

AC Clamp-on Multimeters for Professional Use**Accurate, Rugged, Versatile
and Reliable**

- *Two models: 1,000A AC and 1,000A AC True RMS*
- *AC Amps, AC and DC Volts, Ohms, Continuity and Diode Test*
- *Large jaw takes 50mm \varnothing or 2 x 30mm \varnothing cables*
- *Autoranging and Auto-zeroing*
- *Conformance to IEC1010 and EMC standards*
- *Display-Hold for convenience in use*

Additional features on the LH1025:

- *True RMS measurement of distorted or non-sinusoidal waveforms*
- *Max-Hold mode displays highest measured value*

IEC 1010 and EMC Conformance

IEC 1010 safety features including a tactile barrier and special jaw design provide the user with confidence when making measurements in hazardous voltage areas.

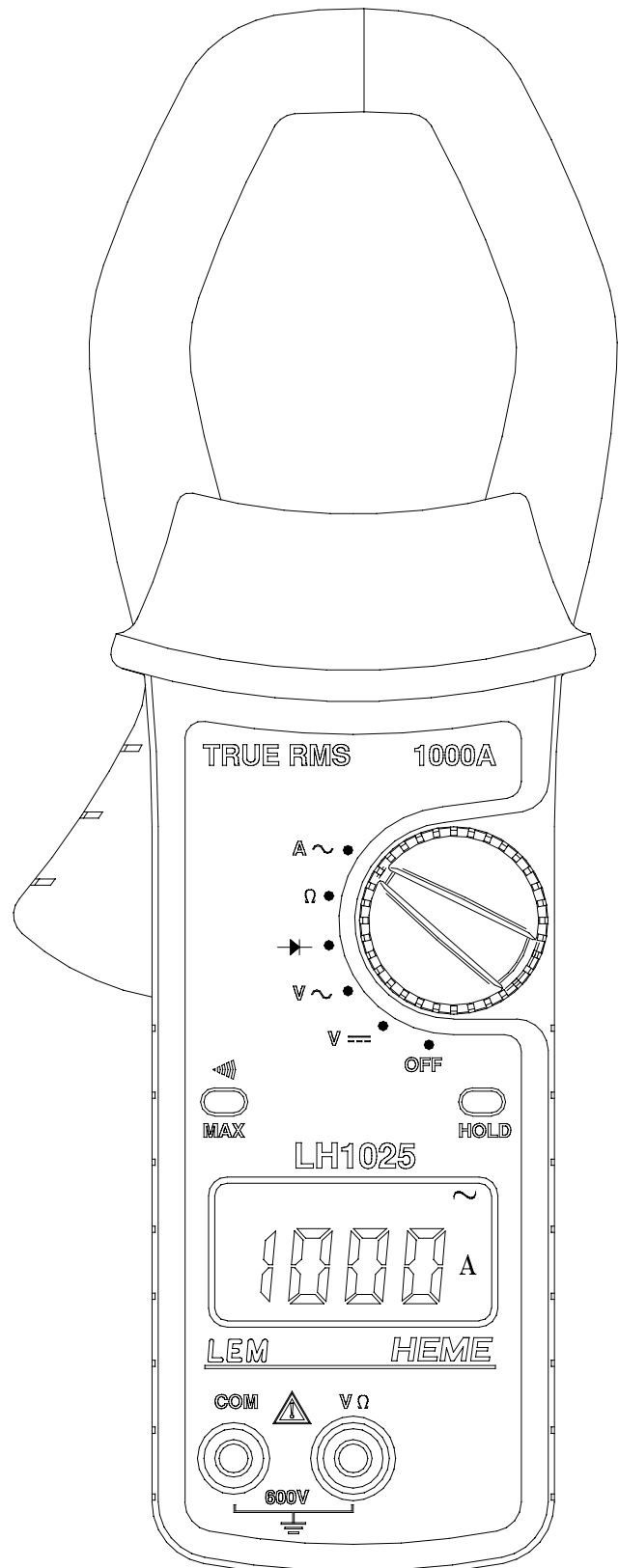
Conformance to EMC standards ensures high reliability through reduced susceptibility to electromagnetic interference.

High Accuracy

The advanced jaw design incorporates features which result in these instruments having excellent measurement performance under a wide range of operating conditions.

True RMS measurement (LH1025)

By using True RMS measurement techniques the LH1025 gives maximum accuracy for non-sinusoidal waveform measurements often found with today's complex loads.



SPECIFICATIONS

| MODEL | LH1020 | LH1025 |
|---|---|---|
| NON-INVASIVE CURRENT MEASUREMENT | | |
| Ranges (auto-ranging) | 400A, 1,000A | 400A, 1,000A |
| Measurement methods | AC RMS responding | AC True RMS |
| Resolution | 100mA (400A range) 1A (1,000A range) | 100mA (400A range) 1A (1,000A range) |
| Basic Accuracy | 10 - 700A, 50-60Hz, $\pm 1.5\%$ of reading ± 5 digits (1) | |
| Crest Factor | 4 maximum for True RMS | |
| Maximum measurable load | 1,000A AC RMS | |
| Maximum permissible overload | 1,200 Amps RMS | |
| VOLTAGE MEASUREMENT | | |
| Methods | AC RMS responding, DC | AC True RMS (2), DC |
| OTHER FEATURES | | |
| Diode test | ● | ● |
| Max hold | | ● |

VOLTAGE MEASUREMENT (continued)

| | |
|-----------------------|---|
| Ranges (auto-ranging) | 400V, 600V AC & DC |
| Maximum overload | 1,000V |
| Accuracy | $\pm 1\%$ of reading ± 3 digits (1) |
| Resolution | 100mV (400V range); 1V (600V range) |
| Crest Factor | 4 for $V < 1,000$ V peak |
| Input impedance | 1M Ω |

RESISTANCE, CONTINUITY AND DIODE TESTING

| | |
|--|---|
| Ω ranges (auto-ranging) | 400 Ω , 4 k Ω |
| Ω resolution | 0.1 Ω (400 Ω range), 1 Ω (4 k Ω range) |
| Ω accuracy | $\pm 1\%$ of reading ± 3 digits (1) |
| Continuity sounder (Ω range only) | Toggled on & off by))) button; Sounds when resistance < 50 Ω |
| Input protection, Ω & diode-test | To 600 V, DC or sinewave RMS |
| Diode test 3.2V max. open circuit, 0.3mA short-circuit | Reads forward-biased diode voltage to 2,000 mV |
| Diode-test accuracy | $\pm 1\%$ of reading ± 2 digits |

FREQUENCY RESPONSE

| | |
|------------------------|---------------|
| AC A and AC V (LH1020) | 50 Hz - 400Hz |
| True RMS AC V (LH1025) | 15Hz - 1kHz |
| DC V | DC only |

DISPLAY

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|--|--|
| Size and type | 4000-count LCD 12mm / 0.5-inch characters |
| Status indication (as appropriate to model) | Low Battery, Data Hold, Pk (MAX Hold), AC, DC, Diode Test, Ω ,))) (Continuity) |
| Refresh rate | 3 times per second |

POWER SUPPLY

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|--------------|---|
| Battery type | 9 V Alkaline: MN1604, PP3, IEC 6LR61 or equivalent |
| Battery life | Typically 60 hours |

MECHANICAL DATA

| | |
|-------------------------|--|
| Dimensions (H x W x D); | 260 x 98 x 52 mm 10.25 x 3.86 x 2.05 inches |
| Weight | 520 gm / 1.4 lbs |
| Jaw Capacity | 1 x 50mm / 2.0-inch \varnothing cable or 2 x 30mm / 1.2-inch \varnothing cables |
| Jaw Opening | 52mm / 2.05 inches |

ENVIRONMENTAL DATA

| | |
|--------------------------------------|---|
| Operating Temperature | 0 $^{\circ}$ C to 50 $^{\circ}$ C (32 $^{\circ}$ F to 122 $^{\circ}$ F) |
| Temperature Coefficient (Current) | $\pm 0.1\%$ of reading per $^{\circ}$ C $\pm 0.06\%$ of reading per $^{\circ}$ F |
| Storage Temperature | -20 $^{\circ}$ to 60 $^{\circ}$ (-4 $^{\circ}$ F to 140 $^{\circ}$ F) |

SAFETY

All models comply with IEC1010-1, 600V working, Installation category III, Pollution degree 2.

MAXIMUM SAFE VOLTAGES

| | |
|--|--|
| Current measurement (bare conductors) | 600V AC RMS or DC between uninsulated conductor & ground |
| Voltage measurement | 600V AC RMS or DC between input terminals or between live terminal & local ground. |

Notes:

- All accuracies stated at 23 $^{\circ}$ C ± 1 $^{\circ}$ C (73.4 ± 1.8 $^{\circ}$ F)
- True RMS measurements taken over 100 ms.

LEM

The LEM group offer a wide range of non-invasive transducers, probes and instrumentation for the measurement and analysis of current, voltage and power. Since the introduction of the world's first digital AC/DC clamp-on ammeter in 1982, LEM HEME has continued to provide innovative test and measurement solutions encompassing current measurement from 5mA to 2,000A

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