	20mΩ	200mΩ	20Ω	200Ω	
Display	1999	19.99	199.9	1999	19.99	199.9
Resolution	1μΩ	10μΩ	100μΩ	1 mΩ	10 mΩ	100 mΩ
Test Current	10 A	1 A	1 A	100mA	10 mA	10 mA

To Order **Model 5600** includes battery and user manual **Cat#1431.01** \$2495.00

Optional Accessories

- Set of Kelvin probes **Cat# 1017.82** (for use up to 10 A) \$157.95
- Set of 1 A Kelvin clips **Cat# 1017.83** \$109.00
- Set of large 10 A Kelvin clips **Cat#1017.84** \$199.00
- Soft Carrying bag for accessories **Cat# 2118.32** \$56.90

Digital Lightmeter Model 810

Description

Measures from 0.01 to 20,000 footcandles Measures from 0.01 to 20,000 lux Display hold locks measured value Automatic zero Unit and symbol display for easy direct reading Close to spectral sensitivity to CIE photopic curve Measurement mode in fc or lux (metric) scale Peak-hold function

The Model 810 is an accurate, economical, fast-responding instrument for field illumination measurements. This compact, rugged meter measures illumination on four ranges in either lux or footcandles, from 0.01 to 20,000 lux/fc.

The Model 810 distinguishes itself from other meters because it accurately measures low, medium and high levels of light. The Model 810 is CE approved and conforms to the CIE photopic curve and, therefore, achieves precise measurements. It's simple to use and includes Peak function, Hold button, and a DC output for logging.

The Lightmeter Model 810 is perfect for general lighting surveys, emergency egress, or any other illumination or illuminance measurements at low, medium or high levels.



TO Order Model 810 Digital Light Meter, Includes light meter, photo cell with lead, battery, user manual and carrying case **Cat# 2111.76** \$179.00

Digital Transformer Ratiometer DTR® Model 8500

The New DTR® Model 8500 from AEMC® Instruments is a portable digital transformer ratiometer designed for on-site testing of power, potential and current transformers. When connected to a non-energized transformer, the DTR® Model 8500 accurately measures primary to secondary turns ratio, while simultaneously displaying polarity and excitation current. The DTR® is fully automatic and uses an ANSI/IEEE compliant test method. No user calibration, range selection, hand cranking or tedious balancing is required. At each measurement, the DTR® automatically self calibrates and checks for open windings/connections/circuit breakers, short circuits (excess excitation current), incorrect test lead placement, and reverse polarity. Measurements are displayed quickly and accurately. The DTR® Model 8500 is designed with operator safety in mind. Tests are performed at low voltage and, unlike other ratiometers, step down excitation is employed. This method, in conjunction with an integral H/X reverse protection circuit, guards against the generation of hazardous test voltages normally associated with transformer ratio measurement instruments. A large, dual line alphanumeric LCD display with adjustable contrast and back light guarantees day/night readability. Power is supplied by integral NiCd battery (included) or by AC line. Batteries are charged automatically during A Cooperation.

Both rugged and reliable, the DTR® Model 8500 is built into an attractive, sealed structural polypropylene case designed to withstand the rigors of utility and industrial field use. Constructed using only the highest quality electrical and mechanical components, the DTR® Model 8500 sets the standard in advanced design, engineering and workmanship, and it will provide the user with years of accurate and reliable measurements.

Specifications



ELECTRICAL SPECIFICATIONS

Ratio Range: Autoranging, 0.8000 to 1500.0:1

Accuracy: Ratio ≤ 1000 to 1: $\pm 0.1\%$ of Reading
Ratio > 1000 to 1: $\pm 0.2\%$ of Reading

Excitation Signal:

PT/VT Mode: 44 Vrms

CT Test Mode: 0.1-7 Vrms, Auto Level, 1A

Excitation Frequency: Factory programmed to 60 Hz other frequencies available

Measurement Method: In accordance with ANSI/IEEE C57.12.90

Power Supply: Dual operation; rechargeable NiCd battery and 115/230 V, 50/60 Hz line supply.

Battery Life: Up to 10 hrs. Continuous operation, DTR® Model 8500 may be used while recharging. Charging time of approximately 12 hours.

Low Battery Indication: LCD display

Line Fuse: 115 V:

1.0A, 5 x 20mm, slow acting 230 V:

0.5A, 5 x 20mm, slow acting

Displayed Measurements: Turns ratio, RMS excitation current, Polarity

Displayed Messages:

Incorrect Lead Connections

H/X Reversal (accidental step-up misconnection)

Short (excess excitation current)

Open Circuits

Low Battery

MECHANICAL SPECIFICATIONS

Connections: Cannon® XLR connectors and large color coded industrial clips

Leads: 15 ft, H & X color coded, in carrying bag

Display: Dual line alphanumeric 3.875 x .875" with contrast adjustment and backlight

Operating Temperature: 0° to 50°C (32° to 122°F), 0 to 90% RH (without condensation)

Case: Heavy duty structural polypropylene (yellow)

Dimensions: 13 x 12 x 6" (330 x 305 x 152 mm)

Weight: 14 lb (6.4 Kg)

FEATURES

- Designed for power transformers, potential transformers and current transformers
- Direct readings from 0.8000:1 to 15:1
- Displays turns ratio, polarity and excitation current simultaneously with high resolution
- Dual Power: Integrated rechargeable NiCd battery and AC supply
- ANSI/IEE compliant measurement method
- Microprocessor based for simple operation
- Easy connection and test set-up-no calibration or balancing required
- Displays warnings of incorrect lead connections, reverse polarity, open and short circuits
- Large display with adjustable contrast and backlight ensures clear visibility
- No high voltages - uses low voltage test technique and integrated safety circuit
- Durable, impact-resistant case.



To Order:	Model 8500 Digital Transformer Ratiometer DTR (Includes AC line cord, test lead set (15ft in a carrying bag and user manual)	Cat# 2111.80	\$2795.00
Accessories:	Test lead set (30-ft) in carrying bag	Cat# 2118.47	\$339.00
	Replacement set of test leads (15ft)	Cat# 2118.48	\$239.00

Simple Logger™

Description

Simple Logger™ is a single channel, low cost data logger that requires no user setup. It has the ability to automatically adjust its scale range and its sample rate to optimize the recording session. Simple Logger includes Windows based software that can graph and analyze data. Simple Logger operates in three modes; Record, Standby and OFF. A red LED indicates the mode of operation. In the record mode, it stores information; in the standby mode, it retains the recorded information for transfer to a computer; in the OFF mode, the memory is cleared. However, if Simple Logger is turned off by mistake, the cleared data can be easily recovered. Simple Logger is the easiest tool built to record data on-site and download it onto your computer for analysis. For the user who is monitoring a machine load for voltage line, troubleshooting HVAC equipment, or monitoring ambient temperature, it's perfect tool to get the information you need, when you need it.



Current Loggers

Supports current probes with voltage or current outputs

Two input types to choose from:

Model L100: 0-1Vrms input range 0-10,000 Arms based on probe

Model L110: 0 - 1 Arms input range 0-3,000 Arms based on probe

True RMS measurements

Inputs via color coded safety banana jacks

Select scale to match probe via software

Specifications

Simple Logger™ RMS Current Module **Model L100** (0-1 Vac Input) **Cat# 2113.50**\$269.00

Simple Logger™ RMS Current Module **Model L110** (0-1 Aac Input) **Cat# 2113.85**\$269.00

Simple Logger™ RMS Voltage Module **Model L230** (0-300 Vac Input) **Cat# 2113.93**\$289.00

Simple Logger™ RMS Voltage Module **Model L260** (0-600 Vac Input) **Cat# 2113.94**\$289.00

Simple Logger™ Temperature Module **Model L600** (Internal Thermistor) **Cat# 2114.16**\$179.00

Simple Logger™ Temperature Module **Model L605** (Internal Thermistor and External **Cat# 2114.17**\$189.00

Thermistor Input. Optional temperature Probes listed below)

All Simple Loggers™ are supplied with software (3-1/2" disk), 6 ft. DB9 RS-232 cable, 9 V battery and user manual.

Accessories

Leads, set of 2, 5 ft. 1000 V Rated **Cat##2111.29** \$39.95

Safety Grip probes, set of 2..... **Cat##2111.31** \$39.95

External 6 ft. Thermistor Probe with epoxy bead..... **Cat##2114.19** \$49.00

External 6 ft. Thermistor Probe with 4" stainless steel sheath **Cat##2114.20** \$69.00

6 ft. DB9 M/F Replacement Serial Cable..... **Cat##2114.27** \$19.95

Simple Logger Software Upgrades **Cat##2114.26** \$49.00

110 V Outlet Adaptor with banana jacks..... **Cat##2118.49** \$20.00

Voltage Loggers

Two input types to choose from:

Model L230: 0-300 Vrms input

Model L260: 0-600 Vrms input

True RMS measurements

Inputs via color coded safety banana jacks

Scale automatically selected by software

Temperature Loggers

Two models to choose from:

Model L600: Internal Thermistor

Model L605: Internal Thermistor and External Thermistor Input

Thermistor type: 10KΩ @ 25°C

Measurement range;

-20 to 70°C

-4 to 158°F

Typical Applications

- Machine Load Monitoring
- Metering CT Re-sizing
- Ambient Temperature Monitoring
- HVAC Troubleshooting
- Line Voltage Monitoring
- Computer Room Monitoring
- Food Storage
- Wine Cellars
- Wave Soldering Temperature Profiling
- Load Profiling

Digital TRMS Power Meter Model 3910

Simple, user-friendly operation - True RMS measurements for distorted waveform environments - Direct display of multiple measurements for easy readings - Measures directly Arms, Vrms, Pf, kW, kVar, kVA and Hz Peak and memory functions for load analysis - Compact and rugged instrument complete with 500 A clamp-on current probe - Built to IEC safety standards

Small and compact in its yellow protective holster, the Model 3910 provides seven essential power measurement values including Arms, Vrms, KVar, PF, kW, and Hz. The peak function allows the user to select A, V or W for a peak measurement and also displays the associated values at that particular task.

The unique memory function permits you to store your measurements at any time and even to compare one reading to another. With the push of a button you can display the difference between stored values and new readings to assist in load analysis.



Power Supply: Four 1.5V "AA" alkaline batteries

Display: 40 x 50 mm multidisplay LCD

Dimension: Case 3.2 x 6.9 x 1.3" (80 x 175 x 32mm)

Weight (instrument with batteries): 15 oz (400 g)

Model	Model 3910	
Measurement		Accuracy (50/60 Hz)
Current (True RMS)	1 to 500 Arms (1000 A*)	With supplied probe 25.0 A: ±5% R, Phase 4° 100A: ±2% R, Phase 2° 500A: ±2% R, Phase 1.5°
Voltage (True RMS)	1 to 600Vrms	1 to 99.9V :0.5%R ± 0.6V 100 to 600V: 0.3% R ± 2V
Frequency	30 to 100Hz 101 to 1000 Hz	0.03% R ±0.1Hz 0.5% R ±1 Hz
Power Factor	-0.00 to 0.00	Sum of the V and A accuracy pulse the probe phase shift
Active Power	30 to 300kW (600kW*)	Sum of the V and A accuracy plus the probe phase shift
Reactive Power	30 to 300kVar (600 kVar*)	Sum of the V and A accuracy @ sin Φ = 1 plus the probe phase shift
Apparent Power	30 to 300 kVA (600kVA*)	Sum of the V and A accuracy

*With optional 1000 A probe

To Order: Model 3910 Cat#2111.27 includes holster, 500 A AC clamp-on probe, two 5ft leads, two test probes, two test probe grips, batteries, user manual and hard carrying case. \$895.00
Optional Accessories

Current Probe Model SD613 Cat# 1200.65 measures to 1000 A. \$169.00