# Digital Micro-Ohmmeters



#### **FEATURES**

- Selectable test currents from 10mA to 200A (model dependent)
- ► Resolutions to 0.1 micro-ohm
- ► Accuracies to 0.05%
- ► Large easy to read backlit display
- ► Automatic and software temperature compensation (model dependent)
- ► Automatic multipoint measurements
- ► Internal data storage of test results
- Analysis and report generation software (DataView®) included
- ► Built into a rugged field proven case
- ► Kelvin test cables included

Our products are backed by over 125 years of experience in test and measurement equipment, and encompass the latest international standards for quality and safety.



### **MODEL 6240**



#### Product 2129.80 Includes

- 2 Kelvin clips, 10ft (10A Hippo)
- 2 Kelvin Probes 10ft (1A, spring loaded)
- NiMH rechargeable battery pack\*
- Optical USB cable
- US 115V power cord
- DataView® software
- Extra large tool bag
- 2 spare fuses (12.5A)
- User manual
- \*Can be charged during operation.

#### **Accessories/Replacement Parts**

• 1017.84	Kelvin Clips 10ft (10A - Hippo)
• 2118.70	Kelvin Clips 20ft (10A - Hippo)
• 2118.73	Kelvin Probes 10ft (1A, spring loaded)
• 2118.74	Kelvin Probes 20ft (1A, spring loaded)
• 2118.75	2 Kelvin Probes Pistol Grip 10ft (10A - spring loaded)
• 2118.76	2 Kelvin Probes Pistol Grip 20ft (10A - spring loaded)
• 2118.77	2 Kelvin Probes 10ft (10A - spring loade
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- 2118.78 2 Kelvin Probes 20ft (10A spring loaded)
- 2118.79 Kelvin Clips 10ft (1-10A) • 2118.80 Kelvin Clips 20ft (1-10A)

#### **FEATURES**

- ▶ Reliable low resistance measurements
- ► Four-terminal Kelvin resistance measurement eliminates test lead resistance
- $\blacktriangleright$  Measures up to 4000μΩ with 10A of test current
- ▶ 0.25% basic accuracy
- ▶  $1\mu\Omega$  resolution
- ► Direct reading, easy to operate
- ► Test current selection of 1mA, 10mA, 100mA, 1A and 10A
- ► Polarity reversal button
- ► Overload and input fuse protection
- ► Manufactured to international safety and environmental standards
- ► Automatic scaling and zeroing
- ► Large terminals accept banana plugs and spade lugs
- ► Rechargeable NiMH battery with internal charger (110/230V) that can be charged during operation
- ► Rugged, double insulated watertight case
- ► Includes DataView® software for instrument configuration, data storage, analysis and report generation

#### **APPLICATIONS**

- ► Aerospace metallic coating resistance measurement
- ► Bonding verification on earth/ground systems
- ► Weld joint integrity verification
- ► Contact resistance measurement of breakers and switchgear
- ► Aircraft and rail bonding checks
- ▶ Wire to terminal connections and resistance checks
- ► Battery strap resistance checks
- ► Cable joint and bus bar connection checks
- Mechanical bond tests





## **SPECIFICATIONS**

Range         4000μΩ         40mΩ         400mΩ         4000mΩ         4000mΩ         40Ω         400Ω           Accuracy         0.25% of Reading $\pm 2cts$	dina						
Accuracy $\pm 2cts$ $\pm 2cts$ $\pm 2cts$ $\pm 2cts$ $\pm 2cts$ $\pm 2cts$	dina						
Resolution         1μΩ         10μΩ         0.1mΩ         1mΩ         10mΩ         100mΩ	lullig						
Test Current         10A         1A         1A         100mA         10mA         10mA							
Measurement Single test start/stop or auto test and store of multiple measurements	Single test start/stop or auto test and store of multiple measurements						
Power Source Rechargeable 6V, 8.5Ah NiMH batteries							
Battery Life Up to 850, 10A tests							
Battery Charging Internal 110/230Vac, 50/60Hz charger							
Power Management User selectable power save mode							
Low Battery Indication blinks when battery needs charging							
Stores up to 99 test results  Memory  Data in memory can be reviewed on the instrument display, on a PC or via direct printout	Data in memory can be reviewed on the instrument display,						
Communication Software DataView® software							
MECHANICAL							
<b>Dimensions</b> 10.70 x 9.76 x 7.17" (270 x 250 x 180mm)							
<b>Weight</b> 10 lbs. (4.5kg)							
Index of Protection IP53 (case open); IP54 (case closed)							
Color Safety yellow case; gray faceplate UL94 V-0							
DISPLAY							
<b>Display Type</b> 4000-count LCD							
<b>Size</b> 4 x 2.25" (102 x 57mm)							
Blacklight Blue electroluminescent							
COMMUNICATION							
Interface Port Optically isolated USB							
ENVIRONMENTAL							
Operating Temperature 14° to 132°F (-10° to 55°C); 10 to 85% RH							
<b>Storage Temperature</b> -40° to +158°F (-40° to +70°C); 10 to 90% RH							
SAFETY							
Safety Rating EN61010-1 300V CAT II							
Double Insulation Yes	Yes						
CE Mark Yes	Yes						
<b>Catalog No.</b> 2129.80	2129.80						











2118.73 (10ft) 2118.74 (20ft) 2118.75 2118.76 2118.77 2118.78

**AEMC**INSTRUMENTS

CHAIIVIN ARNOIIX GROUP

### **MODEL 6255**



#### **Product 2129.84 Includes**

- 2 Kelvin clips 10ft (10A Hippo)
- 2 Kelvin Probes 10ft (1A, spring loaded)
- NiMH rechargeable 6V battery pack
- Optical USB cable
- US 115V power cord
- DataView® software
- Extra large tool bag
- User manual

#### **Accessories/Replacement Parts**

- 1017.84 Kelvin Clips 10ft (10A Hippo)
- 2118.70 Kelvin Clips 20ft (10A Hippo)
- 2118.73 Kelvin Probes 10ft (1A, spring loaded)
- 2118.74 Kelvin Probes 20ft (1A, spring loaded)
- 2118.75 2 Kelvin Probes Pistol Grip 10ft (10A spring loaded)
- 2118.76 2 Kelvin Probes Pistol Grip 20ft (10A spring loaded)
- 2118.77 2 Kelvin Probes 10ft (10A spring loaded)
- 2118.78 2 Kelvin Probes 20ft (10A spring loaded)
- 2118.79 Kelvin Clips 10ft (1-10A)
- 2118.80 Kelvin Clips 20ft (1-10A)
- 2129.95 RTD Temperature Probe
- 2129.96 RTD Temperature Probe w/ 7ft extension cable

#### **FEATURES**

- ► Test up to 60 minutes continuously at 10A
- ► Measure from 1μΩ to 2500Ω
- ► Test current selection of 1mA, 10mA, 100mA, 1A and 10A
- ► RTD temperature probe to check tested sample (optional)
- ► Selectable metal types
- ► Automatic and manual temperature correction
- ► EMF levels measured and eliminated in measurement
- ► Two programmable alarm set points
- ► Stores up to 1500 test results
- ► Selectable Inductive or Resistive test modes
- ► Automatic multiple test mode (multiple tests without pressing the test button)
- ► Large multi-line electroluminescent display
- ► Local or remote test setup and control
- ► Internal rechargeable batteries conduct up to 5000 10A tests
- ► Rugged, double insulated watertight case

#### **APPLICATIONS**

- ► Aerospace metallic coating resistance measurement
- ▶ Bonding resistance measurement of motors and transformers
- ▶ Bonding verification on earth/ground systems
- ► Weld joint integrity verification
- ► Contact resistance measurement of breakers and switchgear
- ► Aircraft and rail bonding checks
- ► Wire to terminal connections and resistance checks
- ► Battery strap resistance checks
- ► Cable joint and bus bar connection checks
- ► Mechanical bond tests





## **SPECIFICATIONS**

ELECTRICAL							
Range	$5.000$ m $\Omega$	25.000mΩ	250.00mΩ	2500.0mΩ	25.000Ω	250.00Ω	2500.0Ω
Accuracy	0.15% of Reading +1μΩ	0.05% of Reading +3μΩ	0.05% of Reading +30μΩ	$0.05\%$ of Reading $+0.3$ m $\Omega$	$0.05\%$ of Reading $+3m\Omega$	0.05% of Reading +30mΩ	0.05% of Reading $+300$ m $\Omega$
Resolution	0.1μΩ	1μΩ	10μΩ	0.1mΩ	1mΩ	10mΩ	100mΩ
Test Current	10A 1A 100mA 10mA 1mA						1mA
Measurement Mode	Sele	Selectable: Inductive (continuous test), Resistive (instantaneous test) or Auto (multiple tests)					
Power Source			Rechargeal	ole 6V, 8.5Ah NiN	IH batteries		
Battery Life		Approximately 5000, 10A tests					
Battery Charging		Internal 120/240Vac, 45/400Hz line voltage					
Power Management		Display power		or 10 minutes o	f inactivity (opera	ator selectable)	
Low Battery Indication		displays when battery needs changing					
Memory	Stores up to 1500 test results  Data in memory can be reviewed on the instrument display,  on a PC or via direct printout						
<b>Communication Software</b>		DataView® software					
MECHANICAL							
Dimensions	10.63 x 9.84 x 7.09" (270 x 250 x 180mm)						
Weight		8.1 lbs (3.69kg)					
Index of Protection		IP53 (case open); IP64 (case closed)					
Color		Safety yellow case; gray faceplate UL94 V-0					
DISPLAY							
Display Type	Large 50,000-count digital						
Size	4 x 2.25" (102 x 57mm)						
Blacklight	Blue electroluminescent						
COMMUNICATION							
Interface Port		RS-232					
ENVIRONMENTAL							
Operating Temperature		14° to	132°F (-10° to	55°C); 10 to 80%	6 RH (non-conde	nsing)	
Storage Temperature	-40° to 140°F (-40° to 60°C); 10 to 80% RH (non-condensing)						
SAFETY							
Safety Rating			EN	61010-1, 50V CA	T III		
Double Insulation	Yes						
CE Mark	Yes						
Catalog No.	2129.84						







2118.73 (10ft) 2118.74 (20ft)



2118.75



2118.77 2118.78



2118.79 (10ft) 2118.80 (20ft)





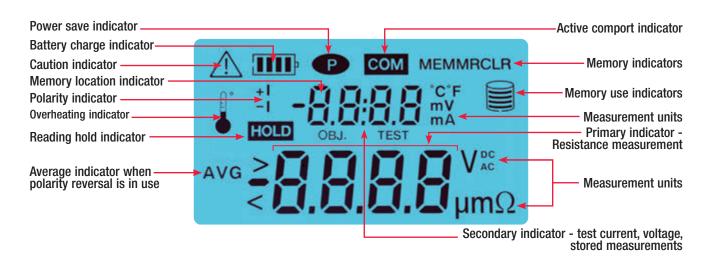
### **Model 6240**

#### Construction



<sup>\*</sup> Function buttons allow direct access to data storage and retrieval, polarity reversal, auto/manual measurement and displayed values.

#### **Functional Display**





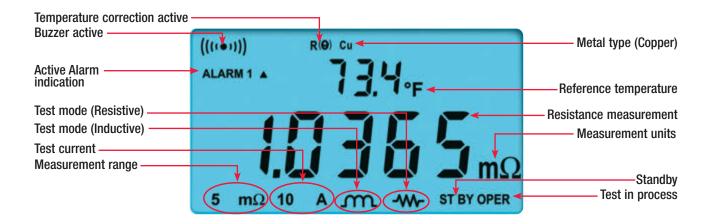
## **Model 6255**

#### Construction



<sup>\*</sup> Function buttons allow direct access to data storage and retrieval, polarity reversal, auto/manual measurement and displayed values.

#### **Functional Display**





## **MODEL 6292**













#### Product 2129.83 Includes

- Accessory Baq
- 2 25ft Kelvin Test Leads w/ Hippo Clamp (200A)
- 1 Green Ground Lead w/ Clamp
- USB Cable
- Power Cord
- User manual
- DataView® software

#### **Accessories/Replacement Parts**

- 2129.72 Lead - Set of 2 25ft Kelvin Leads with Hippo Clamp (200A)
- 2129.73 Lead - Set of 2 50ft Kelvin Leads with Hippo Clamp (200A)
- 2129.86 **Current Probe Model MR6292**
- 2129.88 Lead - 10ft Eartth/Ground w/ attached Clamp
- 5000.40 110V US Power Cord

#### **FEATURES**

- ► Advanced cooling system allows continuous testing at 100A or below and up to 120 seconds at 200A
- ► Incorporates True DC high output with minimum, near zero, ripple lower than 2% of full range.
- ► Allows multiple sequential tests
- ▶ Programmable test currents from 5 to 200A
- ► Measures single or both sides grounded systems
- ► Direct viewing of stored tests on the display
- ► Accurately measures low contact resistances from  $0.1\mu\Omega$  to  $1\Omega$
- ► Resolution of  $0.1\mu\Omega$
- ► Large LCD digital display, available in four languages
- ► Stores up to 8000 test results
- ► USB communication interface
- ► Direct printout using DataView® software and a PC
- ► Rugged, light-weight and water-resistant case

#### APPLICATIONS

- ► Test switchgear contact resistance
- ▶ Test circuit breaker contact resistance
- ▶ Test air frame bonding
- ▶ Test rail bonding
- ▶ Test pipeline bonding
- ▶ Test large transformers





## **SPECIFICATIONS**

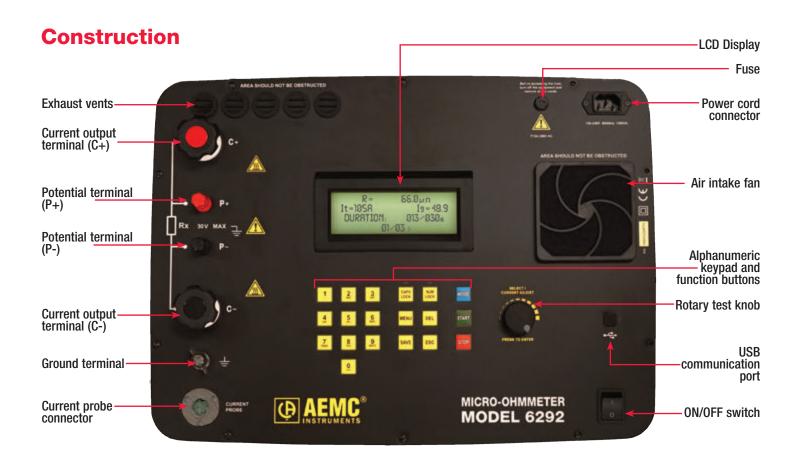
ELECTRICAL						
Test Current Range	Programmable from 5 to 200A (True DC)					
Resistance Range	$0.1\mu\Omega$ to $2m\Omega$ ; 2 to $200m\Omega$ ; $200m\Omega$ to $1\Omega$					
Accuracy	$\pm$ 1% of reading from $50\mu\Omega$ to $1\Omega$					
$\begin{array}{c} \text{Resolution} & 0.1\mu\Omega \text{ to } 2m\Omega \\ & 2 \text{ to } 200m\Omega \\ & 200m\Omega \text{ to } 1\Omega \\ \end{array}$	0.1μ $\Omega$ (200A max) 10μ $\Omega$ (25A max at 200m $\Omega$ ) 1m $\Omega$ (5A max at 1 $\Omega$ )					
Output Voltage	100Vac: 4.2V @ 200A 220Vac: 8.6V @ 200A					
Max. Load Resistance	100Vac: 20m $\Omega$ @ 200A 220Vac: 42m $\Omega$ @ 200A					
Measurement Method	Four-terminal, Kelvin-type					
Test Mode	Normal or both sides grounded (BSG)*					
Adjustable Test Time	5 to 120 seconds at 200A, unlimited at 100A or below					
Memory	Stores up to 8000 measurements					
Communication Software	DataView® software					
Power Supply	100 to 240Vac, 50/60Hz					
MECHANICAL						
Dimensions	19.8 x 15.5 x 7.5" (502 x 394 x 190mm)					
Weight	24.25 lbs (11kg) approx					
DISPLAY						
Display Type	4 line x 20 characters per line LCD					
Size	4.75 x 2.75" (121 x 70mm)					
Backlight	adjustable					
COMMUNICATION						
Interface port	USB 2.0					
ENVIRONMENTAL						
Operating Temperature	32° to 122°F (0° to 50°C)					
Storage Temperature	14° to 158°F (-10° to 70°C)					
Humidity	95% RH (non-condensing)					
SAFETY						
Safety Rating	IEC61010-1					
Protection	Protections against over current, short circuit, overheating and over voltage at output terminals					
<b>Environmental Protection</b>	IP54 with closed lid					
Test w/ Both Sides Grounded	Yes					
CE Mark	Yes					

<sup>\*</sup>BSG Test Mode requires optional Current Probe Model MR6292 (Cat. #2129.86)





## **Model 6292**



#### **Functional Display**



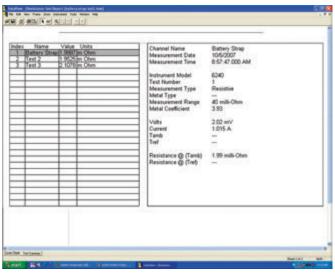


# DataView®

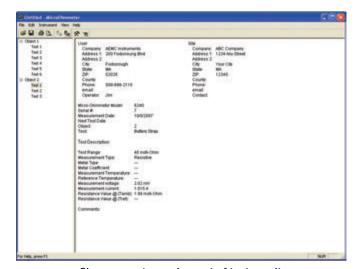


#### **FEATURES**

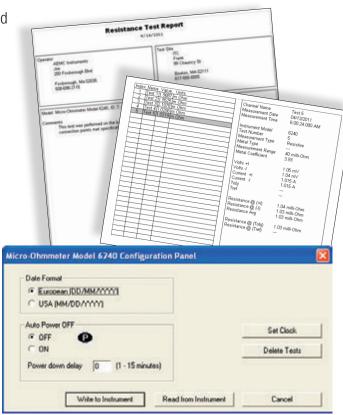
- ► Configure instrument from your PC
- ► Customize views and templates to your exact needs
- ➤ Create and store a library of configurations that can be used with the Models 6240, 6255, and 6292 as needed
- ► Display test results
- ► Print reports using standard included templates or custom templates you design
- ► Upload stored test results to your PC



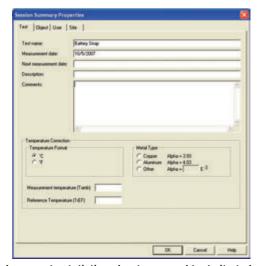
Statistical presentation of measurements



Clean, easy-to-read report of test results

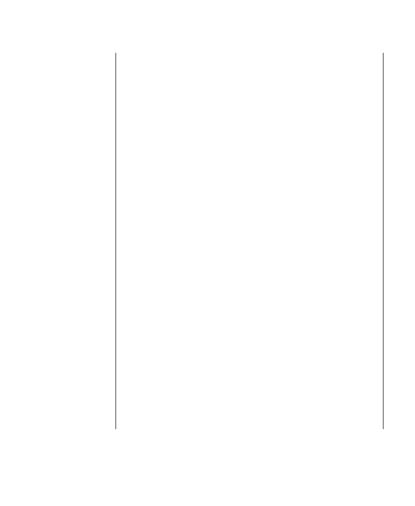


All set up functions available from one screen



Easily documents statistics about user and test site to be stored with the data







Chauvin Arnoux®, Inc. d.b.a AEMC® Instruments