














## Table of Specifications (Representative figures are provided for basic accuracy. For more information, please see the product catalog.)

| Model  | High precision models   |   | Standard models  |   |  | Pocket models   |   |  |
|--|---|---|--|---|--|---|---|--|
|  | DT4281  | DT4282  | DT4251   | DT4252  | DT4253   | DT4221  | DT4222  |  |
| Appearance                                   |    |  |   |  |  |                        |  |  |
| Basic Specifications                         |   |   |  |   |  |   |   |  |
| Principal applications                       | Electrical work   | General use   | Electrical work  | General use   | Air-conditioning/<br>instrumentation   | Electrical work   | General use   |  |
| Rectifier                                    | True RMS  |   | True RMS   |   |  | True RMS  |   |  |
| Maximum display count                        | 60000   |   | 6000   |   |  | 6000  |   |  |
| Display backlight function                   | ✓   | ✓   | ✓  | ✓   | ✓  | ✓   | ✓   |  |
| CAT  | Probe sleeve attached   | CAT IV 600 V / CAT III 1000 V   |  | CAT IV 600 V / CAT III 1000 V   |  |   | CAT IV 300 V / CAT III 600 V  |  |
|  | No probe sleeve attached  | CAT II 1000 V   |  | CAT II 1000 V   |  |   | CAT II 600 V  |  |
| Measurement range                            |   |   |  |   |  |   |   |  |
| AC/DC Voltage                                | 60.000 mV/ 600.0 mV/ 6.0000 V/<br>60.000 V/ 600.00/ 1000.0 V  |   | *600.0 mV (* DC only)<br>6.000 V/ 60.00 V/ 600.0 V/ 1000 V   |   |  | *600.0 mV (* DC only)<br>6.000 V/ 60.00 V/ 600.0 V  |   |  |
| Basic accuracy (DC V)                        | ±0.025 % rdg. ±2 dgt.   |   | ±0.3 % rdg. ±5 dgt.<br>High accuracy 600.0 mV range: ±0.2 %rdg. ±5 dgt.  |   |  | ±0.5 % rdg. ±5 dgt.   |   |  |
| Basic accuracy (AC V)                        | ±0.2 % rdg. ±25 dgt.  |   | ±0.9 % rdg. ±3 dgt.  |   |  | ±1.0 % rdg. ±3 dgt.   |   |  |
| AC+DC Voltage                                | 6.0000 V/ 60.000 V<br>600.00 V/ 1000.0 V  |   | N/A  | N/A   | N/A  | N/A   | N/A   |  |
| Basic accuracy                               | ±0.3 % rdg. ±30 dgt.  |   |  |   |  |   |   |  |
| AC/DC Current (Direct input)                 | 600.00 μA/ 6000.0 μA<br>60.000 mA/ 600.00 mA  | 600.00 μA/ 6000.0 μA<br>60.000 mA/ 600.00 mA<br>6.0000 A/ 10.000 A                | N/A  | 6.000 A/ 10.00 A  | *60.00 μA/*600.0 μA<br>*6.000 mA/*60.00 mA<br>(* DC only)                          | N/A   | N/A   |  |
| Basic accuracy (DC A)                        | ±0.05 % rdg. ±5 dgt.  |   |  | ±0.9 % rdg. ±5 dgt.   | ±0.8 % rdg. ±5 dgt.  |   |   |  |
| Basic accuracy (AC A)                        | ±0.6 % rdg. ±5 dgt.   |   |  | ±1.4 % rdg. ±3 dgt.   |  |   |   |  |
| AC Current (Clamp sensor)                    | 10.00 A to 1000 A   | N/A   | 10.00 A to 1000 A  | N/A   | 10.00 A to 1000 A  | N/A   | N/A   |  |
| Basic accuracy                               | ±0.6 % rdg. ±2 dgt.<br>Combined accuracy:<br>Add AC clamp's measurement accuracy.   |   | ±0.9 % rdg. ±3 dgt.<br>Combined accuracy:<br>Add AC clamp's measurement accuracy.  |   | ±0.9 % rdg. ±3 dgt.<br>Combined accuracy:<br>Add AC clamp's measurement accuracy.  |   |   |  |
| Resistance                                   | 60.000 Ω/ 600.00 Ω/ 6.0000 kΩ/<br>60.000 kΩ/ 600.00 kΩ/ 6.0000 MΩ/<br>60.00 MΩ/ 600.0 MΩ  |   | 600.0 Ω/ 6.000 kΩ/<br>60.00 kΩ/ 600.0 kΩ/<br>6.000 MΩ/ 60.00 MΩ  |   |  | N/A   | 600.0 Ω/ 6.000 kΩ/<br>60.00 kΩ/ 600.0 kΩ/<br>6.000 MΩ/ 60.00 MΩ                     |  |
| Basic accuracy                               | ±0.03 % rdg. ±2 dgt.  |   | ±0.7 % rdg. ±5 dgt.  |   |  |   | ±0.9 % rdg. ±5 dgt.   |  |
| Temperature (thermocouples)                  | K: -40.0 to 800.0 °C  |   | N/A  | N/A   | K: -40.0 to 400.0 °C   | N/A   | N/A   |  |
| Basic accuracy                               | ±0.5 % rdg. ±3 °C   |   |  |   | ±0.5 % rdg. ±2 °C  |   |   |  |
| Capacitance                                  | 1.000 nF/ 10.00 nF/ 100.0 nF/ 1.000 μF/ 10.00 μF/<br>100.0 μF/ 1.000 mF/ 10.00 mF/ 100.0 mF   |   | 1.000 μF/ 10.00 μF/ 100.0 μF/ 1.000 mF/ 10.00 mF   |   |  | N/A   | 1.000 μF/ 10.00 μF/<br>100.0 μF/ 1.000 mF/<br>10.00mF                               |  |
| Basic accuracy                               | ±1.0 % rdg. ±5 dgt.   |   | ±1.9 % rdg. ±5 dgt.  |   |  |   | ±1.9 % rdg. ±5 dgt.   |  |
| Frequency                                    | ACV, DC+ACV, ACA<br>(limited by range in some cases)<br>99.999 Hz/ 999.99 Hz/ 9.9999 kHz/<br>99.999 kHz/ 500.00 kHz   |   | ACV, DC+ACV, ACA (limited by range in some cases)<br>99.99 Hz/ 999.9 Hz/ 9.999 kHz/ 99.99 kHz                                      |   |  | 99.99 Hz/ 999.9 Hz/ 9.999 kHz   |   |  |
| Basic accuracy                               | ±0.005 % rdg. ±3 dgt.   |   | ±0.1 % rdg. ±1 dgt.  |   |  | ±0.1 % rdg. ±2 dgt.   |   |  |
| Continuity check                             | ✓   | ✓   | ✓  | ✓   | ✓  | ✓   | ✓   |  |
| Diode check                                  | ✓   | ✓   | ✓  | ✓   | ✓  | N/A   | ✓   |  |
| Conductance                                  | N/A   | ✓   | N/A  | N/A   | N/A  | N/A   | N/A   |  |
| Voltage detection                            | N/A   | N/A   | ✓  | N/A   | N/A  | ✓   | N/A   |  |
| AC/DC voltage automatic detection            | AC/DC dual display  | AC/DC dual display  | ✓  | N/A   | ✓  | ✓   | N/A   |  |
| Decibel conversion                           | ✓   | ✓   | N/A  | N/A   | N/A  | N/A   | N/A   |  |
| Peak measurement                             | ✓   | ✓   | N/A  | N/A   | N/A  | N/A   | N/A   |  |
| 4-20 mA % conversion                         | ✓   | ✓   | N/A  | N/A   | ✓  | N/A   | N/A   |  |
| Other functions                              | Filter function, Display hold, Auto hold, Max/Min value display, Sampling select, Relative display, Memory function (400 data), Auto-power save, USB communication (option) |   | Filter function, Display hold, Auto hold, Max/Min/Avg value display, Relative display, Auto-power save, USB communication (option) |   |  | Filter function, Display hold, Relative display, Auto-power save  |   |  |
| Power supply/ Continuous use (Backlight off) | LR6 (AA) alkaline batteries ×4, 100 hours<br>R6P (AA) manganese battery ×4, 30 hours<br>[Representative value: DCV function]  |   | Alkaline batteries (LR03) ×4, 130 hours  |   |  | Alkaline batteries (LR03) ×1, 40 hours  |   |  |
| Dimensions and mass                          | 93 mm (3.66 in)W × 197 mm (7.76 in)H × 53 mm (2.09 in)D, 650 g (22.9 oz) (including batteries)  |   | 84 mm (3.31 in)W × 174 mm (6.85 in)H × 52 mm (2.05 in)D, 390 g (13.8 oz) (including batteries and holster)                         |   |  | 72 mm (2.83 in)W × 149 mm (5.87 in)H × 38 mm (1.50 in)D, 190 g (6.7 oz) (including batteries and holster) |   |  |

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| Model  | Standard models   |   | Pocket models   |  |  | Standard models   |
|--|---|---|---|--|--|---|
|  | DT4211  | DT4212  | 3244-60   | 3245-60  | 3246-60  | 3255-50   |
| Appearance   |                |  |  |   |   |    |
| Basic Specifications                               |   |   |   |  |  |   |
| Principal applications                             | General use   | Electrical work   | General use   | General use  | General use  | Electrical work   |
| Rectifier  | MEAN  | True RMS  | MEAN  | MEAN   | MEAN   | MEAN  |
| Maximum display count                              | 4000  |   | 4199  | 4199   | 4199   | 4199  |
| Display backlight function                         | ✓   |   | N/A   | N/A  | ✓  | N/A   |
| CAT  | Probe sleeve attached   | CAT III 600 V<br>CAT II 1000 V  | CAT III 300 V   | CAT IV 300 V<br>CAT III 600 V  | CAT IV 300 V<br>CAT III 600 V  | CAT III 600 V<br>CAT II 1000 V  |
|  | No probe sleeve attached  | CAT II 1000 V   | CAT II 600 V  | CAT II 600 V   | CAT II 600 V   | CAT II 1000 V   |
| Measurement range                                  |   |   |   |  |  |   |
| AC/DC Voltage                                      | 400.0 mV/ 4.000 V/ 40.00 V/ 400.0/ 1000 V   |   | *419.9 mV/ 4.199 V/<br>41.99 V/ 419.9 V/ 500 V<br>(* DC only)                     | *419.9 mV/ 4.199 V/<br>41.99 V/ 419.9 V/ 600 V<br>(* DC only)  | *419.9 mV/ 4.199 V/<br>41.99 V/ 419.9 V/ 600 V<br>(* DC only)                        | 419.9 mV/ 4.199 V/ 41.99<br>V/ 419.9 V/ 1000 V  |
| Basic accuracy (DC V)                              | ±0.5 % rdg. ±3 dgt.   |   | ±0.7 % rdg. ±4 dgt.   | ±1.3 % rdg. ±4 dgt.  | ±1.3 % rdg. ±4 dgt.  | ±0.5 % rdg. ±4 dgt.   |
| Basic accuracy (AC V)                              | ±1.0 % rdg. ±5 dgt.   |   | ±2.3 % rdg. ±8 dgt.   | ±2.3 % rdg. ±8 dgt.  | ±2.3 % rdg. ±8 dgt.  | ±1.2 % rdg. ±4 dgt.   |
| AC+DC Voltage                                      | N/A   |   | N/A   | N/A  | N/A  | N/A   |
| Basic accuracy                                     |   |   |   |  |  |   |
| AC/DC Current (Direct input)                       | 400.0 μA/ 4000 μA<br>40.00 mA/ 400.0 mA<br>4.000 A/ 10.00 A                                     |   | N/A   | N/A  | N/A  | N/A   |
| Basic accuracy (DC A)                              | ±1.2 % rdg. ±3 dgt.   |   |   |  |  |   |
| Basic accuracy (AC A)                              | ±1.2 % rdg. ±5 dgt.   |   |   |  |  |   |
| AC Current (Clamp sensor)                          | N/A   |   | N/A   | N/A  | N/A  | 10.00 A to 1000 A<br>(with optional clamp sensor)   |
| Basic accuracy                                     |   |   |   |  |  | ±2.0 % rdg. ±4 dgt.<br>Combined accuracy:<br>Add AC clamp's measurement accuracy.   |
| Resistance   | 400.0 Ω/ 4.000 kΩ/ 40.00 kΩ/ 400.0 kΩ/ 4.000<br>MΩ/ 40.00 MΩ                                    |   | 419.9 Ω/ 4.199 kΩ/ 41.99 kΩ/ 419.9 kΩ/ 4.199 MΩ/ 41.99 MΩ                         |  |  |   |
| Basic accuracy                                     | ±0.5 % rdg. ±2 dgt.   |   |   |  |  |   |
| Temperature (thermocouples)                        | N/A   |   | K: -55.0 to 700 °C  | N/A  | N/A  | N/A   |
| Basic accuracy                                     | ±2 °C (at 0 to 50 °C)   |   |   |  |  |   |
| Capacitance  | 50.00 nF/ 500.0 nF/ 5.000 μF/ 50.00 μF/ 100.0 μF  |   | N/A   | N/A  | N/A  | N/A   |
| Basic accuracy                                     | ±2.0 % rdg. ±5 dgt.   |   |   |  |  |   |
| Frequency  | 5.000 Hz/ 50.00 Hz/ 500.0 Hz/ 5.000 kHz/<br>50.00 kHz/ 500.0 kHz/ 5.000 MHz                     |   | N/A   | N/A  | N/A  | N/A   |
| Basic accuracy                                     | ±0.1 % rdg. ±3 dgt.   |   |   |  |  |   |
| Continuity check                                   | ✓   |   | ✓   | ✓  | ✓  | ✓   |
| Diode check  | ✓   |   | N/A   | N/A  | ✓ (Judgment only)  | ✓   |
| Conductance  | N/A   |   | N/A   |  |  |   |
| Voltage detection                                  | N/A   |   | N/A   |  |  |   |
| AC/DC voltage automatic detection                  | N/A   |   | N/A   |  |  |   |
| Decibel conversion                                 | N/A   |   | N/A   |  |  |   |
| Peak measurement                                   | N/A   |   | N/A   |  |  |   |
| 4-20 mA % conversion                               | N/A   |   | N/A   |  |  |   |
| Other functions                                    | Operating temperature range of -10 to 50 °C,<br>Display hold, Relative display, Auto-power save |   | N/A   | Light check function   | LED light illuminates<br>test points<br>Backlight LCD                                | Dust-proof and waterproof<br>structure, Built-in with<br>current-limiting resistor<br>and 1000 V withstanding<br>fuse to prevent short-circuit<br>accidents |
| Power supply/<br>Continuous use<br>(Backlight off) | Alkaline batteries<br>(LR6) ×2, 800 hr  | Alkaline batteries<br>(LR6) ×2, 450 hr  | Coin type lithium battery<br>(CR2032) ×1, 150 hr                                  | Main battery: Rechargeable<br>lithium battery, Backup<br>battery: Coin type lithium<br>battery (CR2032) ×1, 150 hr<br>(Backup battery) | Coin type lithium battery<br>(CR2032) ×1, 150 hr                                     | Manganese batteries<br>(R03) ×2, 200 hr   |
| Dimensions and mass                                | 91.6 mm (3.61 in) W × 180.6 mm (7.11 in) H ×<br>57.1 mm (2.25 in) D, 388 g (13.7 oz)            |   | 55 mm (2.17 in) W × 109<br>mm (4.29 in) H × 9.5 mm<br>(0.37 in) D, 60 g (2.1 oz)  | 60 mm (2.36 in) W ×<br>135 mm (5.31 in) H × 23<br>mm (0.91 in) D, 140 g<br>(4.9 oz)  | 30 mm (1.18 in) W ×<br>182 mm (7.17 in) H ×<br>26.5 mm (1.04 in) D,<br>80 g (2.8 oz) | 70 mm (2.76 in) W × 145<br>mm (5.71 in) H × 31 mm<br>(1.22 in) D, 210 g (7.4 oz)<br>(including batteries)   |

### Test lead L9207-10/ L9207-30/ L9206

|                    |                |  |
|--------------------|----------------|--|
| Sleeve attached    | CAT IV 600 V   | When the CAT (measurement category) rating of the main unit is lower than that of test leads, the CAT of the main unit takes precedence.<br>When measuring in a CAT IV or CAT III environment, be sure to attach the sleeve to the test leads. |
|                    | CAT III 1000 V |  |
| No sleeve attached | CAT II 1000 V  |  |

