

VERIMET® PORTABLE CONDUCTIVITY TESTER MODEL 4900C



EDDY CURRENT TESTING FOR NON-FERROUS METALS AND ALLOYS

- Provides rapid conductivity testing for alloy content, heat treatment, material mixes, hardness and tensile strength.
- Unique, patented design offers quick, accurate, non-destructive testing for aluminum, copper, bronze and other non-ferrous metals.
- For metal ingots, forgings, castings, sheet stock and processed parts, including lithium/aluminum alloys.
- Single COMP knob adjustment for temperature compensation.
- Digital readout in percentage I.A.C.S. or MegaSiemens.
- Linear response exceeds military and aircraft industry standards.

FEATURES / BENEFITS

- Excellent lift-off range for rapid, non-contact testing.
- Adjustable temperature compensation circuitry with single knob adjustment for temperature variations.
- Linear response over the full instrument range.
- Linear response plot vs. curve of other instruments.
- Portable, using 12-hour rechargeable batteries with A/C adapter/charger provided.
- Reliable performance with no need for periodic balance, null adjustment or sensitivity setting changes for difficult test conditions.



The M4900C is especially well-suited for measuring the conductivity of aluminum and aluminum alloys. It automatically tracks the temperature coefficient (typically aluminum) with single-knob progressive compensation to an accuracy of 0.5% I.A.C.S. over the full range of 12% to 110% I.A.C.S. (5.75% to 52.8% MegaSiemens). The M4900C has an accuracy of 0.3% over the aluminum range of 17% to 62% I.A.C.S.

The M4900C Verimet tester works well on rough or finished surfaces, including forgings, castings, sheet stock and small parts of reasonable mass. Production line conductivity instruments and systems are available for rapid automatic sorting or process control requirements.

CONSTRUCTION

The Verimet M4900C electronics are housed in rugged, light-weight, cast aluminum cases that stand up well to hostile production environments. Mil-Spec type electronic components and assembly methods assure trouble-free operation. The M4900C is optionally available in switchable I.A.C.S. readings or in MegaSiemens.

WARRANTY

All parts and workmanship are guaranteed for a full year from date of purchase.

SPECIFICATIONS

Size	6.75" x 3.75" x 2.75" (17.2 x 9.5 x 7.0cm)
Weight	2.5 lb. (1.13kg)
Penetration Depth	0.050" (1.27mm)
Range (I.A.C.S.)	12% to 110%
Lift-off	0.025 inch (0.6mm) max.
Accuracy	0.3% (Spec: 17% - 62%) 0.5% (Full Range)
Resolution	0.1%
Power Supply	Rechargeable Nickel Cadmium Batteries with A/C Adapter/Battery Charger 115/60 Hz or 220/50 Hz
Probes	4900M216C probe, 7/16" (11.1mm) with 42" (107cm) cable
Readout	4 Digit LED Numeric Display

STANDARDS AND CERTIFICATIONS

For correct operation a Conductivity Standard should be used within the range (% I.A.C.S.) at which testing is conducted. There are three Standard types available:

Verimation Standards manufactured and certified by Verimation Technology, Inc. which are indirectly traceable to NIST Standards. Lead Time is one week.

Verimation Standards manufactured by Verimation and certified by an outside lab, directly traceable to NIST Standards. Lead Time is 6-8 weeks.

Zetec Standards manufactured and certified by Zetec and directly traceable to NIST Standards. Lead Time is 8-10 weeks.

The following Nominal % I.A.C.S values are available: 21%, 29%, 42%, 60% and 101%. Some of the nominal values of Zetec Standards available include 16%, 23%, 32%, 37.5%, 47%, 56% and 80%.

The Verimet® Portable Conductivity Tester, Model 4900C is a Certified Conductivity Test Instrument.