

# Digital 200A Micro-Ohmmeter

Model 6290

## Measure low resistance with high accuracy

- ▶ Accurately measures low contact resistances with test currents up to 200A
- ▶ Measures resistances from 0 to 20m $\Omega$
- ▶ Resolution of 0.1 $\mu\Omega$
- ▶ Analog bargraph indicator with backlit digital display
- ▶ Stores up to 200 test results
- ▶ USB interface
- ▶ Direct printout using DataView<sup>®</sup> software and a PC
- ▶ Rugged, light-weight and water-resistant



*Our products are backed by over 100 years of experience in test and measurement equipment, and encompass the latest international standards for quality and safety.*

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INSTRUMENTS  
CHAUVIN ARNOUX GROUP

# Low Resistance, High Accuracy

# Model 6290



The AEMC® high-current Micro-Ohmmeter Model 6290 is a portable, microprocessor-controlled instrument. It has optimized filters and protection for measurements in electrical substation. The Model 6290 can be used to accurately measure very low contact resistances on high voltage circuit breakers, switches, busbars, etc., with test currents up to 200A. It employs the four-terminal Kelvin method to prevent errors caused by test leads and their contact resistances.

Measurement accuracy is assured through a state-of-the-art signal amplification system, offset-free with high long-term stability. Resistance readings are shown in the alphanumeric display with up to 4½-digit resolution. It allows measurement resistances up to 20mΩ, and resolution of 0.1μΩ.

Test currents may be adjusted by the operator and are displayed using both an analog bargraph indicator and digital display.

The Model 6290 has an internal memory for storing up to 200 readings. The USB interface may be connected to a computer to download the stored values. The high-current generation system is based on modern technology that allows for a significant decrease in both weight, 24.25 lbs (11 kg), and size. The case is made of hard plastic, highly resistant to impact and environmental conditions. Internal, thermal sensors, in all sensitive components, prevent damage to the instrument caused by overheating.

This is a rugged but lightweight instrument, and may be easily carried by one person. It is water-resistant and can be used under severe weather conditions (IP54 with closed lid) offering an excellent performance working both in the laboratory and out in the field.

## ▶ FEATURES

- ▶ Accurately measures low contact resistances with test currents up to 200A
- ▶ Measures resistances from 0 to 20mΩ
- ▶ Resolution of 0.1μΩ
- ▶ Analog bargraph indicator with backlit digital display
- ▶ Stores up to 200 test results
- ▶ USB interface
- ▶ Direct printout using DataView® software and a PC
- ▶ Rugged, lightweight and water-resistant
- ▶ Includes 20 ft long test cables with C clamps

## ▶ APPLICATIONS

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

CE □  
(pending)



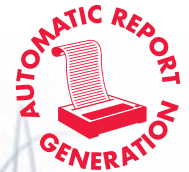
*Accessory case (supplied) includes one black and one red 20 ft Kelvin test lead with integral C clamp, one green ground lead and clamp, USB cable, power cord and user manual*

# SPECIFICATIONS

MODEL	6290
<b>ELECTRICAL</b>	
Test Current Range	100A, 200A (True DC); Adjustable from 0 to 100%
Resistance Range	0 to 1999 $\mu\Omega$ (test current: up to 200A) 0 to 19.99m $\Omega$ (test current: up to 100A)
Accuracy	$\pm 0.5\%$ of Reading $\pm 2$ cts
Resolution	0.1 $\mu\Omega$ for R < 200 $\mu\Omega$ 1 $\mu\Omega$ for R < 2000 $\mu\Omega$ 10 $\mu\Omega$ for R < 20m $\Omega$
Output Voltage	3.5VDC @ 200A 4.5VDC @ 100A 5.8VDC (no load)
Max. Load Resistance	10m $\Omega$ @ 200A 30m $\Omega$ @ 100A
Measurement Principal	Four-terminal, Kelvin-type
Operation Time	Up to 1 minute of continuous use at 200A before thermal protection activates; Up to 15 minutes use at 100A before thermal protection activates
Thermal Protection	Protects all sensitive components, avoiding any damage due to overheating
Memory	Stores up to 200 measurements
Interface	USB
Display	Analog bargraph indicator with backlit digital display
Communication Software	DataView®
Power Supply	100 to 130VAC, 60Hz
<b>MECHANICAL</b>	
Dimensions	19.76 x 15.51 x 7.48" (502 x 394 x 190mm)
Weight	Approx. 24.25 lbs (11 kg)
<b>ENVIRONMENTAL</b>	
Operating Temperature	23° to 122°F (-5° to 50°C)
Storage Temperature	-13° to 149°F (-25° to 65°C)
Humidity	95% RH (non-condensing)
<b>SAFETY</b>	
Safety Rating	IEC61010-1
Environmental Protection	IP54 with closed lid
CE Mark	Pending

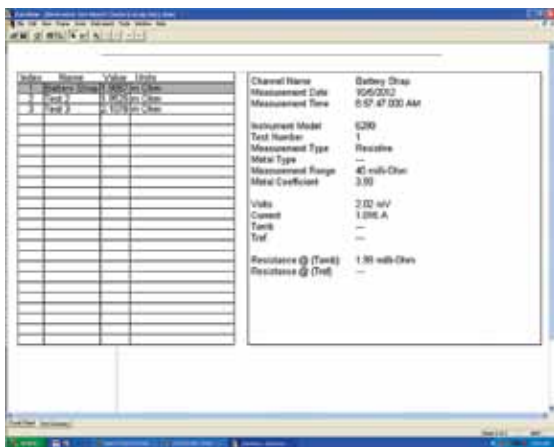
# DataView<sup>®</sup>

## Data Analysis and Reporting Software



### Features

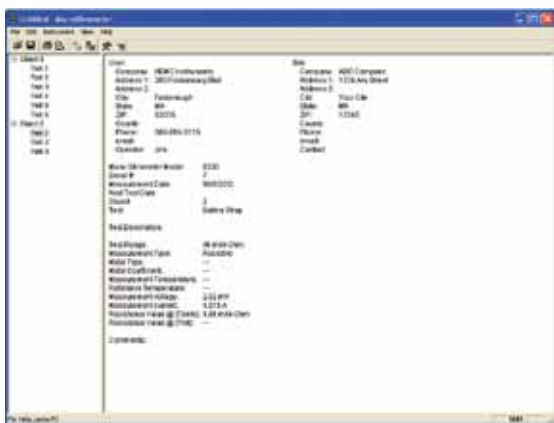
- ▶ Configure from your PC
- ▶ Customize views, templates and reports to your exact needs
- ▶ Create and store a library of configurations that can be used with the Model 6290 as needed
- ▶ Display test results
- ▶ Print reports using standard included templates or custom templates you design



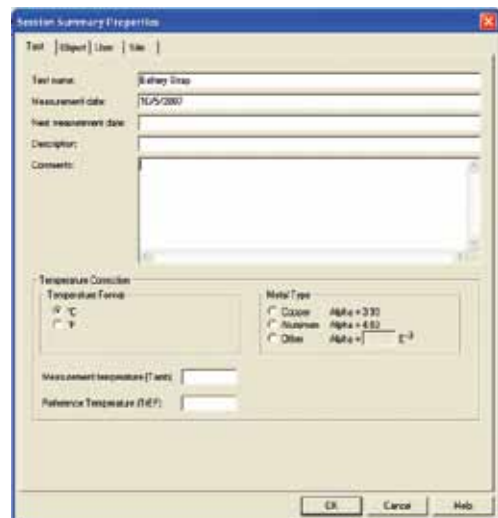
Statistical presentation of measurements.



All set up functioning available from one screen.



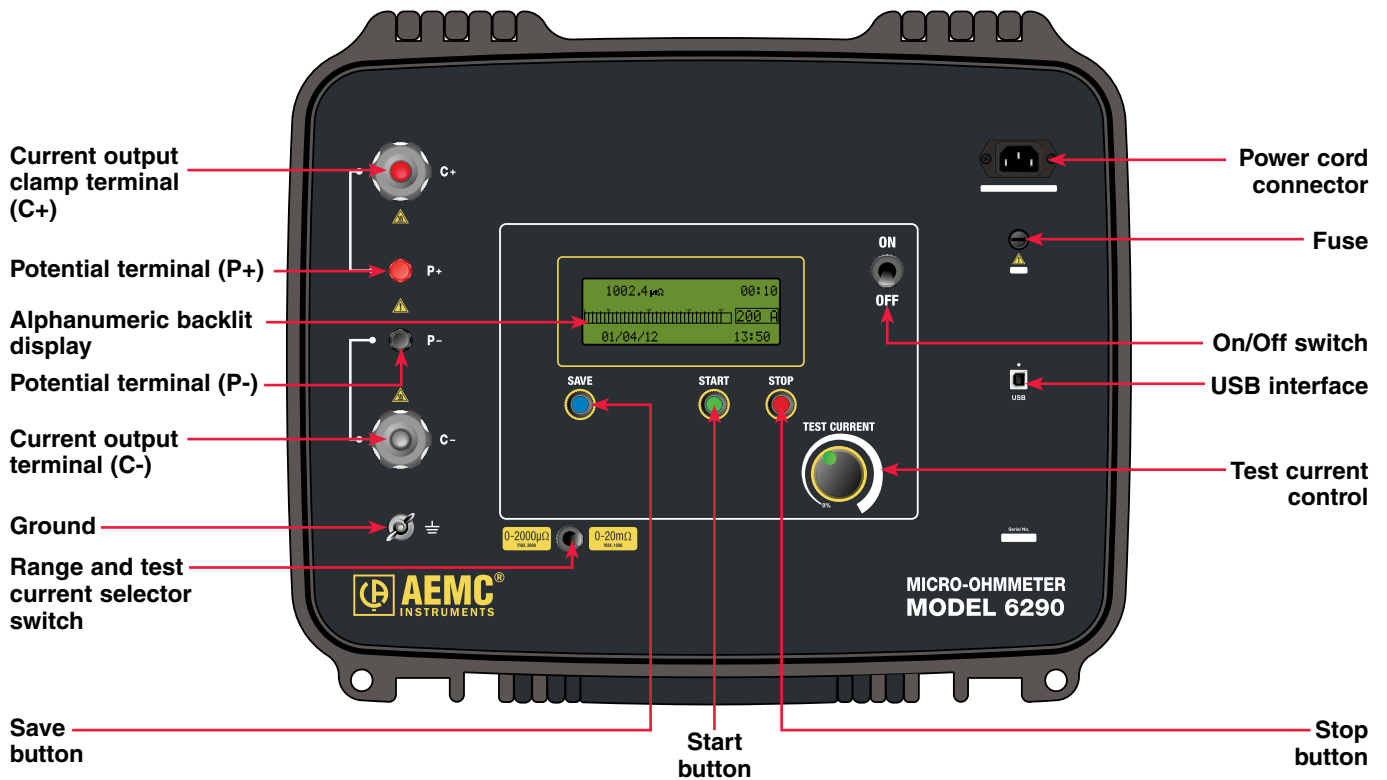
Clean, easy-to-read report of test results.



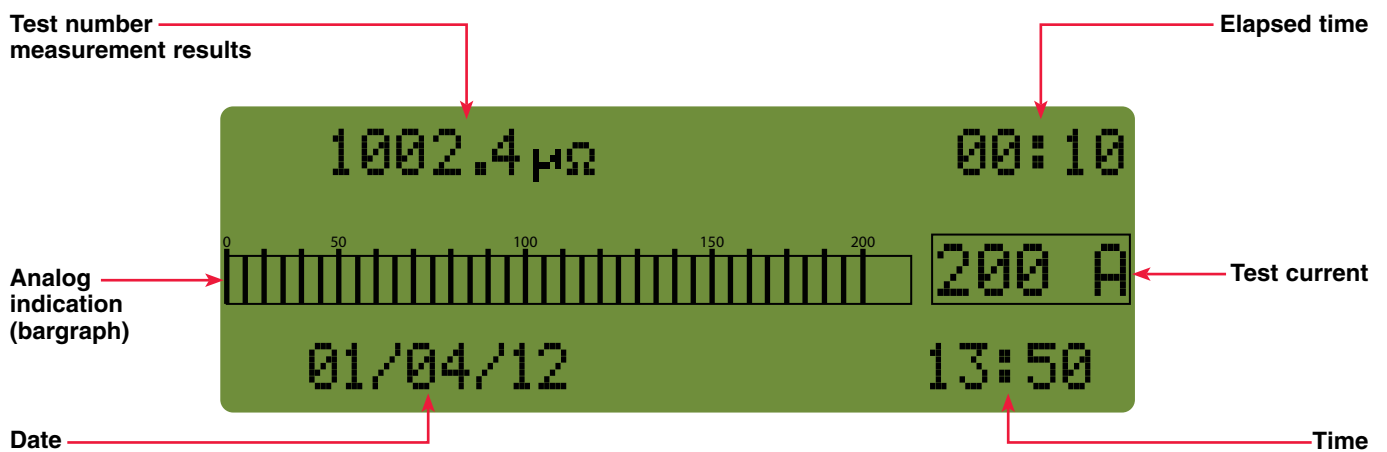
Easily documents statistics about user and test site to be stored with the data.

# CONSTRUCTION

## Model 6290



# FUNCTIONAL DISPLAY



### ORDERING INFORMATION

### CATALOG NO.

Micro-Ohmmeter Model 6290 (200A) ..... Cat. #2129.82  
Includes accessory case, one black and one red 20 ft Kelvin test lead with integral C clamp, one green ground lead and clamp, USB cable, DataView® software, power cord and user manual

## United States & Canada

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