

جدول مشخصات و راهنمای خرید مالتی مترهای هیوکی ژاپن

مهندسی سیتل ترانیکس
تولید کننده انحصاری تجهیزات اندازه گیری هیوکی
تاسیس ۱۳۵۶



Model	High precision models				Standard models		
	DT4281	DT4282	DT4252	DT4253	DT4254	DT4255	DT4256
Appearance							
Basic Specifications	True RMS						
Principal applications	Electrical work	General use	General use	Instrumentation (4-20 mA)	PV, power equipment management	Electrical work	General use
Rectifier	True RMS						
Maximum display count	6000						
Display backlight function	✓						
CAT	Probe sleeve attached	CAT IV 600 V / CAT III 1000 V		CAT IV 600 V / CAT III 1000 V			
	No probe sleeve attached	CAT II 1000 V		CAT II 1000 V			
Measurement range	True RMS						
AC/DC Voltage	60.000 mV/ 600.0 mV/ 6.0000 V/ 60.000 V/ 600.0V/ 1000.0 V		*600.0 mV (* DC only) 6.000 V/ 60.0V/ 600.0 V/ 1000 V		*600.0 mV (* DC only) 6.000 V/ 60.0V/ 600.0 V/ *1500 V (* DC only)		*600.0 mV (* DC only) 6.000 V/ 60.0V/ 600.0 V/ 1000 V
Basic accuracy (DC V)	±0.025 % rdg. ±2 dgt.		±0.3 % rdg. ±5 dgt. 600.0 mV range: ±0.2 % rdg. ±5 dgt.	±0.3 % rdg. ±5 dgt.		±0.3 % rdg. ±3 dgt.	
Basic accuracy (AC V)	±0.2 % rdg. ±2.5 dgt.		±0.9 % rdg. ±3 dgt.		±0.9 % rdg. ±3 dgt.		±0.9 % rdg. ±3 dgt.
AC+DC Voltage	6.0000 V/ 60.000 V 600.0 V/ 1000.0 V		N/A		N/A		N/A
Basic accuracy	±0.3 % rdg. ±30 dgt.		--		--		--
AC/DC Current (Direct input)	600.00 μA/ 6000.0 μA 60.000 mA/ 600.00 mA	600.00 μA/ 6000.0 μA 60.000 mA/ 600.00 mA 6.0000 A/ 10.000 A	6.000 A/ 10.00 A		*60.00 μA/*600.0 μA *6.000 mA/*60.00 mA (* DC only)	N/A	N/A
Basic accuracy (DC A)	±0.05 % rdg. ±5 dgt.		±0.9 % rdg. ±5 dgt.		±0.8 % rdg. ±5 dgt.		±0.9 % rdg. ±3 dgt.
Basic accuracy (AC A)	±0.6 % rdg. ±5 dgt.		±1.4 % rdg. ±3 dgt.		--		±1.4 % rdg. ±3 dgt.
AC Current (Clamp sensor)	10.00 A to 1000 A	N/A	N/A		10.00 A to 1000 A	N/A	10.00 A to 1000 A
Basic accuracy	±0.6 % rdg. ±2 dgt. Combined accuracy: Add AC clamp's measurement accuracy.	--	--		±0.9 % rdg. ±3 dgt. Combined accuracy: Add AC clamp's measurement accuracy.	--	±0.9 % rdg. ±3 dgt. Combined accuracy: Add AC clamp's measurement accuracy.
Resistance	60.000 Ω/ 600.00 Ω/ 6.0000 kΩ/ 60.000 kΩ/ 600.00 kΩ/ 6.0000 MΩ/ 60.00 MΩ/ 600.0 MΩ		600.0 Ω/ 6.000 kΩ/ 60.00 kΩ/ 600.0 kΩ/ 6.000 MΩ/ 60.00 MΩ		N/A		600.0 Ω/ 6.000 kΩ/ 60.00 kΩ/ 600.0 kΩ/ 6.000 MΩ/ 60.00 MΩ
Basic accuracy	±0.03 % rdg. ±2 dgt.		±0.7 % rdg. ±5 dgt.		--		±0.7 % rdg. ±3 dgt.
Temperature (thermocouples)	K: -40.0 to 800.0 °C		N/A		K: -40.0 to 400.0 °C		N/A
Basic accuracy	±0.5 % rdg. ±3 °C		--		--		--
Capacitance	1.000 nF/ 10.00 nF/ 100.0 nF/ 1.000 μF/ 10.00 μF/ 100.0 μF/ 1.000 mF/ 10.00 mF/ 100.0 mF		1.000 μF/ 10.00 μF/ 100.0 μF/ 1.000 mF/ 10.00 mF		N/A		1.000 μF/ 10.00 μF/ 100.0 μF/ 1.000 mF/ 10.00 mF
Basic accuracy	±1.0 % rdg. ±5 dgt.		±1.9 % rdg. ±5 dgt.		--		±1.9 % rdg. ±5 dgt.
Frequency	ACV, DC+ACV, ACA (limited by sensitivity in some cases) 99.999 Hz/ 999.99 Hz/ 9.9999 kHz/ 99.999 kHz/ 500.00 kHz		ACV, ACA (limited by sensitivity in some cases) 99.99 Hz/ 999.9 Hz/ 9.999 kHz/ 99.99 kHz		ACV (limited by sensitivity in some cases) 99.99 Hz/ 999.9 Hz/ 9.999 kHz/ 99.99 kHz		ACV, ACA (limited by sensitivity in some cases) 99.99 Hz/ 999.9 Hz/ 9.999 kHz/ 99.99 kHz
Basic accuracy	±0.005 % rdg. ±3 dgt.		±0.1 % rdg. ±1 dgt.		±0.1 % rdg. ±1 dgt.		±0.1 % rdg. ±1 dgt.
Continuity check	✓	✓	✓	✓	N/A	✓	✓
Diode check	✓	✓	✓	✓	N/A	✓	✓
Conductance	N/A	✓	N/A	N/A	N/A	N/A	N/A
Voltage detection	N/A	N/A	N/A	N/A	✓	✓	✓
AC/DC voltage automatic detection	AC/DC dual display	AC/DC dual display	N/A	✓	✓	✓	✓
dB conversion	✓	✓	N/A	N/A	N/A	N/A	N/A
Peak measurement	✓	✓	N/A	N/A	N/A	N/A	N/A
4-20 mA % conversion	✓	✓	N/A	✓	N/A	N/A	N/A
Other functions	Filter function, Display hold, Auto hold, Max/Min value display, Sampling select, Relative display, Memory function (400 data), Auto-power save, USB communication (option)		Filter function, Display hold, Auto hold, Max/Min/Avg value display, Relative display, Auto-power save, USB communication (option)				
Power supply/ Continuous use (Backlight off)	LR6 (AA) alkaline batteries ×4, 100 hours R6P (AA) manganese battery ×4, 30 hours [Representative value: DCV function]		Alkaline batteries (LR03) ×4, 130 hours				
Dimensions and mass	93 mm (3.66 in)W × 197 mm (7.76 in)H× 53 mm (2.09 in)D, 650 g (22.9 oz) (including batteries)		84 mm (3.31 in)W × 174 mm (6.85 in)H× 52 mm (2.05 in)D, 390 g (13.8 oz) (including batteries and holster)				

DMM Testers

جدول مشخصات و راهنمای خرید مالتی مترهای هیوکی ژاپن



مهندسی سیتل ترونیکس
تاسیس ۱۳۶۱

Model	Pocket models		Standard models		Pocket models		
	DT4221	DT4222	DT4211	DT4212	3244-60	3245-60	3246-60
Appearance							
Basic Specifications							
Principal applications	Electrical work	General use	General use	Electrical work	General use	General use	General use
Rectifier	True RMS		MEAN	True RMS	MEAN	MEAN	MEAN
Maximum display count	6000		4000		4199	4199	4199
Display backlight function	✓	✓	✓		N/A	N/A	✓
CAT	Probe sleeve attached	CAT IV 300 V / CAT III 600 V		CAT III 600 V CAT II 1000 V	CAT III 300 V	CAT IV 300 V CAT III 600 V	CAT IV 300 V CAT III 600 V
	No probe sleeve attached	CAT II 600 V		CAT II 1000 V	CAT II 600 V	CAT II 600 V	CAT II 600 V
Measurement range							
AC/DC Voltage	*600.0 mV (* DC only) 6.000 V/ 60.00 V/ 600.0 V		400.0 mV/ 4.000 V/ 40.00 V/ 400.0/ 1000 V		*419.9 mV/ 4.199 V/ 41.99 V/ 419.9 V/ 500 V (* DC only)	*419.9 mV/ 4.199 V/ 41.99 V/ 419.9 V/ 600 V (* DC only)	*419.9 mV/ 4.199 V/ 41.99 V/ 419.9 V/ 600 V (* DC only)
Basic accuracy (DC V)	±0.5 % rdg. ±5 dgt.		±0.5 % rdg. ±3 dgt.		±0.7 % rdg. ±4 dgt.	±1.3 % rdg. ±4 dgt.	±1.3 % rdg. ±4 dgt.
Basic accuracy (AC V)	±1.0 % rdg. ±3 dgt.		±1.0 % rdg. ±5 dgt.		±2.3 % rdg. ±8 dgt.	±2.3 % rdg. ±8 dgt.	±2.3 % rdg. ±8 dgt.
AC+DC Voltage	N/A	N/A	N/A		N/A	N/A	N/A
Basic accuracy	--	--	--		--	--	--
AC/DC Current (Direct input)	N/A	N/A	400.0 μA/ 4000 μA 40.00 mA/ 400.0 mA 4.000 A/ 10.00 A		N/A	N/A	N/A
Basic accuracy (DC A)	--	--	±1.2 % rdg. ±3 dgt.		--	--	--
Basic accuracy (AC A)	--	--	±1.2 % rdg. ±5 dgt.		--	--	--
AC Current (Clamp sensor)	N/A	N/A	N/A		N/A	N/A	N/A
Basic accuracy	--	--	--		--	--	--
Resistance	N/A	600.0 Ω/ 6.000 kΩ/ 60.00 kΩ/ 600.0 kΩ/ 6.000 MΩ/ 60.00 MΩ	400.0 Ω/ 4.000 kΩ/ 40.00 kΩ/ 400.0 kΩ/ 4.000 MΩ/ 40.00 MΩ		419.9 Ω/ 4.199 kΩ/ 41.99 kΩ/ 419.9 kΩ/ 4.199 MΩ/ 41.99 MΩ		
Basic accuracy	--	±0.9 % rdg. ±5 dgt.	±0.5 % rdg. ±2 dgt.		±2.0 % rdg. ±4 dgt.	±2.0 % rdg. ±4 dgt.	±2.0 % rdg. ±4 dgt.
Temperature (thermocouples)	N/A	N/A	N/A	K: -55.0 to 700 °C	N/A	N/A	N/A
Basic accuracy	--	--	--	±2 °C (at 0 to 50 °C)	--	--	--
Capacitance	N/A	1.000 μF/ 10.00 μF/ 100.0 μF/ 1.000 mF/ 10.00mF	50.00 nF/ 500.0 nF/ 5.000 μF/ 50.00 μF/ 100.0 μF		N/A	N/A	N/A
Basic accuracy	--	±1.9 % rdg. ±5 dgt.	±2.0 % rdg. ±5 dgt.		--	--	--
Frequency	ACV (limited by sensitivity in some cases) 99.99 Hz/ 999.9 Hz/ 9.999 kHz		5.000 Hz/ 50.00 Hz/ 500.0 Hz/ 5.000 kHz/ 50.00 kHz/ 500.0 kHz/ 5.000 MHz		N/A	N/A	N/A
Basic accuracy	±0.1 % rdg. ±2 dgt.		±0.1 % rdg. ±3 dgt.		--	--	--
Continuity check	✓	✓	✓		✓	✓	✓
Diode check	N/A	✓	✓		N/A	N/A	✓ (Judgment only)
Conductance	N/A	N/A	N/A		N/A		
Voltage detection	✓	N/A	N/A		N/A		
AC/DC voltage automatic detection	✓	N/A	N/A		N/A		
dB conversion	N/A	N/A	N/A		N/A		
Peak measurement	N/A	N/A	N/A		N/A		
4-20 mA % conversion	N/A	N/A	N/A		N/A		
Other functions	Filter function, Display hold, Relative display, Auto-power save		Operating temperature range of -10 to 50 °C, Display hold, Relative display, Auto-power save		N/A	Light check function	LED light illuminates test points Backlight LCD
Power supply/ Continuous use (Backlight off)	Alkaline batteries (LR03) ×1, 40 hours		Alkaline batteries (LR6) ×2, 800 hr	Alkaline batteries (LR6) ×2, 450 hr	Coin type lithium battery (CR2032) ×1, 150 hr	Main battery: Rechargeable lithium battery, Backup battery: Coin type lithium battery (CR2032) ×1, 150 hr (Backup battery)	Coin type lithium battery (CR2032) ×1, 150 hr
Dimensions and mass	72 mm (2.83 in)W × 149 mm (5.87 in)H × 38 mm (1.50 in)D, 190 g (6.7 oz) (including batteries and holster)		91.6 mm (3.61 in) W × 180.6 mm (7.11 in) H × 57.1 mm (2.25 in) D, 388 g (13.7 oz)		55 mm (2.17 in)W × 109 mm (4.29 in)H × 9.5 mm (0.37 in)D, 60 g (2.1 oz)	60 mm (2.36 in) W × 135 mm (5.31 in) H × 23 mm (0.91 in) D, 140 g (4.9 oz)	30 mm (1.18 in) W × 182 mm (7.17 in) H × 26.5 mm (1.04 in) D, 80 g (2.8 oz)

DMM Testers

Test lead L9207-10/ L9207-30/ L9206

Sleeve attached	CAT IV 600 V	When the CAT (measurement category) rating of the main unit is lower than that of test leads, the CAT of the main unit takes precedence. When measuring in a CAT IV or CAT III environment, be sure to attach the sleeve to the test leads.
	CAT III 1000 V	
No sleeve attached	CAT II 1000 V	

