

DMM Comparison Table

MODEL	BASIC PERFORMANCE			HIGH SPEED, HIGH ACCURACY		HIGH ACCURACY			MULTI-CHANNEL MEASUREMENT			MODEL
	2110	2100	DMM6500	DMM7510	DMM7512	2010	2001	2002	DAQ6510	2750	3706A	
Display	LCD 2 line	VFD 2 line	Touchscreen, 5 in. (12.7 cm)	Touchscreen, 5 in. (12.7 cm)	None	VFD	VFD	VFD	Touchscreen, 5 in. (12.7 cm)	VFD	VFD 2 line	Display
Digits	5½	6½	6½	7½	7½	7½	7½	8½	6½	6½	7½	Digits
No. Measurement Channels	1	1	10	1	2	10	10	10	80	200	576	No. Measurement Channels
DC VOLTS												
Measurement Range	1 µV–1000 V	0.1 µV–1000 V	100 nV–1000 V	10 nV–1010 V	10 nV–1010 V	10 nV–1000 V	10 nV–1100 V	1 nV–1100 V	100 nV–1000 V	100 nV–1000 V	10 nV–300 V	Measurement Range
Basic Accuracy	0.012%	0.0038%	0.0025%	0.0014%	0.0014%	0.0024%	0.0024%	0.001%	0.0025%	0.003%	0.0025%	Basic Accuracy
Ratio		✓	✓	✓	✓	✓	Option	Option	w/MUX card	w/MUX card		Ratio
DC Peak Spikes							✓	✓				DC Peak Spikes
AC VOLTS (TRMS)												
Measurement Range	1 µV–750 V	0.1 µV–750 V	100 nV–750 V	100 nV–707 V		100 nV–750 V	100 nV–775 V	100 nV–775 V	100 nV–750 V	100 nV–750 V	100 nV–300 V	Measurement Range
Basic Accuracy	0.12%	0.08%	0.05%	0.06%		0.05%	0.03%	0.02%	0.05%	0.06%	0.05%	Basic Accuracy
Bandwidth	10 Hz–300 kHz	3 Hz–300 kHz	3 Hz–300 kHz	3 Hz to 300 kHz		3 Hz–300 kHz	1 Hz–2 MHz	1 Hz–2 MHz	3 Hz–300 kHz	3 Hz–300 kHz	3 Hz–300 kHz	Bandwidth
dB, dBm		✓	✓	✓		✓	✓	✓			✓	dB, dBm
Frequency, Period	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	Frequency, Period
OHMS (2/4 WIRE)												
Measurement Range	1 mΩ–100 MΩ	100 µΩ–100 MΩ	1 µΩ–120 MΩ	0.1 µΩ–1.2 GΩ	0.1 µΩ–1.2 GΩ	1 µΩ–120 MΩ	1 µΩ–1 GΩ	100 nΩ–1 GΩ	1 µΩ–120 MΩ	1 µΩ–120 MΩ	100 nΩ–100 MΩ	Measurement Range
Basic Accuracy	0.02%	0.015%	0.0075%	0.0024%	0.0024%	0.0032%	0.0032%	0.0007%	0.0075%	0.008%	0.004%	Basic Accuracy
Continuity Test	✓	✓	✓	✓	✓	✓			✓	✓	✓	Continuity Test
Diode Test	✓	✓	✓	✓	✓	✓			✓		✓	Diode Test
Offset Compensation			✓	✓	✓	✓	✓	✓	✓	✓	✓	Offset Compensation
Dry Circuit				✓	✓	✓				✓	✓	Dry Circuit
DC AMPS												
Measurement Range	0.1 µA–10 A	10 nA–3 A	10 pA–10 A	1pA–10.1 A	1 pA–3 A	1 nA–3 A	10 pA–2 A	10 pA–2 A	10 pA–3 A	10 nA–3 A	1 pA–3 A	Measurement Range
Basic Accuracy	0.15%	0.055%	0.02%	0.006%	0.006%	0.03%	0.03%	0.027%	0.02%	0.03%	0.03%	Basic Accuracy
In Circuit Current							✓	✓				In Circuit Current
AC AMPS (TRMS)												
Measurement Range	10 µA–10 A	1 µA–3 A	100 pA–10 A	1 nA–10.1 A		1 µA–3 A	100 pA–2 A	100 pA–2 A	100 pA–3 A	1 µA–3 A	1 nA–3 A	Measurement Range
Basic Accuracy	0.3%	0.15%	0.1%	0.08%		0.1%	0.1%	0.1%	0.10%	0.15%	0.08%	Basic Accuracy
Bandwidth	10 Hz–5 kHz	3 Hz–5 kHz	3 Hz–10 kHz	3 Hz to 10 kHz		3 Hz–5 kHz	20 Hz–100 kHz	20 Hz–100 kHz	3 Hz–10 kHz	3 Hz–5 kHz	3 Hz–10 kHz	Bandwidth
OTHER MEASUREMENTS												
Capacitance			0.1 pF–100 µF	0.1 pF–100 µF					0.1 pF–100 µF			Capacitance
Temperature Measurement	TC, RTD, Thermistor	RTD	TC, RTD, Thermistor	TC, RTD, Thermistor	TC, RTD, Thermistor	TC, RTD	TC, RTD	TC, RTD	TC, RTD, Thermistor	TC, RTD, Thermistor	TC, RTD, Thermistor	Temperature Measurement
GENERAL FEATURES												
Interface	USB, GPIB (opt.)	USB	LAN/LXI, USB, GPIB (opt.), RS-232 (opt.)	GPIB, USB, LAN/LXI	USB, LAN/LXI	GPIB, RS-232	GPIB	GPIB	LAN/LXI, USB, GPIB (opt.), RS-232 (opt.)	GPIB, RS-232	GPIB, LAN/LXI, USB	Interface
Reading Hold	✓	✓				✓						Reading Hold
Digital I/O	Trigger In Meter Complete	Trigger In Meter Complete	Trigger In Meter Complete	Trigger In Meter Complete 6 General I/O	Trigger In Meter Complete 6 General I/O	Trigger In Meter Complete	Trigger In Meter Complete 1 In, 4 Out	Trigger In Meter Complete 1 In, 4 Out	Trigger In Meter Complete	2 Trigger In, 5 Limit Out	14 General I/O	Digital I/O
Reading Memory	2000 rdg.	2000 rdg.	7 M rdg.	27.5 M rdg.	27.5 M rdg./channel	1024 rdg.	Opt to 30,000	Opt to 30,000	7 M rdg.	110,000 rdg.	650,000 rdg.	Reading Memory
Maximum Speed	50K rdg/s	2000 rdg/s	1 M rdg/s (16-bit digitizing)	1 M rdg/s (18-bit digitizing)	1 M rdg/s (18-bit digitizing)	2000 rdg/s	2000 rdg/s	2000 r dg/s	1 M rdg/s (16-bit digitizing)	2500 rdg/s	>14,000 rdg/s	Maximum Speed
Other			Embedded Test Script Processor and optional TSP-Link, 6 Digital I/O with Interface Options, Dual Measurement Display	Embedded Test Script Processor and TSP-LINK	Embedded Test Script Processor and TSP-LINK, 2 Digitizers				Embedded Test Script Processor and optional TSP-Link, 6 Digital I/O with Interface Options		Embedded Test Script Processor and TSP-LINK	

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