Agilent 34410A and 34411A Multimeters
Setting the Standard for Next Generation Benchtop and System Testing

Product Overview

Agilent 34410A 6½ Digit High-Performance DMM
- 10,000 readings/sec @ 5½ digits direct to PC
- 1,000 readings/sec @ 6½ digits direct to PC
- 30 PPM 1 year Basic DC accuracy
- LAN, USB & GPIB standard
- DCV, ACV, DCI, ACI, 2-wire and 4-wire Resistance, Frequency, Period, Continuity, and Diode Test
- Capacitance & Temperature measurements
- Expanded measurement ranges
- Data logger with 50 K reading Non-volatile memory

Agilent 34411A 6½ Digit Enhanced-Performance DMM
All the features of the 34410A, plus:
- 50,000 readings/sec @ 4½ digits direct to PC
- 1 Million reading memory
- Analog level triggering
- Programmable Pre/Post triggering

The Best Just Got Better
The Agilent 34410A and 34411A 6½ Digit DMMs represent the latest generation of multimeters from Agilent Technologies. Building on the phenomenal success of the industry-standard Agilent 34401A, these new meters offer improved accuracy, expanded measurement capability, dramatically improved measurement speed and throughput, and modern computer interfaces including LAN and USB. The dual display offers both dual measurement capabilities and ease of use when setting up and configuring the DMM. Improvements have been made in every facet of the 34401A to make the best even better, whether you use it on the bench or in a system.

Dramatic Speed Improvements
Whether it’s raw reading speed or fast system throughput, the 34410A sets a new benchmark in performance. Using a new A/D technology, the 34410A achieves an impressive 10,000 readings a second at 5½ digits, and can stream readings to your computer at this same speed! Triggering is fast and precise, with both trigger latency and trigger jitter less than 1 µs, while bus query response is less than 500 µs. ACV measurements are faster as well thanks to a digital measurement technique that additionally improves accuracy at high and low frequencies. For even greater reading speeds, select the 34411A, which achieves 50,000 readings a second at 4½ digits.

Enhanced Measurement Performance
The 34410A and 34411A offer Temperature and Capacitance capabilities, in addition to those measurements you have come to expect, such as DCV, ACV, DCI, ACI, 2-wire and 4-wire Resistance, Frequency, Period, Continuity and Diode Test. You also get Offset Compensated Ohms, allowing you to accurately measure resistance in the presence of voltages. Measurement ranges have been expanded as well; for example, DC and AC Current Ranges now go down to 100 µA, resulting in 100 pA resolution. Real-time math and statistics are included, and a peak-detect capability allows you to capture peaks as short as 20 µs.
Even Greater Performance with the 34411A

The 34411A has all the features of the 34410A, plus additional performance that makes it even more powerful. With the ability to make 50,000 readings per second at 4½ digits, Analog Level Triggering, programmable Pre- and Post-Trigger and 1 million readings of volatile memory in addition to 50,000 reading of non-volatile memory, you now have the ability to capture low-frequency waveforms, characterize device performance and transfer results for analysis on your computer.

Data Logger Function

A front panel data logger function allows you to set the meter up to make unattended, paced measurements over a fixed time or number of events, then pull up the results later for review or transfer to a computer for analysis. Set the meter up to take measurements every 10 seconds for an hour, go have lunch, and check the results upon your return. The contextual front panel sequences make setup and read back a breeze.

Improved Ease of Use

From the inclusion of a second display to configuring setups for each of the measurement functions, these new DMMs offer significant improvements in usability. Simple things are simple; more complicated setups are easier than ever. There is even a new probe set designed to more easily probe today’s fine-pitch components. Finally, there is a built-in Graphical Web Interface that allows you to interactively control the DMM without the hassle of programming at all!

Modern I/O for Improved Connectivity

When connecting to a computer, select LAN, USB or GPIB interfaces; all three are standard on the 34410A and 34411A. Concerned about the viability of your existing software programs? These new DMMs respond to Standard Commands for Programmable Instrumentation (SCPI), and there is even a 34401A Emulation Mode to ensure the easiest upgrade possible. Agilent’s I/O Library Suite ships with the 34410A and 34411A to help you quickly establish an error-free connection between your PC and instrument. It provides robust instrument control and works with the software development environment you choose.

LXI - Class C

LAN Extensions for Instruments (LXI) provides the next generation I/O for system applications requiring the highest throughput. Transfer rates of well over 100,000 readings/sec are attainable ensuring even the most data intensive measurements are fast, without the overhead cost of an instrument cardcage. Both the 34410A and the 34411A have been designed for LXI - Class C compliance.

Built To Last

Our new DMMs were designed to high standards of ruggedness and reliability. From the robust package with its shock absorbing bumpers to careful selection of components and conservative circuit design, these meters are built to last. Calculated Mean Time Between Failure (MTBF) is in excess of 100,000 hours. Backed by a 1-year warranty and a worldwide network of service centers, you can buy with confidence.

Go to the Web

For the latest information on these or other Agilent DMMs, go to www.Agilent.com

Product Reference CD-ROM with soft documentation and software:
• Programmer’s Reference Help
• Quick Start Tutorial
• User’s Guide
• Service Guide
• Programming Examples
• IntuiLink for Multimeters
• LabVIEW and IVI-COM drivers

Optional Printed Documentation:
• Quick Start Tutorial
• User’s Guide
• Service Guide

Accessories Included:
• Test Lead Kit with probes and SMT attachments.
• Test report, power cord, and USB interface cable.
### Accuracy Specifications ± (% of reading + % of range)\(^1\)

<table>
<thead>
<tr>
<th>Function</th>
<th>Range(^3)</th>
<th>Frequency, Test Current or Burden Voltage</th>
<th>24 Hour(^2) Tcal ±1°C</th>
<th>90 Day(^2) Tcal ±5°C</th>
<th>1 Year(^2) Tcal ±5°C</th>
<th>Temperature Coefficient/°C (Tcal +5°C to Tcal -5°C)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>DC Voltage</strong></td>
<td>100.0000 mV</td>
<td>0.0030 + 0.0030</td>
<td>0.0040 + 0.0035</td>
<td>0.0050 + 0.0035</td>
<td>0.0050 + 0.0035</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1.000000 V</td>
<td>0.0020 + 0.0006</td>
<td>0.0030 + 0.0007</td>
<td>0.0035 + 0.0007</td>
<td>0.0035 + 0.0007</td>
<td></td>
</tr>
<tr>
<td></td>
<td>10.00000 V</td>
<td>0.0015 + 0.0004</td>
<td>0.0020 + 0.0005</td>
<td>0.0030 + 0.0005</td>
<td>0.0030 + 0.0005</td>
<td></td>
</tr>
<tr>
<td></td>
<td>100.0000 V</td>
<td>0.0020 + 0.0006</td>
<td>0.0035 + 0.0006</td>
<td>0.0040 + 0.0006</td>
<td>0.0040 + 0.0006</td>
<td></td>
</tr>
<tr>
<td><strong>True RMS</strong></td>
<td>100.0000 mV</td>
<td>0.50 + 0.02</td>
<td>0.50 + 0.03</td>
<td>0.50 + 0.03</td>
<td>0.50 + 0.03</td>
<td>0.010 + 0.03</td>
</tr>
<tr>
<td><strong>AC Voltage</strong></td>
<td>to 750.000 V</td>
<td>0.10 + 0.02</td>
<td>0.10 + 0.03</td>
<td>0.10 + 0.03</td>
<td>0.10 + 0.03</td>
<td>0.008 + 0.03</td>
</tr>
<tr>
<td></td>
<td>10 Hz – 20 kHz</td>
<td>0.02 + 0.02</td>
<td>0.05 + 0.03</td>
<td>0.06 + 0.03</td>
<td>0.05 + 0.03</td>
<td></td>
</tr>
<tr>
<td></td>
<td>20 kHz – 50 kHz</td>
<td>0.05 + 0.04</td>
<td>0.09 + 0.05</td>
<td>0.10 + 0.05</td>
<td>0.10 + 0.05</td>
<td></td>
</tr>
<tr>
<td></td>
<td>50 kHz – 100 kHz</td>
<td>0.20 + 0.08</td>
<td>0.30 + 0.08</td>
<td>0.40 + 0.08</td>
<td>0.40 + 0.08</td>
<td></td>
</tr>
<tr>
<td></td>
<td>100 kHz – 300 kHz</td>
<td>1.00 + 0.50</td>
<td>1.20 + 0.50</td>
<td>1.20 + 0.50</td>
<td>1.20 + 0.50</td>
<td></td>
</tr>
<tr>
<td><strong>Resistance</strong></td>
<td>100.0000 Ω</td>
<td>0.0030 + 0.0030</td>
<td>0.008 + 0.004</td>
<td>0.010 + 0.004</td>
<td>0.010 + 0.004</td>
<td>0.006 + 0.005</td>
</tr>
<tr>
<td></td>
<td>1.000000 kΩ</td>
<td>0.0020 + 0.0005</td>
<td>0.007 + 0.001</td>
<td>0.010 + 0.001</td>
<td>0.010 + 0.001</td>
<td>0.006 + 0.001</td>
</tr>
<tr>
<td></td>
<td>10.00000 kΩ</td>
<td>0.0020 + 0.0005</td>
<td>0.007 + 0.001</td>
<td>0.010 + 0.001</td>
<td>0.010 + 0.001</td>
<td>0.006 + 0.001</td>
</tr>
<tr>
<td></td>
<td>100.0000 MΩ</td>
<td>0.0020 + 0.0005</td>
<td>0.007 + 0.001</td>
<td>0.010 + 0.001</td>
<td>0.010 + 0.001</td>
<td>0.006 + 0.001</td>
</tr>
<tr>
<td><strong>True RMS</strong></td>
<td>100.0000 mV</td>
<td>0.010 + 0.010</td>
<td>0.020 + 0.010</td>
<td>0.030 + 0.010</td>
<td>0.030 + 0.010</td>
<td>0.010 + 0.010</td>
</tr>
<tr>
<td><strong>AC Current</strong></td>
<td></td>
<td>0.050 + 0.030</td>
<td>0.080 + 0.010</td>
<td>0.100 + 0.010</td>
<td>0.100 + 0.010</td>
<td></td>
</tr>
<tr>
<td></td>
<td>10.000000 A</td>
<td>0.0100 + 0.0010</td>
<td>0.030 + 0.0010</td>
<td>0.040 + 0.0010</td>
<td>0.040 + 0.0010</td>
<td></td>
</tr>
<tr>
<td></td>
<td>100.00000 A</td>
<td>0.0200 + 0.0010</td>
<td>0.040 + 0.0010</td>
<td>0.050 + 0.0010</td>
<td>0.050 + 0.0010</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1.000000 A</td>
<td>2.0000 + 0.0010</td>
<td>6.000 + 0.0010</td>
<td>8.000 + 0.0010</td>
<td>8.000 + 0.0010</td>
<td></td>
</tr>
<tr>
<td><strong>Temperature</strong></td>
<td>RTD</td>
<td>-200°C to 600°C</td>
<td>0.06°C</td>
<td>0.06°C</td>
<td>0.06°C</td>
<td>0.003°C</td>
</tr>
<tr>
<td></td>
<td>Thermistor</td>
<td>-80°C to 150°C</td>
<td>0.08°C</td>
<td>0.08°C</td>
<td>0.08°C</td>
<td>0.002°C</td>
</tr>
<tr>
<td><strong>Continuity</strong></td>
<td>1000.0 Ω</td>
<td>0.002 + 0.010</td>
<td>0.008 + 0.020</td>
<td>0.010 + 0.020</td>
<td>0.010 + 0.020</td>
<td></td>
</tr>
<tr>
<td><strong>Diode Test</strong></td>
<td>1.0000 V</td>
<td>0.002 + 0.010</td>
<td>0.008 + 0.020</td>
<td>0.010 + 0.020</td>
<td>0.010 + 0.020</td>
<td></td>
</tr>
</tbody>
</table>

---

1. Specifications are for 1-hour warm-up and 100 PLC.
2. Relative to calibration standards.
3. 20% overrange on all ranges, except DCV 1000 V, ACV 750 V, DCI and ACI 3 A ranges.
4. For each additional volt over ± 500 V add 0.02 mV of error.
5. Specifications are for sinusoidal input > 0.3% of range and > 1 mVrms. Add 30 uV error for frequencies below 1 kHz. 750 VAC range limited to 8 x 10^7 Volts-Hz. For each additional volt over 300 Vrms add 0.7 mVrms of error.
6. Specifications are for 4-wire resistance measurements, or 2-wire using Math Null. Without Math Null, add 0.2 Ω additional error in 2-wire resistance measurements.
7. Specifications are for sinusoidal input > 1% of range and > 10 uArms. Frequencies > 5 kHz are typical for 1 A and 3 A ranges.
8. Specifications are for 1-hour warm-up using Math Null. Additional errors may occur for non-film capacitors.
9. For total measurement accuracy, add temperature probe error.
10. Accuracy specifications are for the voltage measured at the input terminals only, 1 mA test current is typical. Variation in the current source will create some variation in the voltage drop across a diode junction.
A-to-D Converter Noise Performance

<table>
<thead>
<tr>
<th>Integration Time (NPLC)</th>
<th>Resolution</th>
<th>Normal Mode (ppm of range)</th>
<th>Readings/Second (dB)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.001&lt;sup&gt;3&lt;/sup&gt;</td>
<td>30</td>
<td>0</td>
<td>50,000</td>
</tr>
<tr>
<td>0.002&lt;sup&gt;3&lt;/sup&gt;</td>
<td>15</td>
<td>0</td>
<td>25,000</td>
</tr>
<tr>
<td>0.006</td>
<td>6</td>
<td>0</td>
<td>10,000</td>
</tr>
<tr>
<td>0.02</td>
<td>3</td>
<td>0</td>
<td>3,000</td>
</tr>
<tr>
<td>0.06</td>
<td>1.5</td>
<td>0</td>
<td>1,000</td>
</tr>
<tr>
<td>0.2</td>
<td>0.7</td>
<td>0</td>
<td>300</td>
</tr>
<tr>
<td>1</td>
<td>0.3</td>
<td>55</td>
<td>60 (60)</td>
</tr>
<tr>
<td>2</td>
<td>0.2</td>
<td>110&lt;sup&gt;1&lt;/sup&gt;</td>
<td>30 (25)</td>
</tr>
<tr>
<td>10</td>
<td>0.1</td>
<td>110&lt;sup&gt;1&lt;/sup&gt;</td>
<td>6 (5)</td>
</tr>
<tr>
<td>100</td>
<td>0.03</td>
<td>110&lt;sup&gt;1&lt;/sup&gt;</td>
<td>0.6 (0.5)</td>
</tr>
</tbody>
</table>

<sup>1</sup> Resolution is defined as the typical DCV 10 V range RMS noise.
<sup>2</sup> Normal mode rejection for power line frequency ± 0.1%.
<sup>3</sup> For power-line frequency ± 1% 75 dB and for ± 3% 55 dB.
<sup>4</sup> Maximum rate with auto-zero off for 60 Hz and (50 Hz) operation.
<sup>5</sup> Only available for the 34411A.

System Reading and Throughput Rates

<table>
<thead>
<tr>
<th>Reading Format</th>
<th>GPIB Readings/sec</th>
<th>USB 2.0 Readings/sec</th>
<th>LAN (VXI-11) Readings/sec</th>
<th>LAN (Sockets) Readings/sec</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASCII</td>
<td>2,850</td>
<td>2,000</td>
<td>4,800</td>
<td>4,000</td>
</tr>
<tr>
<td>32-bit Binary</td>
<td>89,000</td>
<td>265,000</td>
<td>110,000</td>
<td>270,000</td>
</tr>
<tr>
<td>64-bit Binary</td>
<td>47,000</td>
<td>154,000</td>
<td>60,000</td>
<td>160,000</td>
</tr>
</tbody>
</table>

Direct I/O Measurements (Single reading – measure and I/O time)<sup>3</sup>

<table>
<thead>
<tr>
<th>Function</th>
<th>Resolution (NPLC)</th>
<th>GPIB msec</th>
<th>USB 2.0 msec</th>
<th>LAN (VXI-11) msec</th>
<th>LAN (Sockets) msec</th>
</tr>
</thead>
<tbody>
<tr>
<td>DCV/2-wire</td>
<td>0.006 (0.001)</td>
<td>3.0</td>
<td>3.6</td>
<td>5.0</td>
<td>3.5</td>
</tr>
<tr>
<td>Resistance</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>10,000 (50,000)</td>
</tr>
<tr>
<td>ACV/</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Frequency</td>
<td>Fast Filter</td>
<td>10.0</td>
<td>10.0</td>
<td>10.0</td>
<td>10.0</td>
</tr>
<tr>
<td></td>
<td>1 ms Gate</td>
<td></td>
<td></td>
<td></td>
<td>500</td>
</tr>
</tbody>
</table>

<sup>1</sup> 1/2 scale input signal, immediate trigger, trigger delay 0, auto-zero off, auto-range off, no math, null off.
<sup>2</sup> 60 Hz line frequency. Specifications are for 34410A or (34411A). See manual for performance on other functions.

System Performance

<table>
<thead>
<tr>
<th>Function</th>
<th>Change (msec)&lt;sup&gt;3&lt;/sup&gt;</th>
<th>Range Change (msec)&lt;sup&gt;3&lt;/sup&gt;</th>
<th>Auto-range (msec)&lt;sup&gt;3&lt;/sup&gt;</th>
<th>Maximum External Trigger Rate</th>
<th>Maximum Internal Trigger Rate&lt;sup&gt;4&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>DCV/2-wire</td>
<td>22</td>
<td>5.5</td>
<td>7.5</td>
<td>5,000/s</td>
<td>10,000/s</td>
</tr>
<tr>
<td>Resistance</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(50,000/s)</td>
</tr>
<tr>
<td>ACV/</td>
<td>37</td>
<td>6.5</td>
<td>19</td>
<td>500/s</td>
<td>500/s</td>
</tr>
<tr>
<td>Frequency</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<sup>1</sup> Time to change from 2 wire Resistance to this specified function, or DCV to 2 wire Resistance using the SCPI “FUNC” command.
<sup>2</sup> Time to change from one range to the next higher range, ≤10 V, ≤10 MΩ.
<sup>3</sup> Time to automatically change one range and be ready for the new measurement, ≤10 V, ≤10 MΩ.
<sup>4</sup> Specifications are for 34410A or (34411A).
Measurement Characteristics

DC Voltage

Measurement Method: Continuously integrating multi-slope IV A/D converter

Linearity: 0.0002% of reading (10 V range) + 0.0001% of range

Input Resistance:
- 0.1 V, 1 V, 10 V: 10 MΩ or > 10 GΩ (Selectable)
- 100 V, 1000 V: 10 MΩ ±1% (Fixed)

Input Bias Current: < 30 pA at 25°C

Input Protection: 1000 V on all ranges

Input Impedance:

DC CMRR: 140 dB²

True RMS AC Voltage


Crest Factor: No additional error for crest factors < 10. Limited by peak input and 300 kHz bandwidth.

Peak Input: 300% of range or 1100 V

Overload Ranging: Will select higher range if peak input overload is detected during auto range. Overload is reported in manual ranging.

AC CMR: 70 dB²

Maximum Input: 400 Vdc, 1100 Vpk

Input Impedance:

1 MΩ ± 2% in parallel with < 150 pF

Input Protection: 750 Vrms all ranges

Resistance

Measurement Method: Selectable 2-wire or 4-wire.

Current source referenced to LO input.

Offset Compensation: Selectable on the 100 Ω, 1 kΩ, and 10 kΩ ranges

Max. Lead Resistance (4-wire): 10% of range per lead for 100 Ω, 1 kΩ. 1 kΩ per lead on all other ranges

Input Protection: 1000 V on all ranges

DC Current

Current Shunt:
- 200 Ω for 100 µA, 1 mA
- 2 Ω for 10 mA, 100 mA
- 0.1 Ω for 1 A, 3 A

Input Protection: 3 A, 250 V fuse

True RMS AC Current


Current Shunt:
- 200 Ω for 100 µA, 1 mA
- 2 Ω for 10 mA, 100 mA
- 0.1 Ω for 1 A, 3 A

Maximum Input: The peak value of the DC + AC current must be <300% of range. The RMS current must be <3 A including the DC current content.

Input Protection: 3 A, 250 V fuse

Frequency and Period

Measurement Method: Reciprocal-counting technique. AC-coupled input using the AC voltage measurement function.

Input Impedance:

1 MΩ ± 2% in parallel with < 150 pF

Input Protection: 750 Vrms all ranges

Capacitance

Measurement Method: Current input with measurement of resulting ramp.

Connection Type: 2-wire

Temperature

Thermistor:
- 2.2 kΩ, 5 kΩ, and 10 kΩ

RTD: \( a = 0.00385 \) \( R_o \) from 49 Ω to 2.1 kΩ

Continuity/Diode Test

Response Time:
- 300 samples/sec with audible tone

Continuity Threshold: Fixed at 10 Ω

Operational Characteristics

Maximum readings/second

\[ \begin{array}{cccc}
\text{Digits} & \text{4.5} & \text{5.5} & \text{6.5} \\
\text{DCV} & \text{50 kΩ} & \text{10 kΩ} & \text{1 kΩ} \\
\text{2-wire Ω} & \text{25 kΩ} & \text{3 kΩ} & \text{60(50)} \\
\text{DCI} & \text{3 kΩ} & \text{60(50)} & \text{60(50)} \\
\text{ACV} & \text{500} & \text{500} & \text{150} \\
\text{ACI} & \text{500} & \text{500} & \text{150} \\
\text{Frequency} & \text{450} & \text{90} & \text{10} \\
\text{Period} & \text{450} & \text{90} & \text{10} \\
\end{array} \]

Triggering and Memory

Reading Hold Sensitivity: 1% of reading

Samples per Trigger:
- 1 to 50,000 (34410A)
- 1 to 1,000,000 (34411A)

Trigger Delay: 0 to 3600 sec (20 µs step size)

External Trigger: Programmable edge, Low-power TTL compatible

Delay: < 1 µs

Max rate: 5,000/sec

Jitter: < 1 µs

Min Pulsewidth: 1 µs

Voltmeter Complete: 3 V Logic output, 2 µs pulse with programmable edge

Nonvolatile Memory: 50,000 readings

Volatile Memory: 50,000 readings (34410A)
- 1,000,000 readings (34411A)

Sample Timer:
- Range: 0 to 3600 sec (20 µs step sizes)
- Jitter: < 100 ns

General Specifications

Power Supply:
- 100 V/120 V/220 V/240 V ±10%

Power Line Frequency:
- 45 Hz to 66 Hz and 360 Hz to 440 Hz, Automatically sensed at power-on

Power Consumption:
- 25 VA peak (18 W average)

Operating Environment:
- Full accuracy for 0°C to 55°C, 95% R.H. at 40°C non-condensing

Storage Temperature: -40°C to 70°C

Weight: 3.72 kg (8.2 lbs)

Safety:
- IEC 61010-1, EN 61010-1, UL 61010-1, CAN/CSA-C22.2 No. 61010-1, Refer to Declarations of Conformity for current revisions. Measurement CAT II 300 V, CAT I 1000 V. Pollution Degree 2

EMC:
- IEC 61326, EN 61326, CISPR 11, ICES-001, AS/NZS 2064.1, Refer to Declaration of Conformity for current revisions.

Vibration & Shock:
- MIL-T-28800E, Type III, Class 5 (Sine Only)

Warranty: 1 year
Ordering Information
Agilent 34410A and 34411A Multimeters

Accessories included
Test Lead Kit with probes and SMT attachments, test report, power cord, and USB interface cable.

Product Reference CD-ROM with soft documentation and software:
• Programmer’s Reference Help
• Quick Start Tutorial
• User’s Guide
• Service Guide
• Programming Examples
• IntuiLink for Multimeters
• LabVIEW and IVI-COM drivers

Options
Opt. 1CM
Rack Mount Kit
Opt. ABA
Printed Manual Set (English)
Opt. 0B0
Delete printed Manual Set (full documentation included on CD ROM)
Opt. A6J
ANSI Z540 compliant calibration

Agilent Accessories
11059A Kelvin Probe set
11060A Surface Mount Device (SMD) test probes
11062A Kelvin clip set
34131A Hard transit case
34162A Accessory pouch
34171A Input terminal connector (sold in pairs)
34172A Input calibration short (sold in pairs)
34330A 30 A current shunt
E2308A 5 kΩ thermistor probe

* For racking two side-by-side, order both items below:
Lock link kit (P/N 5061-9694)
Flange kit (P/N 5063-9212)

Agilent Technologies’ Test and Measurement Support, Services, and Assistance
Agilent Technologies aims to maximize the value you receive, while minimizing your risk and problems. We strive to ensure that you get the test and measurement capabilities you paid for and obtain the support you need. Our extensive support resources and services can help you choose the right Agilent products for your applications and apply them successfully. Every instrument and system we sell has a global warranty. Two concepts underlie Agilent’s overall support policy: “Our Promise” and “Your Advantage.”

Our Promise
Our Promise means your Agilent test and measurement equipment will meet its advertised performance and functionality. When you are choosing new equipment, we will help you with product information, including realistic performance specifications and practical recommendations from experienced test engineers. When you receive your new Agilent equipment, we can help verify that it works properly and help with initial product operation.

Your Advantage
Your Advantage means that Agilent offers a wide range of additional expert test and measurement services, which you can purchase according to your unique technical and business needs. Solve problems efficiently and gain a competitive edge by contracting with us for calibration, extra-cost upgrades, out-of-warranty repairs, and on-site education and training, as well as design, system integration, project management, and other professional engineering services. Experienced Agilent engineers and technicians worldwide can help you maximize your productivity, optimize the return on investment of your Agilent instruments and systems, and obtain dependable measurement accuracy for the life of those products.

Agilent Email Updates
www.agilent.com/find/emailupdates
Get the latest information on the products and applications you select.

Agilent Direct
www.agilent.com/find/agilentdirect
Quickly choose and use your test equipment solutions with confidence.

Agilent Open
www.agilent.com/find/open
Agilent Open simplifies the process of connecting and programming test systems to help engineers design, validate and manufacture electronic products. Agilent offers open connectivity for a broad range of system-ready instruments, open industry software, PC-standard I/O and global support, which are combined to more easily integrate test system development.

www.agilent.com
For more information on Agilent Technologies’ products, applications or services, please contact your local Agilent office. The complete list is available at:

www.agilent.com/find/contactus

Phone or Fax
United States:
(tel) 800 829 4444
(fax) 800 829 4433
Canada:
(tel) 877 894 4414
(fax) 800 746 4866
China:
(tel) 800 810 0189
(fax) 800 820 2816
Europe:
(tel) 31 20 547 2111
Japan:
(tel) (81) 426 56 7832
(fax) (81) 426 56 7840
Korea:
(tel) (080) 769 0800
(fax) (080) 769 0900
Latin America:
(tel) (305) 269 7500
Taiwan:
(tel) 0800 047 866
(fax) 0800 286 331
Other Asia Pacific Countries:
(tel) (65) 6375 8100
(fax) (65) 6755 0042
Email: tm_ap@agilent.com
Contacts revised: 09/26/05

Product specifications and descriptions in this document subject to change without notice.

© Agilent Technologies, Inc. 2005
Printed in the USA November 2, 2005 5989-3738EN

Agilent Technologies

Agilent Technologies’ Test and Measurement Support, Services, and Assistance
Agilent Technologies aims to maximize the value you receive, while minimizing your risk and problems. We strive to ensure that you get the test and measurement capabilities you paid for and obtain the support you need. Our extensive support resources and services can help you choose the right Agilent products for your applications and apply them successfully. Every instrument and system we sell has a global warranty. Two concepts underlie Agilent’s overall support policy: “Our Promise” and “Your Advantage.”

Our Promise
Our Promise means your Agilent test and measurement equipment will meet its advertised performance and functionality. When you are choosing new equipment, we will help you with product information, including realistic performance specifications and practical recommendations from experienced test engineers. When you receive your new Agilent equipment, we can help verify that it works properly and help with initial product operation.

Your Advantage
Your Advantage means that Agilent offers a wide range of additional expert test and measurement services, which you can purchase according to your unique technical and business needs. Solve problems efficiently and gain a competitive edge by contracting with us for calibration, extra-cost upgrades, out-of-warranty repairs, and on-site education and training, as well as design, system integration, project management, and other professional engineering services. Experienced Agilent engineers and technicians worldwide can help you maximize your productivity, optimize the return on investment of your Agilent instruments and systems, and obtain dependable measurement accuracy for the life of those products.

Agilent Email Updates
www.agilent.com/find/emailupdates
Get the latest information on the products and applications you select.

Agilent Direct
www.agilent.com/find/agilentdirect
Quickly choose and use your test equipment solutions with confidence.

Agilent Open
www.agilent.com/find/open
Agilent Open simplifies the process of connecting and programming test systems to help engineers design, validate and manufacture electronic products. Agilent offers open connectivity for a broad range of system-ready instruments, open industry software, PC-standard I/O and global support, which are combined to more easily integrate test system development.

www.agilent.com
For more information on Agilent Technologies’ products, applications or services, please contact your local Agilent office. The complete list is available at:

www.agilent.com/find/contactus

Phone or Fax
United States:
(tel) 800 829 4444
(fax) 800 829 4433
Canada:
(tel) 877 894 4414
(fax) 800 746 4866
China:
(tel) 800 810 0189
(fax) 800 820 2816
Europe:
(tel) 31 20 547 2111
Japan:
(tel) (81) 426 56 7832
(fax) (81) 426 56 7840
Korea:
(tel) (080) 769 0800
(fax) (080) 769 0900
Latin America:
(tel) (305) 269 7500
Taiwan:
(tel) 0800 047 866
(fax) 0800 286 331
Other Asia Pacific Countries:
(tel) (65) 6375 8100
(fax) (65) 6755 0042
Email: tm_ap@agilent.com
Contacts revised: 09/26/05

Product specifications and descriptions in this document subject to change without notice.

© Agilent Technologies, Inc. 2005
Printed in the USA November 2, 2005 5989-3738EN

Agilent Technologies