Siglent launches SDM4000A Series 5½-Digit and 6½-Digit Digital Multimeter with enhanced precision and speed

April 16, 2025

In the automatic production lines where speed drives profitability, the Digital Multimeter as core equipment in automated testing directly impacts system efficiency. On April 16, 2025, Siglent launches the SDM4000A series high-speed 5½-digit and 6½-digit Digital multimeters. With 2,200,000 counts, fast reading rate of 50,000 readings/s, minimum sampling interval of 20 µs, 11 measurement functions, and a touchscreen with intuitive interface, the SDM4000A not only elevates individual product testing efficiency but also enhances overall production line performance in accuracy-driven automated environments.
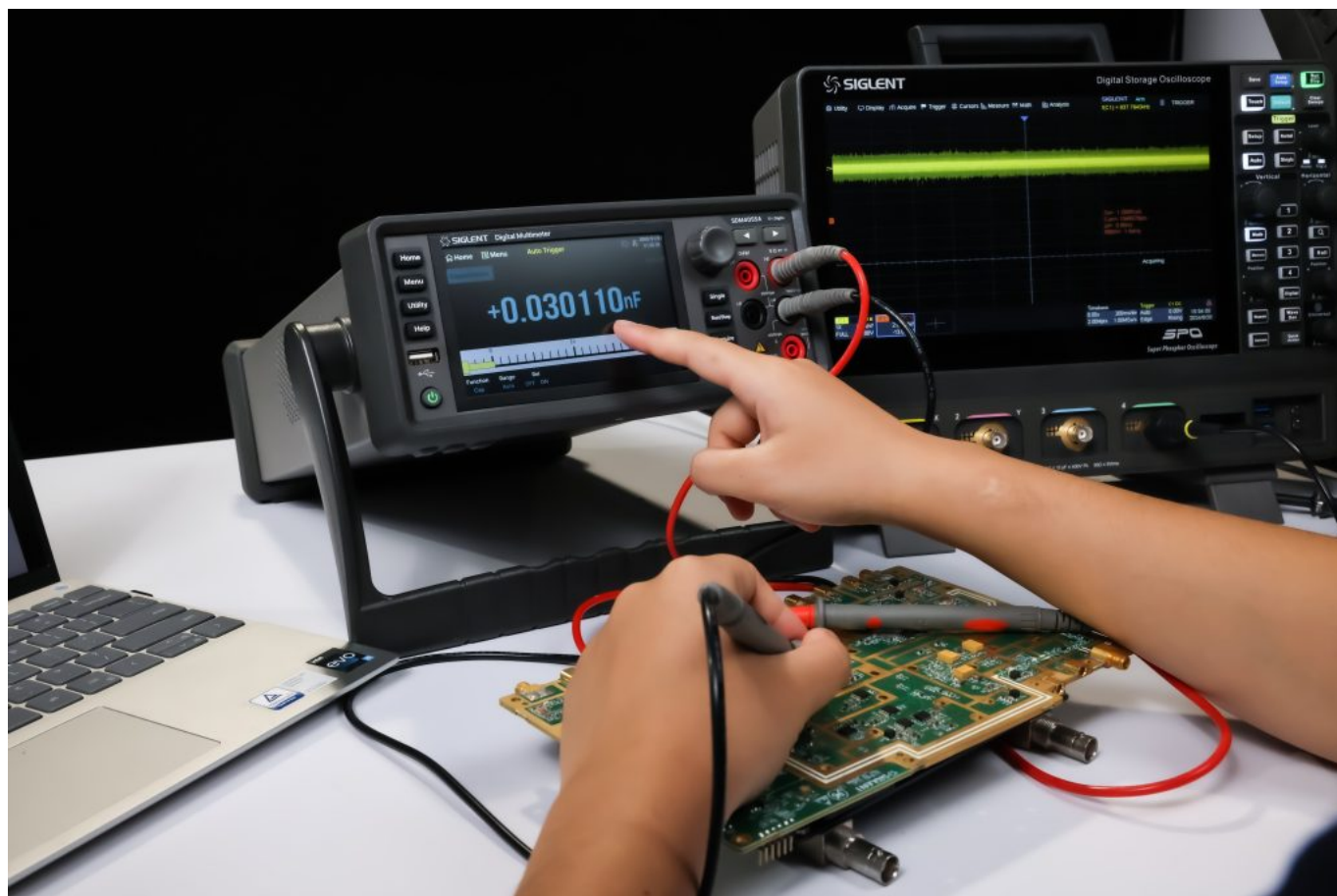

True 5½-digit and 6½-digit precision

SDM4000A Series offers 5½-digit (220,000 counts) and 6½-digit resolution (2,200,000 counts) with a full-scale display range from -2,199,999 to +2,199,999. Its exceptional performance ensures precise capture of subtle current variations and large voltage fluctuations.
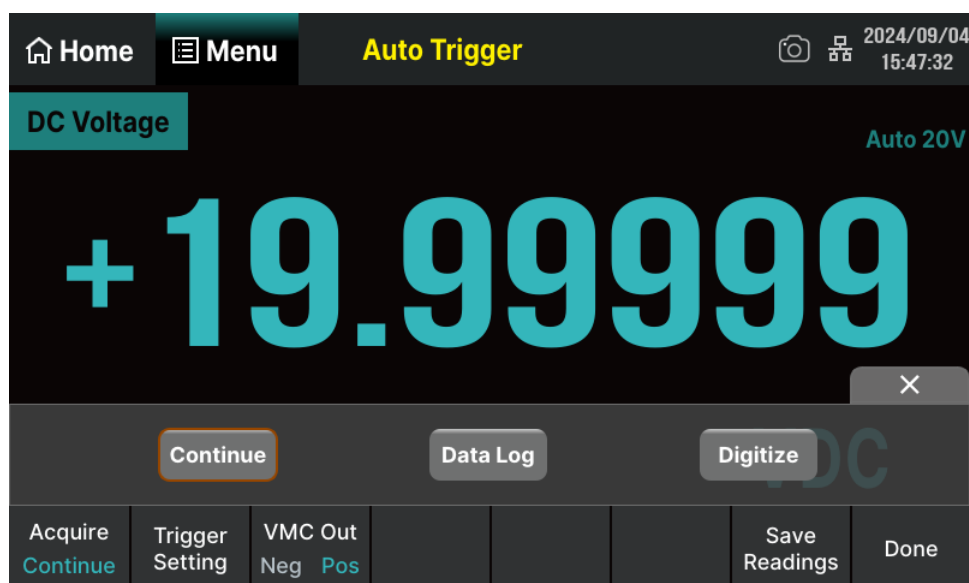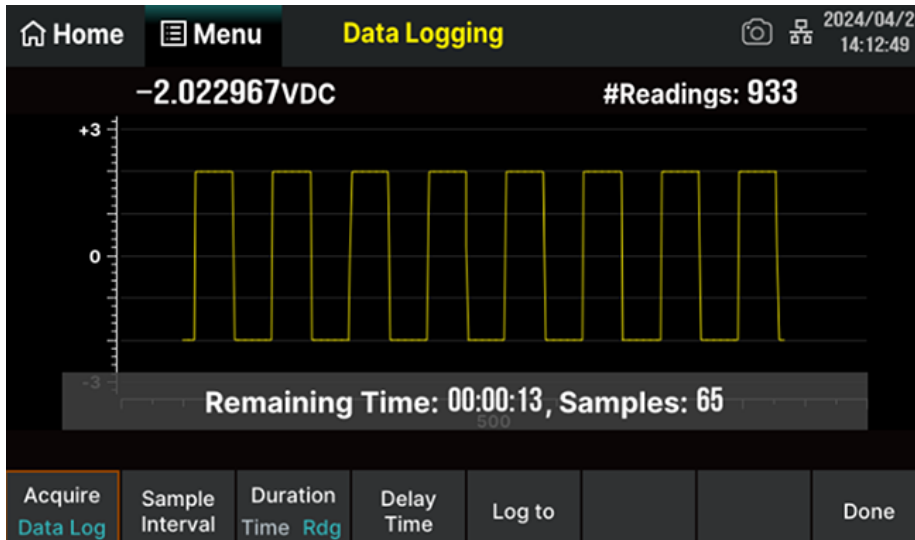
High speed Measurement

The SDM4055A series achieves a maximum reading rate of 4,800 readings/s, while **the SDM4065A series** supports up to 50,000 readings/s. Both models offer adjustable measurement speeds (fast/medium/slow). For the SDM4065A, its sampling interval can be precisely configured from 0.001 PLC to 1,000 PLC (Power Line Cycle), enabling superior performance in high-speed data acquisition and micro-variation monitoring—ideal for applications requiring precise measurements.
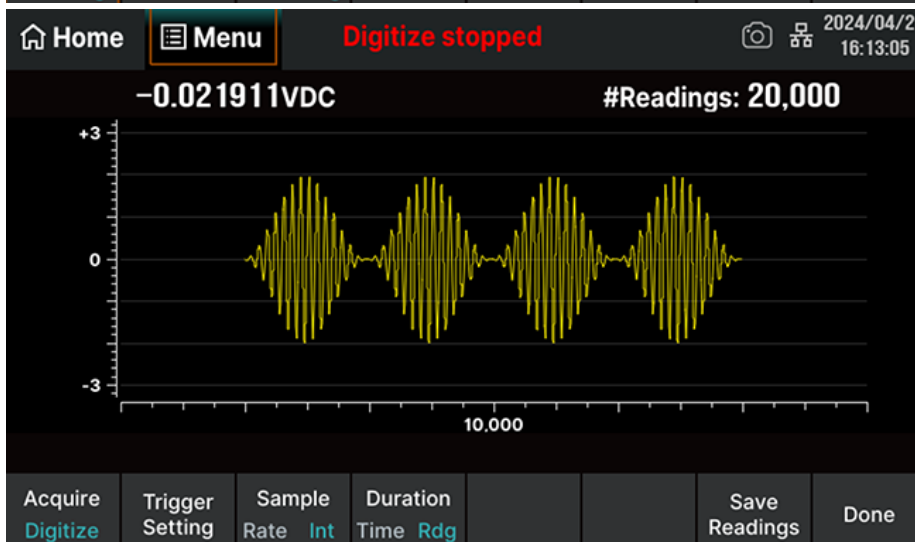

Three acquisition modes

Continuous Sampling Mode
Constant-rate sampling enables real-time monitoring.

Data Logging Function
Supports continuous data logging for up to 100 hours with 2GB internal storage, ideal for long-term trend analysis.
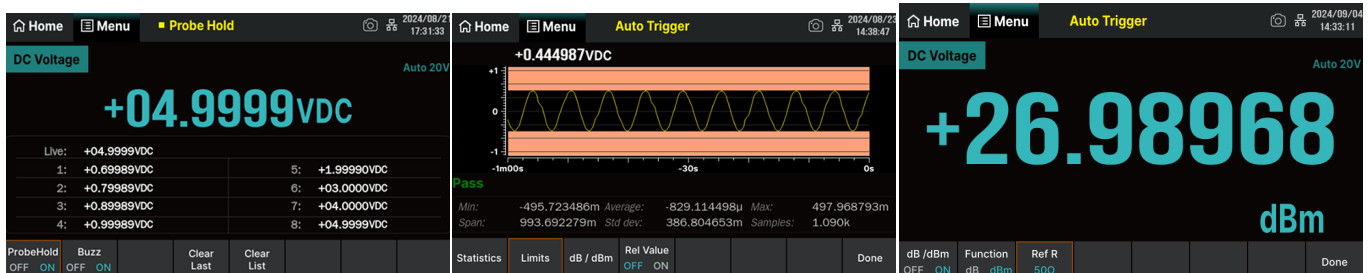

Digitizer Function(SDM4065A)
Outperforms oscilloscopes and spectrum analyzers in high-precision, low-frequency sampling, particularly suitable for audio signal digitization.
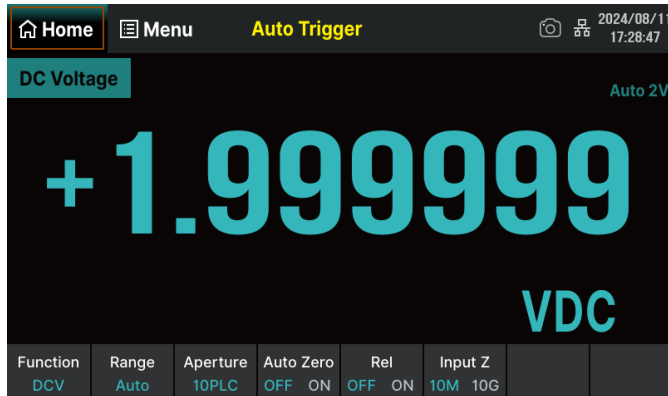
Advanced Math Functions

SDM4000A supports five operations: statistics, limits, dBm, dB, and relative measurements. It rapidly calculates max/min, average, peak-to-peak, standard deviation, and sample count, while enabling pass/fail testing via preset thresholds. Voltage-to-power conversion, dB-based relative measurements, and deviation analysis further enhance versatility.
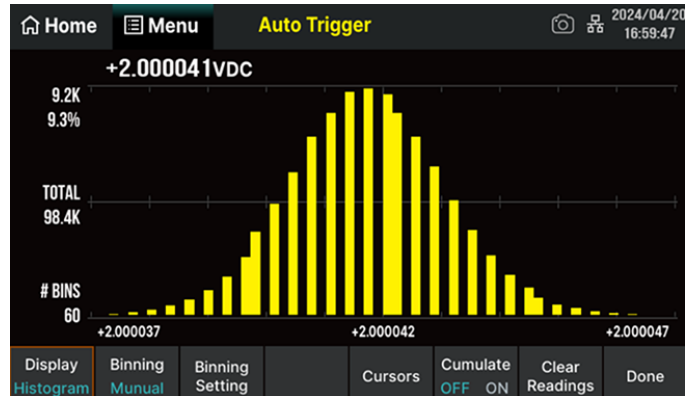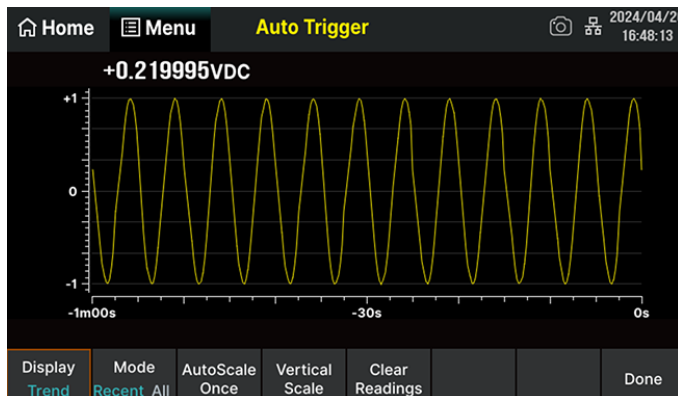
Four Display Modes

SDM4000A offers four modes: Numeric for instant clarity, Histogram for data distribution analysis, Trend Chart for dynamic data pattern observation and trend prediction, and Bar Chart for cross-condition comparisons and rapid analysis of variations and patterns under different conditions, empowering users to visualize and analyze data with deeper insights.

Digital display
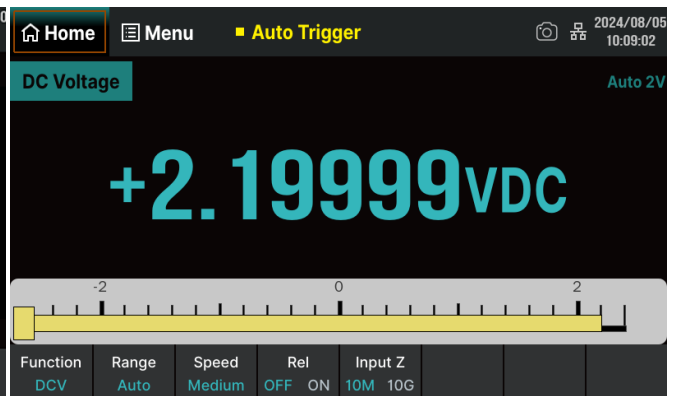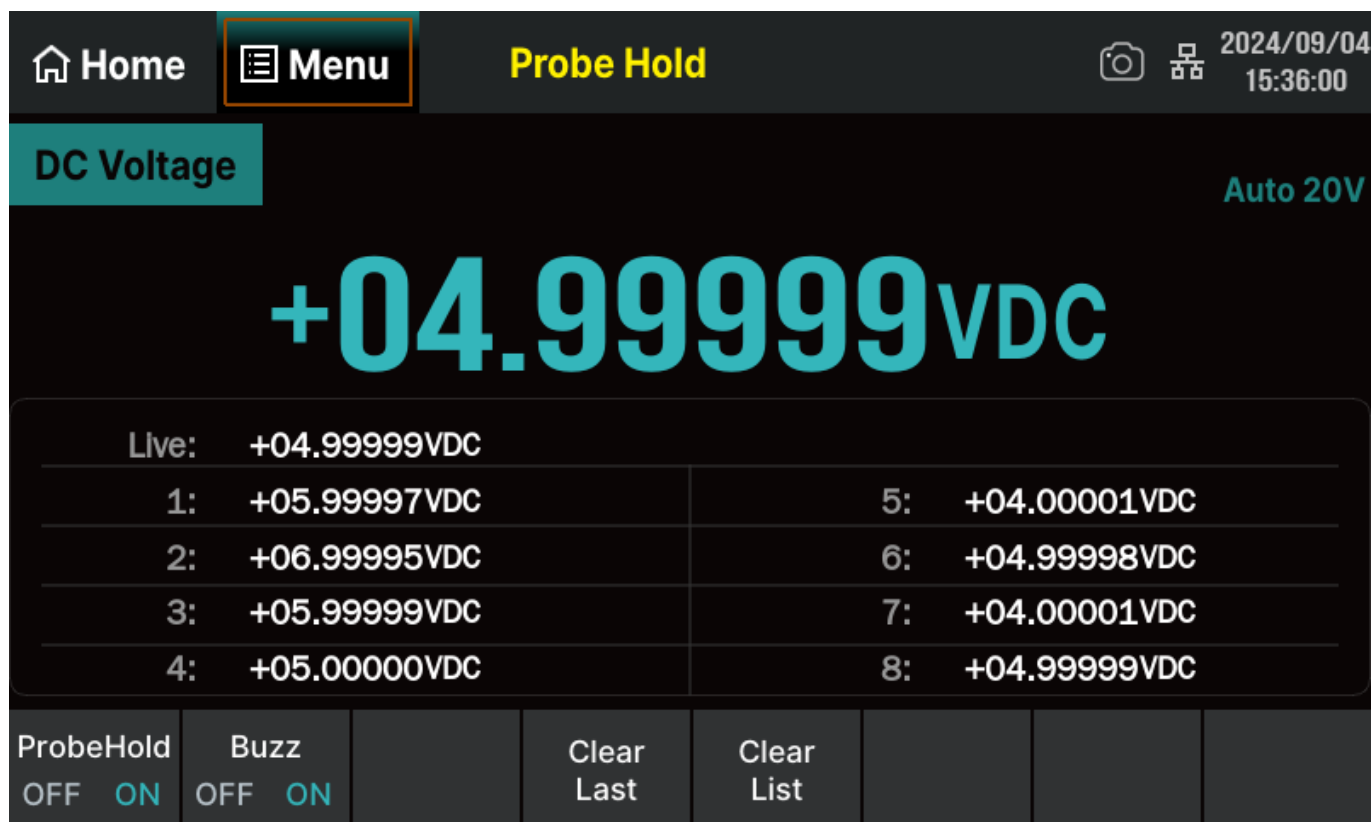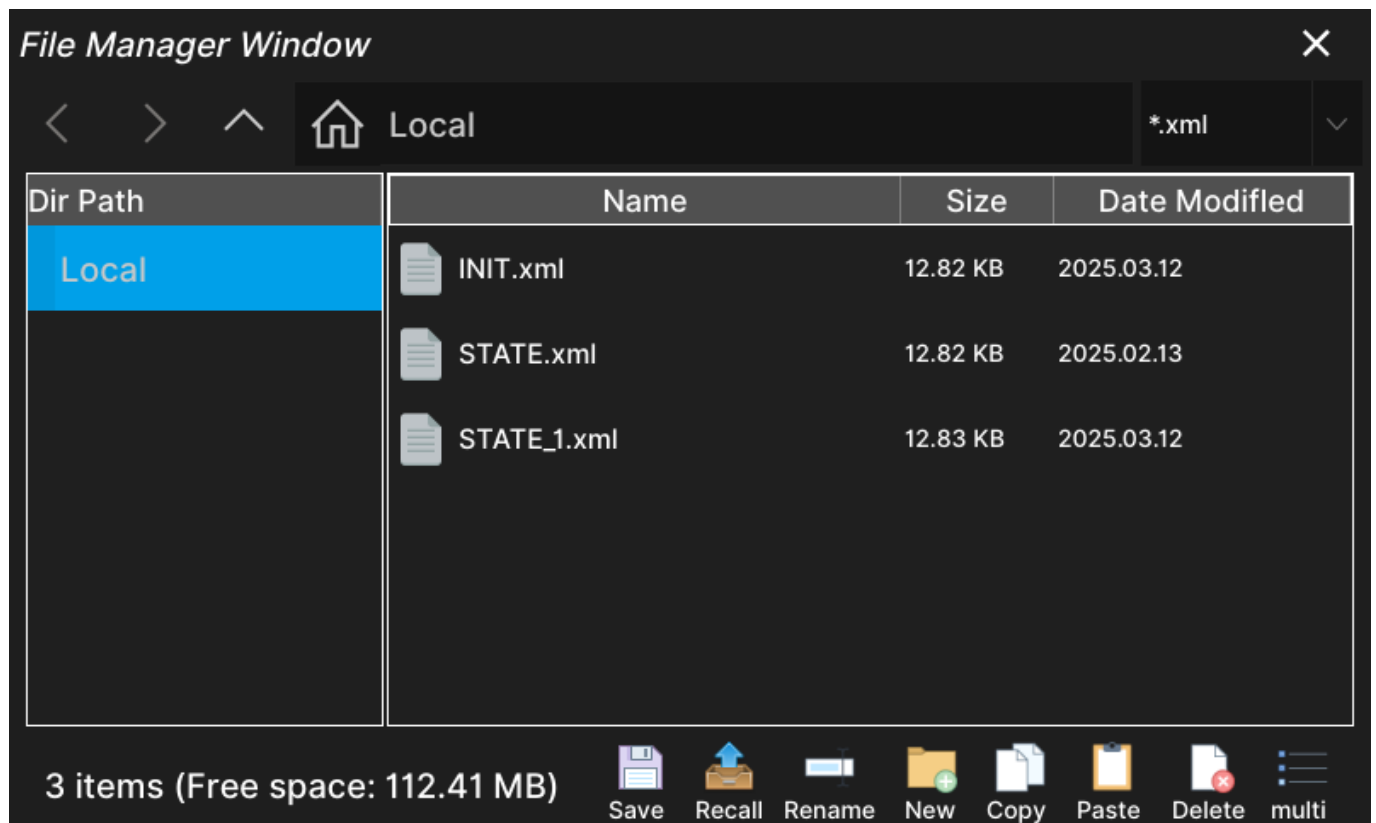

Histogram

Trend chart

Bar chart

Probe Hold

After the readings stabilize, the multimeter buzzer sounds and displays the results, automatically retains the latest eight readings for users to compare and refer to. Users can access historical data at any time for in-depth analysis of equipment performance or parameter changes, and the displayed data can be cleared with a single click.

DC Voltage   Auto 20V

+04.99999VDC

Live:	+04.99999VDC			
1:	+05.99997VDC	5:	+04.00001VDC
2:	+06.99995VDC	6:	+04.99998VDC
3:	+05.99999VDC	7:	+04.00001VDC
4:	+05.00000VDC	8:	+04.99999VDC

| ProbeHold | Buzz | | Clear | Clear | | | |
| OFF   ON | OFF   ON | | Last | List | | | |

Storage & Recall

The SDM4000A series features excellent storage and retrieval capabilities. The SDM4055A series is equipped with a 512MB RAM memory and a 256MB NAND – Flash. The SDM4065A series can save up to 2 million readings. Users can easily manage instrument parameter files in the internal storage area and on external USB storage devices. It supports the storage of various types of files such as reading points, pictures, CSV/XML files. Users can perform operations like creating folders, saving screen captures, copying, renaming, and deleting files, enabling efficient data management.

Remote Control & Programming

SDM4000A integrates USB Host, USB Device, and LAN interfaces, with an optional USB-GPIB module. It supports standard SCPI remote control commands, PC-based software, and compatibility with the latest mainstream multimeter command sets. Its embedded web server enables direct remote control and programming via a browser, fulfilling diverse communication and automation needs.

Web control

PC software control

The SDM4000A high-speed 5½-digit and 6½-digit multimeters strike a balance between speed, accuracy,

and stability. Whether applied in automated control system testing, power engineering, electronics manufacturing and repair, telecommunications and networking, or scientific research and education, the SDM4000A series is dedicated to delivering a new measurement experience for engineers, enabling more precise and efficient testing.

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