

Multimeter Comparison Chart

All Meters (except 5115):
Continuity w/Beeper,
Display HOLD,
Auto Ranging, Manual Ranging*,
Auto Pwr Off*, Direct Fuse Access*



| MODEL | 5115 | 5231 | 5233 | 5212 | 5217 | MTX 3290 | MTX 3291 | MTX 3292B MTX 3292B-BT | MTX 3293B MTX 3293B-BT | |
|--|---------------|--------------------------------|--------------------------------|------------------|----------------------|-------------------------------|-------------------------------|--|--|--|
| TRMS - (True RMS) | - | • | • | • | • | • | • | • | • | |
| Counts | 2000 | 6,000 | 6,000 | 4,000 | 6,000 | 6,000 | 60,000 | 100,000 | 100,000 | |
| VOLTAGE MEASUREMENTS | | | | | | | | | | |
| Voltage - MAX | 600V AC/DC | 1000V AC/DC | 1000V AC/DC | 600V AC/DC | 750V AC/ 1000V DC | 600V AC/DC/AC+DC | 600V AC/DC/AC+DC | 1000V AC/DC/AC+DC | 1000V AC/DC/AC+DC | |
| Voltage - AC / DC / AC+DC | • / • / - | • / • / - | • / • / - | • / • / - | • / • / - | • / • / - | • / • / - | • / • / - | • / • / - | |
| Voltage - Bandwidth | - | 1kHz | 1kHz | 1kHz | 1kHz | 20kHz | 100kHz | 100kHz | 200kHz | |
| Milli-Volt (mV) Range | - | • | • | • | - | - | - | • | • | |
| V Low Z - Ghost Voltages (Z) | - | • (Z=250kΩ) | • (Z=250kΩ) | • (Z=500kΩ) | • (Z=500kΩ) | - | - | • (Z=300kΩ) | • (Z=300kΩ) | |
| NCV - Non Contact Voltage Detector | • | • | • | • | • | • | • | • | • | |
| CURRENT MEASUREMENTS | | | | | | | | | | |
| Current - MAX | - | - | 10A | 10A (20A <30sec) | 10A (20A <30sec) | 10A (20A <30sec) | 10A (20A <30sec) | 10A (20A <30sec) | 10A (20A <30sec) | |
| Current - AC / DC / AC+DC | - | • / • / - | • / • / - | • / • / - | • / • / - | • / • / - | • / • / - | • / • / - | • / • / - | |
| Milli-Amp (mA) / Micro-Amp (µA) Ranges | - | - | - | - / - | • / • | • / - | • / - | • / • | • / • | |
| Current Clamp Function / Current MAX | - | • / 600A | - | - | - | • / 6 kA | • / 6 kA | • / >999 kA | • / >999 kA | |
| Current Clamp Ratios | - | 1mV/A | - | - | - | 1000 ; 100 ; 10 ; 1mV/A | 1000 ; 100 ; 10 ; 1mV/A | Custom Programmable (V or A)/A Ratios | Custom Programmable (V or A)/A Ratios | |
| OTHER MEASUREMENTS | | | | | | | | | | |
| Resistance - MAX | 20MΩ | 60MΩ | 60MΩ | 40MΩ | 60MΩ | 60MΩ | 60MΩ | 100MΩ | 100MΩ | |
| Continuity With Beeper - Threshold | <30Ω | <20Ω + 3Ω | <20Ω + 3Ω | <50Ω | <50Ω | <30Ω ± 5Ω | <30Ω ± 5Ω | ~20Ω | ~20Ω | |
| Frequency - Range | - | - | 10Hz-3kHz | - | 10Hz-1kHz | 60Hz-200kHz | 60Hz-600kHz | 10Hz-5MHz | 10Hz-5MHz | |
| Low Pass Filter (Frequency) | - | - | - | - | - | • (300Hz) | • (300Hz) | • (300Hz) | • (300Hz) | |
| Capacitance | - | - | 1mF | 100mF | 100mF | 60mF | 60mF | 10mF | 10mF | |
| Diode test | 0-1V | 0-2.8V <0.9mA | 0-2.8V <0.9mA | 0-3V | 0-3V | 0-3V | 0-3V | 0-2.6V <1mA + (Zener/LED) | 0-20V <11mA | |
| Temperature - PT100 / PT1000 RTD | - / - | - / - | - / - | - / - | - / - | - / - | - / - | • / • | • / • | |
| Temperature - Type-J / Type-K TC | - / - | - / - | - / • | - / - | - / • | - / - | - / - | • / • | • / • | |
| Duty Cycle / Pulse Width / Pulse Count | - / - / - | - / - / - | • / - / - | - / - / - | • / - / - | - / - / - | • / • / - | • / • / • | • / • / • | |
| Δ REL - Relative Measurement | - | - | • | - | • | - | - | • | • | |
| dB - Decibels In Voltage (Vref) | - | - | - | - | - | - | - | • | • | |
| dBm - Decibels In Power (Rref) | - | - | - | - | - | - | - | • | • | |
| MAX / MIN / Peak+ / Peak - | • / - / - / - | - / - / - / - | • / • / - / - | - / - / - / - | • / • / - / - | - / - / - / - | • / • / - / - | • / • / • / • | • / • / • / • | |
| CF - Crest Factor | - | - | - | - | - | - | - | • | • | |
| Power - Resistive / VxA | - / - | - / - | - / - | - / - | - / - | - / - | • / - | • / • | • / • | |
| MATH Function | - | - | - | - | - | - | - | • | • | |
| OTHER FEATURES | | | | | | | | | | |
| Recording - (# Of Records) | - | - | - | - | - | - | - | • (10,000) | • (30,000) | |
| Communication To PC - USB / Bluetooth | - / - | - / - | - / - | - / - | - / - | - / - | • / - | • / • (-BT version) | • / • (-BT version) | |
| Software For Data Analysis | - | - | - | - | - | - | - | • (SX-DMM) | • (SX-DMM) | |
| Color Graphical Display | - | - | - | - | - | - | - | • | • | |
| Backlight / Flashlight | • / • | • / - | • / - | • / • | • / • | - | - | • / - | • / - | |
| Auto Power Off Removable | - | • | • | • | • | - | - | • | • | |
| POWER | | | | | | | | | | |
| Batteries / Power Supply | 2 x CR2032 | 9V | 9V | 2 x AA | 2 x AA | 4 x AA or NiMH | 4 x AA or NiMH | 4 x AA or NiMH or Wall Charger Power Supply | 4 x AA or NiMH or Wall Charger Power Supply | |
| Battery Life | - | >100hrs | >100hrs | 500hrs | 500hrs | AA: 200hrs NiMH: 140hrs | AA: 300hrs NiMH: 210hrs | AA: 100hrs NiMH: 80hrs | AA: 100hrs NiMH: 80hrs | |
| Low Battery Indication | - | • | • | • | • | • | • | • | • | |
| MECHANICAL / ENVIRONMENTAL | | | | | | | | | | |
| Magnetic Hanger | - | w/MultiFix (#5000.44) | w/MultiFix (#5000.44) | • | • | w/MultiFix (#5000.44) | w/MultiFix (#5000.44) | w/MultiFix (#5000.44) | w/MultiFix (#5000.44) | |
| Protection Index | IP 40 | IP 54 | IP 54 | IP 54 | IP 54 | IP 67 | IP 67 | IP 67 | IP 67 | |
| Waterproof | - | - | - | - | - | • | • | • | • | |
| Operating Temperature Range | 32°F to 122°F | 32°F to 122°F | 32°F to 122°F | -4°F to 120°F | -4°F to 120°F | 14°F to 131°F | 14°F to 131°F | 32°F to 104°F | 32°F to 104°F | |
| WARRANTY / SAFETY | | | | | | | | | | |
| Safety | 600V CAT III | 1000 V CAT III 600 V CAT IV | 1000 V CAT III 600 V CAT IV | 600 V CAT III | 600 V CAT III | 600 V CAT III 300 V CAT IV | 600 V CAT III 300 V CAT IV | 1000 V CAT III 600 V CAT IV | 1000 V CAT III 600 V CAT IV | |
| Warranty | 2 Years | 2 Years | 2 Years | 2 Years | 2 Years | 2 Years | 2 Years | 3 Years | 3 Years | |
| CATALOG # | 2154.10 | 2125.64 | 2125.65 | 2154.07 | 2154.09 | 2154.01 | 2154.02 | 2154.03 / .05(-BT) | 2154.04 / .06(-BT) | |
| MODEL | 5115 | 5231 | 5233 | 5212 | 5217 | MTX 3290 | MTX 3291 | MTX 3292 MTX 3292-BT | MTX 3293 MTX 3293-BT | |