

**Aumictech**

Test &amp; measurement · bought, sold, repaired, calibrated

**Data Sheet**

July 30, 2026

TEKTRONIX

# Tektronix DM5110 DMM Programmable Digital Multimeter

Tektronix DM5110 DMM Programmable Digital Multimeter The Tektronix DM 5110 is a programmable six-function autoranging digital multimeter plug-in for the TM 5000 Series power module system. Tektronix documentation describes it as a 4 1/2-digit instrument with an LED display capable of presenting +/-19,999 counts, and with built-in IEEE-488.1 (GPIB) remote programmability. The related DM 511 offers the same measurement performance without GPIB programmability. The DM 5110 is intended for benchtop and automated measurement of DC/AC voltage, DC/AC current, resistance, and temperature in TM 5000-based systems. Typical uses include general electrical characterization, production and incoming inspection, and GPIB-controlled automated test setups.



|                                  |                                                                                                                    |
|----------------------------------|--------------------------------------------------------------------------------------------------------------------|
| MODEL<br><b>Tektronix DM5110</b> | CALIBRATION<br><b>Available on request</b>                                                                         |
| CONDITION<br><b>Used</b>         | STATUS<br><b>In stock</b>                                                                                          |
| RFQ / SKU<br><b>DM5110</b>       | LISTING<br><a href="https://aumictechlabs.com/products/dm5110-2/">https://aumictechlabs.com/products/dm5110-2/</a> |

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

## This unit

The Tektronix DM5110 is a 4.5-digit programmable digital multimeter designed for precise electronic measurements in automated test systems and laboratory environments. This modular plug-in for the TM5000 system delivers IEEE-488.1 (GPIB) programmability, enabling remote control and seamless integration into larger test configurations. With autoranging capability, multiple measurement modes, and built-in comparison functions, the DM5110 handles demanding

measurement tasks from DC voltage to temperature across a wide dynamic range. Technical Specifications Measurement Functions & Ranges: DC Voltage: up to 1000 V, 10 mV resolution AC Voltage (True RMS): up to 500 V, 10 mV resolution, 50 kHz frequency response – 20–100 Hz:  $\pm(0.8\% \text{ reading} + 0.05\% \text{ F.S.})$  – 100 Hz–10 kHz:  $\pm(0.3\% \text{ reading} + 0.05\% \text{ F.S.})$  – 10–20 kHz:  $\pm(0.6\% \text{ reading} + 0.05\% \text{ F.S.})$  – 20–50 kHz:  $\pm(1.0\% \text{ reading} + 0.05\% \text{ F.S.})$  DC Current: up to 2000 mA, 10 nA resolution AC Current (True RMS): up to 2000 mA, 10 nA resolution Resistance: up to 20 M $\Omega$ , 10 m $\Omega$  resolution Temperature: –62 °C to +240 °C dBm/dBV calculations via software Display & Indicators: 4.5-digit LED display ( $\pm 19,999$  counts) with NULL, HOLD, AUTO, ADDR, and REM indicators. Basic DC Accuracy:  $\pm 0.05\%$  (DC Voltage 2 V range:  $\pm(0.1\% \text{ reading} + 0.02\% \text{ F.S.})$ ) Key Features Autoranging with manual range override IEEE-488.1 GPIB interface (SH1, AH1, T6, L4, SR1, RL1, PPO, DC1, DT1, E1 functions) Null offset measurement capability Hold mode for value retention Triggered measurement operations Compare mode with user-selectable HI/LO limits Beeper alarm for limit exceedance FAST (3.5-digit) and NORMAL (4.5-digit) measurement modes 50/60 Hz line frequency measurement modes Front/rear panel input selection for LOW and Volts/ $\Omega$ /Temp inputs Typical Applications Automated testing, data acquisition, production environments, and laboratory measurement systems requiring programmable control and high measurement accuracy. Compatibility & Integration Modular TM5000 system plug-in with full IEEE-488.1 GPIB programmability for system integration.

## Features & description

---

From manufacturer datasheet

### Features

- Six measurement functions with autoranging
- 4 1/2-digit LED display (+/-19,999 counts)
- Programmable IEEE-488.1 / GPIB interface
- True RMS AC voltage and AC current measurement
- dBm and dBV calculated ranges
- NULL, HOLD, TRIGGER, COMPARE, and BEEPER modes
- FAST (3.5-digit) and NORMAL (4.5-digit) measurement modes
- 50 Hz and 60 Hz measurement modes
- Front and rear input path selection
- TM 5000 Series plug-in form factor

## DM5110 Characteristics / Specifications

| PARAMETER             | VALUE                                                                                                                                                                                                                   |
|-----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Model                 | DM 5110                                                                                                                                                                                                                 |
| Instrument Type       | Programmable Digital Multimeter                                                                                                                                                                                         |
| System Compatibility  | TM 5000 Series power module                                                                                                                                                                                             |
| Display Resolution    | 4 1/2 digits (+/-19,999 counts); also 3.5-digit FAST mode                                                                                                                                                               |
| Measurement Functions | DCV, ACV (True RMS), Resistance, DCI, ACI (True RMS), Temperature<br>DC Voltage                                                                                                                                         |
| Ranges                | 200 Ohm, 2 kOhm, 20 kOhm, 200 kOhm, 2 MOhm, 20 MOhm                                                                                                                                                                     |
| Maximum Measurement   | up to 1000 V DC                                                                                                                                                                                                         |
| Maximum Resolution    | 10 mOhm DC Current                                                                                                                                                                                                      |
| Input Resistance      | 10 MOhm +/-0.5%                                                                                                                                                                                                         |
| Common Mode Rejection | greater than or equal to 100 dB at DC; greater than or equal to 80 dB at<br>50/60 Hz with 1 kOhm unbalance                                                                                                              |
| Normal Mode Rejection | greater than or equal to 50 dB at 50/60 Hz                                                                                                                                                                              |
| Maximum Input         | 1000 V peak (VOLTS/Ohms/TEMP to LOW, to GND, and LOW to GND)<br>AC Voltage (True RMS, AC coupled)                                                                                                                       |
| Input Impedance       | 2 MOhm +/-1% in parallel with less than 50 pF                                                                                                                                                                           |
| Frequency Coverage    | approximately 20 Hz to 50 kHz depending on range and accuracy<br>band dB Functions: software-calculated dBV and dBm ranges; 0.00<br>dBm = 1 mW in 600 Ohm; 0.00 dBV = 1 V RMS; maximum resolution<br>0.01 dB Resistance |
| Inputs                | front-panel current inputs AC Current (True RMS, AC coupled)                                                                                                                                                            |
| Range                 | -62 C to +240 C                                                                                                                                                                                                         |
| Probe                 | Tektronix P6602 temperature probe required                                                                                                                                                                              |
| Ranging               | single range (not autoranging) Remote Control And Operating Modes                                                                                                                                                       |
| Interface             | Built-in IEEE-488.1 GPIB                                                                                                                                                                                                |
| GPIB Indicators       | ADDR and REM                                                                                                                                                                                                            |
| Operating Aids        | NULL offset measurements; HOLD and TRIGGER; COMPARE against<br>user HI/LO limits; BEEPER when outside limits                                                                                                            |

| PARAMETER  | VALUE                                                                                                                                                                                                                                                                                                                                                                                  |
|------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Input Path | <p>Manual front/rear switch for LOW and Volts/Ohms/Temp inputs</p> <p>Operational Notes The DM 5110 operates in one compartment of a TM 5000 Series power module. Tektronix specifies warm-up of about 30 minutes for rated accuracy. The non-programmable DM 511 provides the same measurement specifications without GPIB control and can also operate in TM 500 Series modules.</p> |

# Full OEM specifications

Complete technical content extracted from the manufacturer datasheet. Sparse OEM tables are reconstructed as tables below; other text is preserved as paragraphs.

performance without GPIB programmability.

Applications

The DM 5110 is intended for benchtop and automated measurement of DC/AC voltage, DC/AC current, resistance, and temperature in TM 5000-based systems. Typical uses include general electrical characterization, production and incoming inspection, and GPIB-controlled automated test setups.

Key Features

- Six measurement functions with autoranging
- 4 1/2-digit LED display (+/-19,999 counts)
- Programmable IEEE-488.1 / GPIB interface
- True RMS AC voltage and AC current measurement
- dBm and dBV calculated ranges
- NULL, HOLD, TRIGGER, COMPARE, and BEEPER modes
- FAST (3.5-digit) and NORMAL (4.5-digit) measurement modes
- 50 Hz and 60 Hz measurement modes
- Front and rear input path selection
- TM 5000 Series plug-in form factor

Technical Specifications

### Specifications

| PARAMETER           | VALUE                                                                                                              |
|---------------------|--------------------------------------------------------------------------------------------------------------------|
| Ranges              | 200 mV, 2 V, 20 V, 200 V, 500 V                                                                                    |
| Maximum Measurement | up to 500 V AC                                                                                                     |
| Maximum Resolution  | 10 uV                                                                                                              |
| Input Impedance     | 2 MOhm +/-1% in parallel with less than 50 pF                                                                      |
| Frequency Coverage  | approximately 20 Hz to 50 kHz depending on range and accuracy band                                                 |
| dB Functions        | software-calculated dBV and dBm ranges; 0.00 dBm = 1 mW in 600 Ohm; 0.00 dBV = 1 V RMS; maximum resolution 0.01 dB |

### Technical Specifications

| PARAMETER             | VALUE                                                             |
|-----------------------|-------------------------------------------------------------------|
| Model                 | DM 5110                                                           |
| Instrument Type       | Programmable Digital Multimeter                                   |
| System Compatibility  | TM 5000 Series power module                                       |
| Display Resolution    | 4 1/2 digits (+/-19,999 counts); also 3.5-digit FAST mode         |
| Measurement Functions | DCV, ACV (True RMS), Resistance, DCI, ACI (True RMS), Temperature |

DC Voltage

### Specifications

| PARAMETER           | VALUE                            |
|---------------------|----------------------------------|
| Ranges              | 200 mV, 2 V, 20 V, 200 V, 1000 V |
| Maximum Measurement | up to 1000 V DC                  |
| Maximum Resolution  | 10 uV                            |
| Input Resistance    | 10 MOhm +/-0.5%                  |

Typical Accuracy (+18 to +28 C, 200 mV range): +/- (0.05% of reading + 0.015% of full scale)

Specifications

| PARAMETER             | VALUE                                                                                                   |
|-----------------------|---------------------------------------------------------------------------------------------------------|
| Common Mode Rejection | greater than or equal to 100 dB at DC; greater than or equal to 80 dB at 50/60 Hz with 1 kOhm unbalance |
| Normal Mode Rejection | greater than or equal to 50 dB at 50/60 Hz                                                              |
| Maximum Input         | 1000 V peak (VOLTS/Ohms/TEMP to LOW, to GND, and LOW to GND)                                            |

AC Voltage (True RMS, AC coupled)

Specifications

| PARAMETER           | VALUE                                         |
|---------------------|-----------------------------------------------|
| Ranges              | 200 mV, 2 V, 20 V, 200 V, 500 V               |
| Maximum Measurement | up to 500 V AC                                |
| Maximum Resolution  | 10 uV                                         |
| Input Impedance     | 2 MOhm +/-1% in parallel with less than 50 pF |

Frequency Coverage: approximately 20 Hz to 50 kHz depending on range and accuracy band dB Functions: software-calculated dBV and dBm ranges; 0.00 dBm = 1 mW in 600 Ohm; 0.00 dBV = 1 V RMS; maximum resolution 0.01 dB

Resistance

Specifications

| PARAMETER           | VALUE                                               |
|---------------------|-----------------------------------------------------|
| Ranges              | 200 Ohm, 2 kOhm, 20 kOhm, 200 kOhm, 2 MOhm, 20 MOhm |
| Maximum Measurement | up to 20 MOhm                                       |
| Maximum Resolution  | 10 mOhm                                             |

DC Current

Specifications

| PARAMETER           | VALUE                                |
|---------------------|--------------------------------------|
| Ranges              | 200 uA, 2 mA, 20 mA, 200 mA, 2000 mA |
| Maximum Measurement | up to 2000 mA                        |

| PARAMETER          | VALUE                      |
|--------------------|----------------------------|
| Maximum Resolution | 10 nA                      |
| Inputs             | front-panel current inputs |

AC Current (True RMS, AC coupled)

### Specifications

| PARAMETER           | VALUE                                |
|---------------------|--------------------------------------|
| Ranges              | 200 uA, 2 mA, 20 mA, 200 mA, 2000 mA |
| Maximum Measurement | up to 2000 mA                        |
| Maximum Resolution  | 10 nA                                |

Temperature

### Specifications

| PARAMETER | VALUE                                      |
|-----------|--------------------------------------------|
| Range     | -62 C to +240 C                            |
| Probe     | Tektronix P6602 temperature probe required |
| Ranging   | single range (not autoranging)             |

Remote Control And Operating Modes

### Specifications

| PARAMETER       | VALUE                                                                                                     |
|-----------------|-----------------------------------------------------------------------------------------------------------|
| Interface       | Built-in IEEE-488.1 GPIB                                                                                  |
| GPIB Indicators | ADDR and REM                                                                                              |
| Operating Aids  | NULL offset measurements; HOLD and TRIGGER; COMPARE against user HI/LO limits; BEEPER when outside limits |
| Input Path      | Manual front/rear switch for LOW and Volts/Ohms/Temp inputs                                               |

### Operational Notes

The DM 5110 operates in one compartment of a TM 5000 Series power module. Tektronix specifies warm-up of about 30 minutes for rated accuracy. The non-programmable DM 511 provides the same measurement specifications without GPIB control and can also operate in TM 500 Series modules.

### Notes

This manual OEM source was compiled from the official Tektronix DM 5110 / DM 511 Operators Instruction Manual (070-7478-00) and related TekWiki summary specifications.



### Available from Aumictech

Used and refurbished unit evaluated in-house. Calibration: Available on request. Used · In stock.

Request a quote: [sales@aumictech.com](mailto:sales@aumictech.com) · +1 (484) 841-9341

#### Aumictech

788 S 500 E, Pleasant Grove, UT 84062  
[sales@aumictech.com](mailto:sales@aumictech.com) · +1 (484) 841-9341  
<https://aumictechlabs.com>

NIST-traceable calibration · SAM registered ·  
30-day returns  
NAICS 423690 · 811210 · 541380  
Generated July 30, 2026

Technical content from manufacturer specifications. Unit photo/stock from Aumictech listing when available. Specifications subject to OEM documentation and unit condition.