

Datasheet

RS PRO 6 1/2 Digit Dual Measurement Multimeter

Stock No:1919721,1919777,1919778



FEATURES

- 6 1/2 Digit Display: 1,200,000 Counts
- 4.3" TFT Graphic LCD
- DCV Basic Accuracy: 0.0035%(RSDM-9061)/0.0075%(RSDM-9060)
- 12 Measurement Functions: DCV, ACV, DCI, ACI, 2-wire and 4-wire Resistance, Frequency, Period, Diode, Continuity, Temperature and Capacitance
- Sampling Rate up to 10k SPS (RSDM-9061)
- Dual Measurements to Perform Two Selected Measurement Simultaneously
- Offer Graphical Capabilities Including Histogram, Bar Meter and Trend
- Temperature Measurement Support RTD, Thermistor as Well as Thermocouple
- Standard Interface: USB Host/Device, RS-232C,LAN,Digital I/O
- Optional Interface: GPIB

SPECIFICATIONS						
DC CHARACTERISTICS		Accuracy : ± (% of reading + % of range)				
DC Voltage	Range	Resolution	Input Resistance	Accuracy(1Year)(TCAL±5°C)		
				RSDM-9061	RSDM-9060	
	100.0000 mV	0.1µV	10MΩ or >10GΩ	0.0050 + 0.0035	0.0090 + 0.0065	
	1.000000 V	1µV	10MΩ or >10GΩ	0.0048 + 0.0007	0.0080 + 0.0010	
	10.00000 V	10µV	10MΩ or >10GΩ	0.0035 + 0.0005	0.0075 + 0.0005	
	100.0000 V	0.1mV	10MΩ ±1%	0.0050 + 0.0006	0.0085 + 0.0006	
1000.000 V	1mV	10MΩ ±1%	0.0050 + 0.0010	0.0085 + 0.0010		
Resistance	Range	Resolution	Test Current	Accuracy(1Year)(TCAL±5°C)		
				RSDM-9061	RSDM-9060	
	100.0000 Ω	100µΩ	1mA	0.010 + 0.004	0.014 + 0.007	
	1.000000 kΩ	1mΩ	1mA	0.010 + 0.001	0.014 + 0.001	
	10.00000 kΩ	10mΩ	100µA	0.010 + 0.001	0.014 + 0.001	
	100.0000 kΩ	100mΩ	10µA	0.010 + 0.001	0.014 + 0.001	
	1.000000 MΩ	1Ω	5µA	0.010 + 0.001	0.014 + 0.001	
	10.00000 MΩ	10Ω	500nA	0.040 + 0.001	0.040 + 0.001	
100.0000 MΩ	100Ω	500nA//10 MΩ	0.800 + 0.010	0.800 + 0.010		
DC Current	Range	Resolution	Burden Volt.	Accuracy(1Year)(TCAL±5°C)		
				RSDM-9061	RSDM-9060	
	100.0000 µA	100pA	< 0.011 V	0.05 + 0.025	0.05 + 0.025	
	1.000000 mA	1nA	< 0.11 V	0.05 + 0.006	0.05 + 0.006	
	10.00000 mA	10nA	< 0.04 V	0.05 + 0.020	0.05 + 0.020	
	100.0000 mA	100nA	< 0.4 V	0.05 + 0.005	0.05 + 0.005	
	1.000000 A	1µA	< 0.7 V	0.10 + 0.010	0.10 + 0.010	
	3.000000 A	1µA	< 2.0 V	0.20 + 0.020	0.20 + 0.020	
10.00000 A	10µA	< 0.5 V	0.15 + 0.010	-----		
Continuity	Range	Resolution	Test Current	Accuracy(1Year)(TCAL±5°C)		
				RSDM-9061	RSDM-9060	
1000.000 Ω	0.001 Ω	1 mA	0.010 + 0.030	0.014 + 0.030		
Diode Test	Range	Resolution	Test Current	Accuracy(1Year)(TCAL±5°C)		
				RSDM-9061	RSDM-9060	
5.000000 V	1µV	1 mA	0.010 + 0.030	0.014 + 0.030		
DC Ratio	Accuracy Specification: ± (DC Input accuracy + DC Reference accuracy)					
TEMPERATURE CHARACTERISTICS						
RTD (Accuracy based on PT100)	Range	Resolution	Accuracy(1Year)(TCAL±5°C)			
	-200 °C ~ -100 °C	0.001 °C	0.09 °C			
	-100 °C ~ -20 °C	0.001 °C	0.08 °C			
	-20 °C ~ 20 °C	0.001 °C	0.06 °C			
	20 °C ~ 100 °C	0.001 °C	0.08 °C			
	100 °C ~ 300 °C	0.001 °C	0.12 °C			
300 °C ~ 600 °C	0.001 °C	0.22 °C				
Thermocouples (Accuracy based on ITS-90)	Type	Range	Resolution	Accuracy(1Year)(TCAL±5°C)		
	E	-200 °C ~ +1000 °C	0.002 °C	0.2 °C		
	J	-210 °C ~ +1200 °C	0.002 °C	0.2 °C		
	T	-200 °C ~ +400 °C	0.002 °C	0.3 °C		
	K	-200 °C ~ +1372 °C	0.002 °C	0.3 °C		
	N	-200 °C ~ +1300 °C	0.003 °C	0.4 °C		
	R	-50 °C ~ +1768 °C	0.01 °C	1 °C		
	S	-50 °C ~ +1768 °C	0.01 °C	1 °C		
B	+350 °C ~ +1820 °C	0.01 °C	1 °C			
Thermistor (2.2kΩ, 5kΩ, 10kΩ or User Type)	Range	Resolution	Accuracy(1Year)(TCAL±5°C)			
	-80 °C ~ 150 °C	0.01 °C	0.01 °C			
AC CHARACTERISTICS						
Accuracy : ± (% of reading + % of range)						
AC Voltage (True RMS)	Range	Resolution	Frequency	Accuracy(1Year)(TCAL±5°C)		
				RSDM-9061	RSDM-9060	
	100.0000 mV	0.1µV		3Hz ~ 5Hz	1.00 + 0.04	1.00 + 0.04
				5Hz ~ 10Hz	0.35 + 0.04	0.38 + 0.04
				10Hz ~ 20kHz	0.06 + 0.04	0.09 + 0.04
				20kHz ~ 50kHz	0.12 + 0.05	0.15 + 0.05
				50kHz ~ 100kHz	0.60 + 0.08	0.63 + 0.08
100kHz ~ 300kHz				4.00 + 0.50	4.00 + 0.50	

SPECIFICATIONS						
	1.000000 V to 750.000 V	1µV ~ 1mV	3Hz ~ 5Hz 5Hz ~ 10Hz 10Hz ~ 20kHz 20kHz ~ 50kHz 50kHz ~ 100kHz 100kHz ~ 300kHz	1.00 + 0.04 0.35 + 0.04 0.06 + 0.04 0.12 + 0.05 0.60 + 0.08 4.00 + 0.50	1.00 + 0.04 0.38 + 0.04 0.09 + 0.04 0.15 + 0.05 0.63 + 0.08 4.00 + 0.50	
AC Current (True RMS)	Range	Resolution	Frequency	Accuracy(1Year)(TCAL±5°C)		
				RSDM-9061	RSDM-9060	
	100.0000 µA 10.00000 mA	100pA	3Hz ~ 5Hz 5Hz ~ 10Hz 10Hz ~ 5kHz 5kHz ~ 10kHz	1.00 + 0.04 0.35 + 0.04 0.10 + 0.04 0.18 + 0.04	1.00 + 0.04 0.38 + 0.04 0.13 + 0.04 0.20 + 0.04	
		10nA	3Hz ~ 5Hz 5Hz ~ 10Hz 10Hz ~ 5kHz 5kHz ~ 10kHz	1.00 + 0.04 0.30 + 0.04 0.10 + 0.04 0.15 + 0.04	1.00 + 0.04 0.33 + 0.04 0.13 + 0.04 0.18 + 0.04	
	1.000000 mA 100.0000 mA	1nA	3Hz ~ 5Hz 5Hz ~ 10Hz 10Hz ~ 5kHz 5kHz ~ 10kHz	1.00 + 0.04 0.30 + 0.04 0.10 + 0.04 0.15 + 0.04	1.00 + 0.04 0.33 + 0.04 0.13 + 0.04 0.18 + 0.04	
		100nA	3Hz ~ 5Hz 5Hz ~ 10Hz 10Hz ~ 5kHz 5kHz ~ 10kHz	1.00 + 0.04 0.30 + 0.04 0.10 + 0.04 0.15 + 0.04	1.00 + 0.04 0.33 + 0.04 0.13 + 0.04 0.18 + 0.04	
	1.000000 A	1µA	3Hz ~ 5Hz 5Hz ~ 10Hz 10Hz ~ 5kHz 5kHz ~ 10kHz	1.00 + 0.04 0.30 + 0.04 0.10 + 0.04 0.15 + 0.04	1.00 + 0.04 0.33 + 0.04 0.13 + 0.04 0.18 + 0.04	
			3Hz ~ 5Hz 5Hz ~ 10Hz 10Hz ~ 5kHz 5kHz ~ 10kHz	1.00 + 0.04 0.35 + 0.04 0.23 + 0.04 0.23 + 0.04	1.00 + 0.04 0.38 + 0.04 0.23 + 0.04 0.23 + 0.04	
	3.000000 A	1µA	3Hz ~ 5Hz 5Hz ~ 10Hz 10Hz ~ 5kHz 5kHz ~ 10kHz	1.00 + 0.04 0.35 + 0.04 0.23 + 0.04 0.23 + 0.04	1.00 + 0.04 0.38 + 0.04 0.23 + 0.04 0.23 + 0.04	
			3Hz ~ 5Hz 5Hz ~ 10Hz 10Hz ~ 5kHz 5kHz ~ 10kHz	1.10 + 0.04 0.35 + 0.04 0.15 + 0.04 0.35 + 0.04	----- ----- ----- -----	
	10.00000 A	10µA	3Hz ~ 5Hz 5Hz ~ 10Hz 10Hz ~ 5kHz 5kHz ~ 10kHz	1.10 + 0.04 0.35 + 0.04 0.15 + 0.04 0.35 + 0.04	----- ----- ----- -----	
			3Hz ~ 5Hz 5Hz ~ 10Hz 10Hz ~ 5kHz 5kHz ~ 10kHz	----- ----- ----- -----	----- ----- ----- -----	
	CAPACITANCE CHARACTERISTICS Accuracy : ± (% of reading + % of range)					
	Capacitance	Range	Resolution	Accuracy(1Year)(TCAL±5°C)		
		1.000 nF	0.001nF	2.00 + 2.00		
		10.00 nF	0.01nF	2.00 + 1.00		
		100.0 nF	0.1nF	2.00 + 0.40		
		1.000 µF	0.001µF	2.00 + 0.40		
10.00 µF		0.01µF	2.00 + 0.40			
100.0 µF	0.1µF	2.00 + 0.40				
FREQUENCY AND PERIOD CHARACTERISTICS Accuracy : ± (% of reading)						
Frequency/Period	Range	Frequency	Accuracy(1Year)(TCAL±5°C)			
	100.0000mV to 750.000V	3Hz ~ 5Hz	0.1			
		5Hz ~ 10Hz	0.05			
		10Hz ~ 40Hz	0.03			
		40Hz ~ 1MHz	0.006			
40Hz ~ 1MHz		0.006				
GENERAL INFORMATION						
	Display	4.3" Color TFT WQVGA (480 x 272)				
	Standard Interface	RS-232C, USB Host/Device, LAN, Digital I/O				
	Power Source	AC 100 V/120 V/220 V/240 V±10%				
	Power Line Frequency	50 Hz/60 Hz/400 Hz±10%				
	Power Consumption	Max. 25VA				
	Dimension & Weight	267(W) x 107(H) x 302(D) mm, Approx. 3.5kg				

ORDERING INFORMATION

1919720 RSDM-9061 6 ½ (1200000 counts) Digit Dual Measurement Multimeter
1919775
1919776
1919721 RSDM-9060 6 ½ (1200000 counts) Digit Dual Measurement Multimeter
1919777
1919778

ACCESSORIES :

Safety Instructions x 1, Power cord x 1, USB cable GTL-246 x 1, Test lead GTL-207A x 1, CD x 1 (including the complete user manual, upgrade program and PC software, DMM-Viewer2)

OPTION

Opt.1 GPIB card (*) GPIB can be installed at customer site

OPTIONAL ACCESSORIES

GTL-205 Temperature Probe Adapter with Thermal Coupling (K-type), approx. 1000mm	GTL-248 GPIB Cable, approx. 2000mm
GTL-234 RS-232C Cable, 9-pin female-female cable, approx. 2000mm	GTL-308 4Wire Type (+shield) Test lead, approx. 1500mm
	GRA-422 Rack Mount Kit(19",2U)