Designed with an emphasis on safety

2 types of DMMs

3256 MEAN-Value

- Measures RMS values of commercial mains power frequencies
- Makes RMS measurements that exclude harmonic components.

3257 True RMS

- Accurately measures harmonic wave components
- Accurate measurements are guaranteed for components in the range from 50 to 500 Hz.
- Crest factor: 3.0 max. (Except 420mV range)

Behind-the-scene safety features

The 3256 and 3257 models bear the CE mark meaning that they conform to standards such as the IEC61010-1 international safety standard and other EMC-related standards. Moreover, these units are designed with an emphasis on safety. In addition to a shutter mechanism that prevents incorrect test lead connection, the current terminals of the units come equipped with standard fast blow fuses.

Overvoltage category (CAT)

In order to promote the safe use of measuring instruments, safety level standards are classified under IEC60664 into overvoltage categories CAT I through IV, depending on the location where the instrument is to be used. Categories with a higher number indicate an electrical environment that has high levels of instantaneous energy. Therefore, a measuring instrument designed for CAT III can endure higher instantaneous energy than an instrument designed for CAT II.

CAT II: Primary electrical circuits in equipment connected to a wall outlet via a power cord.
CAT III: Circuits between primary and distribution panels and outlets in equipment that reads electricity from the direct distribution panel via electrical reads (fixed equipment).

3256 only

Check for live lines safely and easily

- Press 2 times
- Adjusting sensitivity
- Simply move the head close to the power line
- Buzzer sounds and flashing

Voltage and resistance ranges: overload protection of up to 1000 V DC, 1000 V AC rms(sin) or 10 V·Hz
Current range: fuse protection
0.5 A / 700 VAC 50 kA interrupting capacity
10 A / 600 VAC 10 kA interrupting capacity

3257 only

Analyze pulse control signals

The ratio between pulse width (TW+ or TW-) and pulse recursion cycle (T) is displayed as a percentage.

Display range: 5 to 95%
- Accuracy: 10 Hz to 1 kHz: ±0.4% rdg.±4 dgt.
- 1 kHz to 10 kHz: ±0.1% rdg±50 dgt.

Accuracy rating pertains to a square wave of 3Vp-p.
Practical functions

I want to see fluctuations with respect to the current value...
I want to zero adjust the resistance range...

Relative function
This setting can be used with the V, A and Ω functions.
Any value can be set as the reference value and values can be displayed relative to the reference value.

I want to keep track of values measured...

Memory function (REC.MEMO)
This setting can be used with the V, A, Ω and Hz functions.
Up to 20 data points can be held using this function.
Up to 20 display values obtained with Hold or Automatic Hold can be stored sequentially. Several types of data can be held at once.

I can't see the reading because it is too dark...
I can't check the reading right now...

Automatic Hold function (H.AUTO)
This setting can be used with the V, A and Ω functions.
This function is useful when the device being tested needs to be monitored constantly.
This function can be set to hold the display when the switch is pressed.

I want to read the max/min/average values...

Recording function
This setting can be used with the V, A and Ω functions.
The display can be switched between the present measurement value and the maximum, minimum, or average values measured since the start of recording. This is useful when observing changes over an extended period of time.

I cannot use the unit because the batteries are dead...

Automatic power saver function
Because the LCD goes out when the unit is idle for 10 minutes, unnecessary power consumption is easily avoided. This function can also be disabled.
This function is automatically disabled when recording.
## 3256 & 3257 common specifications

### Accuracy

<table>
<thead>
<tr>
<th>Range</th>
<th>DC</th>
<th>AC</th>
<th>Notes</th>
<th>Overload protection</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>AC / DC voltage V</strong></td>
<td>± 0.5%rdg. ± 2dgt.</td>
<td>± 1.5%rdg. ± 3dgt.</td>
<td>Input impedance</td>
<td>DC 1000 V 1000 Vrms(sine) or 10 V Hz 1 minute</td>
</tr>
<tr>
<td>420.0 mV</td>
<td>± 0.5%rdg. ± 2dgt.</td>
<td>± 1.2%rdg. ± 3dgt.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.200 V</td>
<td>± 0.5%rdg. ± 2dgt.</td>
<td>± 1.2%rdg. ± 3dgt.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>420.0 V</td>
<td>± 0.5%rdg. ± 2dgt.</td>
<td>± 1.2%rdg. ± 3dgt.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1000 V</td>
<td>± 0.5%rdg. ± 2dgt.</td>
<td>± 1.2%rdg. ± 3dgt.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>AC / DC current A</strong></td>
<td>± 1.5%rdg. ± 4dgt.</td>
<td>± 2.5%rdg. ± 5dgt.</td>
<td>Input impedance</td>
<td></td>
</tr>
<tr>
<td>420.0 µA</td>
<td>± 0.7%rdg. ± 4dgt.</td>
<td>± 0.7%rdg. ± 4dgt.</td>
<td>Open-circuit terminal voltage</td>
<td></td>
</tr>
<tr>
<td>420.0 µA</td>
<td>± 0.7%rdg. ± 4dgt.</td>
<td>± 0.7%rdg. ± 4dgt.</td>
<td>Open-circuit terminal voltage</td>
<td></td>
</tr>
<tr>
<td>420.0 mA</td>
<td>± 0.7%rdg. ± 4dgt.</td>
<td>± 0.7%rdg. ± 4dgt.</td>
<td>Open-circuit terminal voltage</td>
<td></td>
</tr>
<tr>
<td>10.00 A</td>
<td>± 0.7%rdg. ± 4dgt.</td>
<td>± 0.7%rdg. ± 4dgt.</td>
<td>Open-circuit terminal voltage</td>
<td></td>
</tr>
<tr>
<td><strong>Resistance Ω</strong></td>
<td>± 0.7%rdg. ± 2dgt.</td>
<td>± 2.5%rdg. ± 2dgt.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>420.0 Ω</td>
<td>± 0.7%rdg. ± 2dgt.</td>
<td>± 2.5%rdg. ± 2dgt.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.200 kΩ</td>
<td>± 0.7%rdg. ± 2dgt.</td>
<td>± 2.5%rdg. ± 2dgt.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>420.0 MΩ</td>
<td>± 0.7%rdg. ± 2dgt.</td>
<td>± 2.5%rdg. ± 2dgt.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Continuity Ω</strong></td>
<td>± 0.7%rdg. ± 4dgt.</td>
<td>± 0.7%rdg. ± 4dgt.</td>
<td>A built-in buzzer sounds</td>
<td></td>
</tr>
<tr>
<td>420.0 Ω</td>
<td>± 0.7%rdg. ± 4dgt.</td>
<td>± 0.7%rdg. ± 4dgt.</td>
<td>A built-in buzzer sounds</td>
<td></td>
</tr>
<tr>
<td><strong>Diode</strong></td>
<td>± 5.0%rdg. ± 2dgt.</td>
<td>± 5.0%rdg. ± 2dgt.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.00 V</td>
<td>± 5.0%rdg. ± 2dgt.</td>
<td>± 5.0%rdg. ± 2dgt.</td>
<td>Open terminal voltage/current</td>
<td></td>
</tr>
<tr>
<td><strong>Frequency Hz</strong></td>
<td>± 0.02%rdg. ± 2dgt.</td>
<td>± 0.02%rdg. ± 2dgt.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0.50Hz to 199.99Hz</td>
<td>± 0.02%rdg. ± 2dgt.</td>
<td>± 0.02%rdg. ± 2dgt.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>200Hz to 500kHz</td>
<td>± 0.02%rdg. ± 2dgt.</td>
<td>± 0.02%rdg. ± 2dgt.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**AC measurement Accuracy:** In the 3256, ±2 dgt. is added for inputs less than 10% of the full scale. Accuracy is not rated for inputs less than 1.0 mV in the 420 mV range. For the 3257, the accuracy rating is for inputs greater than 10% of full scale.

**Measurement times in the 10 A range:** continuous up to 7 A, maximum 1 minute for 7 A to 10 A.

### With Holster

**3256-51** (MEAN value type)
**3257-51** (True RMS type)
*(Includes 9207-10 TEST LEADS and holster)*

### With Semi-hard Carrying Case

**3256-50** (MEAN value type)
**3257-50** (True RMS type)
*(Includes 9207-10 TEST LEADS and 9378 CARRYING CASE)*

### Special option for the 3256-51 and 3257-51

**3853 CARRYING CASE** (soft type)

### Common options for the 3256-51 and 3257-51

**9014 HIGH VOLTAGE PROBE** (No CE marking)

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