# ALL-TEST PRO 7<sup>™</sup> | ALL-TEST PRO 7<sup>™</sup> PROFESSIONAL

PATENTED TECHNOLOGY

MCA™ | TVS™ | DYNAMIC STATOR AND ROTOR SIGNATURES







Get the motor health data you need to make a quick and informed decision.

### **SPECIFICATIONS**

Measurement	Accuracy and Measurement Range	Max Resolution	Relative Accuracy (Phase to Phase)
Test Frequency	50, 100, 200, 400, 800 Hz		
Test Value Static™ (TVS™)	0.01 – 10,000 ± 1% (Dimensionless calculated value)		
Stator Test Dynamic	Repeatability $\pm1\%$ (of measured data and calculated deviations)		
Rotor Test Dynamic	Repeatabilty ± 2% (of measured data and calculated deviations)		
Resistance	$0.01\Omega$ – $0.1\Omega$ ±(1% of the range full scale +1 digit)	0.01mΩ or one digit (whichever is greater)	±(1% of Measured Value +1 digit)
	$0.1\Omega$ – 99.9 $\Omega$ ±(1% of measured value +1 digit)	1mΩ or one digit (whichever is greater)	±(0.1% of Measured Value +1 digit)
	$100\Omega$ – $500\Omega$ ± (1.5% of measured value +1 digit)	1Ω	±(0.1% of Measured Value +1 digit)
	$501\Omega - 999\Omega \pm (2.5\% \text{ of measured value +1 digit})$	1Ω	±(0.1% of Measured Value +1 digit)
	True 4-wire Kelvin measurement (Compensation for thermoelectric offset voltages)		
Impedance	$0.1 - 999 \Omega \pm 2\%$	$0.01\Omega$ or one count (whichever is greater)	± 0.2%
Inductance	1mH - 2mH ±(2% of the range full scale +1 digit)	0.01mH	±(0.2% of Measured Value +1 digit)
	2.01mH - 200mH ±(2% of measured value =1 digit)	0.01mH or one digit (whichever is greater)	±(0.2% of Measured Value +1 digit)
	201mH - 999mH ±(3% of measured value +1 digit)	1mH	±(0.2% of Measured Value +1 digit)
Phase Angle	1° – 90° ± 1°	0.1°	± 0.1°
I/F (current/frequency)	-50% – +99% ± 1%	0.1%	± 0.1%
Dissipation Factor - DF	1% – 100% total range (expressed as a percentage)		
(frame - stator)	1% – 10% ± 0.75% (C = 10 – 1,000 nF)		
	1% – 10% ± 1.0% (all other values of C within range 2 – 2,000 nF)		
	10% – $30%$ ± 1.0% (this specification is based on battery operation and USB not connected to PC)		
Capacitance (frame - stator)	2 – 2,000 nF total range		
	10 – 2,000 NF ± 5% (this specification is based on battery operation and USB not connected to PC)		
Insulation Resistance	0 – 5000 MΩ total range @ 500 V or 1,000 V		
	$1-999~\text{M}\Omega\pm3\%$		
	All other values ± 5%		

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#### CERTIFICATION SPECIFICATIONS

Certification

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Safety

IEC 61010-1 3rd Edition

**Calibration Certificates** 

Optional (contact distributor for details)

EMC

Emmission: EN61000-6-4

Immunity: EN61000-6-2, EN61000-4-2, EN610000-4-3

**EQUIPMENT OPERATING RANGE SPECIFICATIONS** 

**Storage Temperature Range** 

-20 °C - +55 °C (-4 °F - +131 °F)

**Operating Temperature Range** 

-10 °C - +50 °C (+14 °F - +122 °F)

Humidity

0 – 80% relative humidity, non-condensing

HARDWARE SPECIFICATIONS

Enclosure Size (W x L x H)

126 x 218 x 51 mm (5" x 9.6" x 2")

(basic enclosure size without minor protrusions)

**Enclosure Material** 

Polycarbonate, UL94 V-0 (Flammability)

**Enclosure Weight** 

0.7 kg (1.55 lb)

Batteries

2x Li-ION cells with ≥ 2100 mAH capacity, UL 1642 (Safety)

Display

Graphic LCD, monochrome 128 x 128 pixels (3.8"); white LED backlight

Keyboard

Alphanumeric, sealed tactile switches with backlight overlay

Connections

3x Motor input/output: push-pull connectors 4-pole

High-voltage output: Ø 4 mm safety jack

PC communication: USB type B connector

Charger input: 2.5 mm diameter center pin DC-jack

**Internal Memory** 

Stores up to 500 test and REF test records

**INCLUDED ACCESSORIES** 

Test Leads

3x with heavy duty Kelvin Clips and push-pull connectors

1x with 4 mm safety plug and MC "Dolphin" clip

**Charging Adapter** 

Universal input type 100 - 240 VAC, output 9 V DC @ 1.7 A

Software

Refer to software specification sheet

ALL-TEST PRO 7<sup>™</sup> - MCA Basic<sup>™</sup> Software

ALL-TEST PRO 7<sup>™</sup> PROFESSIONAL - MCA PRO<sup>™</sup> Software

Languages

Available in English, Spanish, Chinese, and Portuguese

PC Communication

1x USB cable (1 meter)

**Carrying Case** 

Durable and rugged hard case with pre-cut foam liner

SUGGESTED ACCESSORIES (NOT INCLUDED)

**Carrying Pouch** 

Contact distributor for options

Soft carrying pouch for instrument and test leads

Software

Refer to software specification document

MCA PRO™ Enterprise Software

**Training Demo Motor** 

Contact distributor for options

**Test Leads** 

Contact distributor for options

3x with small Kelvin Clips and push-pull connectors

1x with 4 mm safety plug

**MISC** 

Warranty

1 Year Limited with optional 2 Year with calibration

Trademark

ALL-TEST PRO 7™ is a trademark of ALL-TEST Pro

**Patent Pending** 

REPRESENTED BY

The ALL-TEST Pro Promise

ALL-TEST Pro delivers on the promise of true predictive maintenance and troubleshooting, with innovative diagnostic tools, software, and support that enable you to keep your business running. We ensure the reliability of motors in the field and help to maximize the productivity of maintenance teams everywhere, backing every ALL-TEST Pro product with unmatched motor testing expertise.

**ALL-TEST Pro** 

Tel: 860-399-4222

P.O. Box 1139

Email: info@alltestpro.com

Old Saybrook, CT 06475 USA Web: alltestpro.com