

DT4200 Series Basic Comparison



	DT4281	DT4282	DT4252	DT4253	DT4254	DT4255	DT4256	DT4221	DT4222	DT4223	DT4224
Basic Characteristics											
True RMS	Yes		Yes					Yes			
DCV basic accuracy	±0.025 %rdg. ±2 dgt.		±0.3 %rdg. ±5 dgt.		±0.3 %rdg. ±3 dgt.			±0.5 %rdg. ±5 dgt.			
Measurement items (Typical ranges are indicated; may not reflect maximum or minimum measurable signal)											
DC voltage	60 mV to 1000 V		600 mV to 1000 V		600 mV to 1500 V	600 mV to 1000 V		600 mV to 600 V			
AC voltage	60 mV to 1000 V		6 V to 1000 V					6 V to 600 V			
DCV + ACV	6 V to 1000 V		n/a					n/a			
DCA current	600 μA to 600 mA	600 μA to 10 A	6 A to 10 A	60 μA to 60 mA	n/a		60 mA to 10 A	n/a			
ACA current	600 μA to 600 mA	600 μA to 10 A	6 A to 10 A	n/a			600 mA to 10 A	n/a			
AC clamp	10 A to 1000 A	n/a	n/a	10 A to 1000 A	n/a	10 A to 1000 A	10 A to 1000 A	n/a			
Resistance	60 Ω to 600 MΩ		600 Ω to 60 MΩ		n/a	600 Ω to 60 MΩ		n/a	600 Ω to 60 MΩ		
Temperature	-40°C to 800°C		n/a	-40°C to 400°C		n/a		n/a			
Capacitance	1 nF to 100 mF		1 μF to 10 mF		n/a	1 μF to 10 mF		n/a	1 μF to 10 mF	n/a	1 μF to 10 mF
Frequency	99 Hz to 500 kHz		99 Hz to 99 kHz					99 Hz to 9.9 kHz			
Continuity check	Yes		Yes		n/a	Yes		Yes			
Diode check	Yes		Yes		n/a	Yes		n/a	Yes	n/a	Yes
Conductance	n/a	Yes	n/a					n/a			
Voltage detection	n/a		n/a		Yes			Yes	n/a	Yes	n/a
Additional Functions											
AUTO AC/DCV	n/a		n/a	Yes				Yes	n/a	Yes	n/a
Peak measurement	DC/AC		n/a					n/a			
Low-pass filter	Analog filter Cut-off : 630 Hz		Digital filter Pass-band : 100Hz/500Hz					Digital filter Pass-band : 100Hz/500Hz			
Display update setting	Yes		n/a					n/a			
Hold display value	AUTO / MANUAL		AUTO / MANUAL					MANUAL		AUTO / MANUAL	
Max/Min value display	Yes		Yes					n/a			
Relative display	Yes		Yes					Yes			
Decibel conversion	Yes		n/a					n/a			
Percentage conversion display	Yes		n/a	Yes	n/a		n/a	n/a			
DC voltage polarity check	n/a		n/a		Yes			n/a			
Data storage											
Capacity	Max 400 data		n/a					n/a			
USB communication*1	Yes		Yes					n/a			
Operating time											
Continuous operating time	Approx. 100 hours*2		Approx. 130 hours					Approx. 40 hours		Approx. 35 hours	
Power supply	Alkaline (LR6) battery x4 / Manganese(R6P) battery x4		Alkaline (LR03) battery x4					Alkaline (LR03) battery x1			
Display											
Back light	Yes		Yes					Yes			
Dual display	Yes		Yes					n/a			
Bar graph display	n/a		Yes					Yes			
Safety											
Safety standard categories	CATIII1000 V/ CATIV600 V		CATIII1000 V/ CATIV600 V					CATIII600 V/ CATIV300 V			
Mis-insertion prevention shutters	Yes		n/a					n/a			
Circuit breaker false trip prevention	n/a		n/a					n/a		Yes	

*1. Requires optional DT4900-01 Communication Package

*2. When using four AA alkaline batteries

Glossary

Auto AC/DCV : Automatically detects and measures AC and DC voltage. **I Peak measurement** : After starting PEAK value measurement, check maximum and minimum instantaneous voltage and current values. **I Low-pass filter** : Cuts high frequency content to provide stable numerical values for measurement. **I Display update setting** : Reduces the display value update rate to stabilize measurements. **I Hold display value** : Manual: press the button to freeze the display. Auto: the display freezes automatically when the measurement value is stable. **I Max/Min value display** : Pressing the MAX/MIN button displays the maximum and minimum displayed measurement values. **I Relative display** : Pressing the REL button displays subsequent measurements as values relative to that displayed when the button was pressed. **I Decibel conversion** : Displays AC voltage measurements converted to decibel values (dbm/dbv) **I Percentage conversion display** : Displays 4 to 20 mA (or 0 to 20 mA) signals converted to 0 to 100% values. For the DT4253, only 4 to 20 mA.