

# ALL-TEST PRO On-Line II™

## Electrical Signature Analyzer Specifications



The ALL-TEST PRO On-Line II™ Electrical Signature Analysis instrument sets the standard for modern Current and Voltage Signature Analysis and Power Analysis industry-wide. The system is based on demodulated current and voltage and current Fast-Fourier Transform (FFT) allowing the analyst or technician to view the electrical system both upstream (supply) and downstream (load) from the point of test. The Power Analysis and Electrical Signature Analysis software allows for a complete analysis of the electrical and motor system and is supported with an easy-to-use menu operation and automated data analysis. Test data can be taken remotely using this hand-held instrument or via the instrument's Bluetooth wireless interface by using the computer software in virtual instrument mode. Data is uploaded and analyzed within minutes, either way.



The ALL-TEST PRO On-Line II™ is the most powerful system on the market and remains hand-held and weight is just over 1 lb. (0.50 kg).

### Capabilities

Power Analysis	Electrical Signature Analysis
<ul style="list-style-type: none"> <li>✓ Complete harmonic analysis of every cycle of all phases, simultaneously</li> <li>✓ Swell, sag and inrush detection of every half cycle of all phases, simultaneously</li> <li>✓ Transient detection on all phases, simultaneously (8 µSec sampling rate)</li> <li>✓ Complete power/energy/cost analysis while simultaneously doing harmonic, swell, sag and transient analysis on all inputs</li> <li>✓ Compatible with variable frequency drives (VFD)</li> <li>✓ Complete logging, triggering and waveform capture capability</li> <li>✓ Harmonic analysis to the 65th on all channels</li> <li>✓ Data logging</li> <li>✓ Low, medium and high current and voltage probes available to 6000 Amps and 15 kV</li> <li>✓ 8-10 hours of continuous use from internal battery</li> </ul>	<ul style="list-style-type: none"> <li>✓ Automatic rotor bar and stator deterioration and severity</li> <li>✓ Automatic rotor-stator eccentricity characteristics</li> <li>✓ Automatic motor speed and slip (PPF)</li> <li>✓ Average running current to variation – an indicator of motor torque variation</li> <li>✓ Power factor</li> <li>✓ Torsional vibration and dynamic loading</li> <li>✓ Automatic misalignment and mechanical unbalance</li> <li>✓ Bearing degradation and automatic bearing fault indication</li> <li>✓ Current/Voltage variations and THD</li> <li>✓ Voltage and Current FFT analysis</li> <li>✓ Current demodulation and analysis</li> <li>✓ Automated reporting</li> <li>✓ Does not require nameplate entry prior to data collection</li> <li>✓ Motor efficiency calculations for AC induction &amp; DC motors</li> <li>✓ Driven load mechanical analysis</li> </ul>

- ✓ AC/DC Electric Motors
- ✓ Generators
- ✓ Transformers
- ✓ Tests Supply through Driven Load
- ✓ ATPOL II™ automatically senses CT for automatic setup

- ✓ 2083 samples per cycle at 60 Hz
- ✓ Comes Standard with 0.1-100 Amp (4) and 1-6000 Amp Flex CT's (4)
- ✓ Hall Effect CT 5-600A DC and Hall Effect CT 10-2000A DC available
- ✓ Voltage Probes Available to 15 kV (special order)

# ALL-TEST PRO On-Line II™ Instrument Specifications

<ul style="list-style-type: none"> <li>✓ Size: 3.88" x 7.72" x 2.14" (9.86cm x 19.61cm x 5.44cm)</li> <li>✓ Weight: 1.1 lb (0.50 kg)</li> <li>✓ Operating range: 32° - 122° F (0° - 50° C) and relative humidity to 70%</li> <li>✓ Power requirement: 12 VDC @ 500mA, wall mount power supply included. Internal Li-ion operates 8 hours after 4 hours charge.</li> <li>✓ Environmental Protection: IP40 per IEC 529</li> <li>✓ Voltage: 1-1000 Vrms steady state using the 1-6000A Flex CT (#45011); Display Range 1-6 megavolt (using input ratios); Accuracy 0.1% of reading over input range +/- 0.3 Vrms; Repetition Rate - Measure every cycle of every input. Frequency Response: No de-rating of accuracy for harmonics through 3900 Hz.</li> <li>✓ Current: 0.005 - 6000 Amps, AC or DC with proper CT attached; Display Range 1mA - 6 Megamps (using input ratios); Accuracy 0.1% plus accuracy of current probe; Repetition rate - Measure every cycle of every input. Frequency Response: dependent on current probe attached. With HA1000: no de-rating of accuracy for harmonics through 3900 Hz.</li> </ul>	<ul style="list-style-type: none"> <li>✓ Frequency: 0.25% accuracy for             <ul style="list-style-type: none"> <li>• DC, 22 - 200 Hz, 360 - 440 Hz fundamental frequency</li> <li>• DC and 22-3900 Hz included in RMS</li> <li>• 22-3900 Hz for harmonic measurements</li> </ul> </li> <li>✓ Harmonic Distortion: Out to 65th range; 1% resolution of fundamental</li> <li>✓ Power, Energy, Cost, Power Factor: 1 Watt to 999MW display range; 0.5% accuracy plus accuracy of CT</li> <li>✓ Swell/Dip Detection: RMS measured every half cycle of every input</li> <li>✓ High Speed Transient Detection: Measured every 8 µSec on every input</li> <li>✓ Quantity of Captured Waveforms - set by user allocation of memory</li> <li>✓ SD Memory Card Slot for SD cards up to 32 GByte</li> </ul>
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## Included Current Transformers

	0.1 - 100 Amp CT (4 included) 600V CAT III	1 - 6000 Amp Flex CT (4 included) 1000V CAT III
Specifications	0.1 to 100 Amps RMS AC Current measurement	Dual Range 1.0 to 6,000 Amps RMS AC Current measurement
Accuracy	+/- 2% of reading, +/- 0.2 Arms including the accuracy of the instrument (see detailed specification document for more information)	+/- 1% of reading plus +/- 0.1 Arms for currents for low range or +/- 0.5 Arms for high range including the accuracy of the instrument (see detailed specification document for more information)
Dimensions	Inside - 0.8 inch diameter Outside - 5.25" x 2.1" x 1.35" Cable Length - 2 meters (6.5 feet)	Inside - 7.25 inch diameter Outside - Circumference 24 inch Cable Length - 2 meters (6.5 feet)

### Safety

CE for a 1000V Category III, pollution degree II, Double Insulated

### Warranty

One (1) year limited warranty (Optional 2 year limited warranty available)

### ALL-TEST Pro, LLC

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Specifications are subject to change without notice. Rev. 11/15