

Digital Multimeters

7351A/7351E/7351E+03




5½-digit

General-purpose and low-cost 5½-digit DMM

- Highest throughput in the class
FAST: 140 readings/s (Max. display of 19999)
MED: 40 readings/s (Max. display of 199999)
- High measurement accuracy of 110 ppm (2 VDC range)
- Wide range of current measurement
Three ranges: 200 mA, 2000 mA, 10 A
- Various interfaces

7451A/7461A



5½-digit/6½-digit 

High-performance and low-cost DMM

- Two models available by use
5½-digit display (7451A)
6½-digit display (7461A)
- Fast sampling : 5,000 readings/s (7451A)
20,000 readings/s (7461A)
- Variable integration time:
100 μs (7451A)/10 μs (7461A) to 10 s
- Two-channel input for DC voltage measurement

7461P



6½-digit 

Thermal DMM capable of temperature measurement with a resolution of 0.001 °C

- Measurement of DC voltage/current, AC voltage/current, resistance and temperature using a Pt sensor
- Fast sampling: 20,000 readings/s
- Data memory: up to 20,000 data
- Digital output capable of remote control of external devices for system use
- Variable integration time: 10 μs to 10 s

	7351A	7351E	7351E+03	7451A	7461A	7461P
Maximum display		199999		319999		1199999
Sampling rate (readings/s)		140 max		5,000 max		20,000 max
Variable integration		—		✓		✓
DC voltage		1 μV to 1000 V		1 μV to 1000 V		100 nV to 1000 V
Accuracy (typical value)		0.011 %/year		0.01 %/year		0.0035 %/year
DC current		1 μA to 10 A		10 nA to 3 A		1 nA to 3 A
Resistance		1 mΩ to 200 MΩ		100 μΩ to 300 MΩ		100 μΩ to 100 MΩ
Four-wire resistance		—		✓		✓
AC voltage (True RMS)		1 μV to 700 V		1 μV to 700 V		100 nV to 700 V
AC voltage frequency range		20 Hz to 100 kHz		20 Hz to 300 kHz		20 Hz to 300 kHz
AC current (True RMS)		1 μA to 10 A		10 nA to 3 A		1 nA to 3 A
Calculation functions		✓		✓		✓
Rear input		—		✓		✓
Temperature		—		—		Pt100 (–200 °C to +850 °C)/JP t 100
Interface	USB, GPIB	USB	USB, RS232	USB, GPIB	USB, GPIB	
Comparator output	—	—	✓	✓	✓	Selectable
Digital output	—	—	—	—	—	
Maximum memory		—		10,000	10,000	20,000
Dimensions (W)x(H)x(D)mm	212×88×340					
Weight (kg)	3.4 or less					

7481



8½-digit

8½-digit high-precision and high-accuracy DMM for system calibration

- 8½-digit display (119 999 999), 0.01 ppm resolution
- High-accuracy measurement by self-calibration function
5 ppm/year (DC voltage measurement relative accuracy)
8 ppm/year (resistance measurement relative accuracy)
- Resistance measurement range: 10 Ω to 1000 MΩ
- Easy calibration by automatic two-source calibration
- Internal memory storage up to 50,000 data

	7481
Maximum display	119 999 999
DC voltage	10 nV to 1000 V
Accuracy (typical value)	5 ppm/year
DC current	100 fA to 1 A
Resistance	1 μΩ to 1000 MΩ
AC voltage (True RMS)	—
AC current (True RMS)	—
Calculation functions	✓
Temperature	✓
Interface	GPIB, USB, LAN (option)
Dimensions (W)×(H)×(D) mm	424×88×450
Weight (kg)	9 or less