Handheld Digital Multi Meter Sellection

Function item	TY710	TY720	TY520	TY530	73201	73202	73203	73204	73101
	Handhel Digital Multi Meter Models								
Measurment Function	Ture RMS	Ture RMS MEAN Sellect	RMS	RMS MEAN Sellect	MEAN	MEAN	MEAN	MEAN	MEAN
Max. Measurrement Accuracy at DCV	0.02%		0.09%		0.5%	0.5%	0.3%	0.5%	0.7%
Wide bandwidth	20KHz	100KHz	1kHz		—				—
Display Digits(Uint:Digit)	5 digits		3.5 Digits		3.5 Digits				3.5 Digits
Max. Value	50000		6000		4300				4300
Bar Graph Dsiplay (Uints:Segment)	51		31		—				32
LCD Back Light	White LED		LED		—				—
Max.Measurement Voltage (AC/or DC)	50.000mV to 1000.0V	50.000mV to 1000.0V	600.0mV to 1000V	600.0mV to 1000V	4.000V*3 to 600V	4.000V*3 to 600V	4.000V*3 to 600V	4.000V*3 to 600V	4.000V*3 to 600V
Max.Measurement Currents (AC/or DC)	500.00µA to 10.000A	500.00µA to 10.000A	600.0µA to 10.00A	600.0µA to 10.00A	400.0µA to 10.00A	400.0µA to 10.00A	400.0µA to 10.00A	—	—
Max.Measurement Resistance	500.00Ω to 50.000MΩ	500.00Ω to 50.000MΩ	600.0Ω to 60.00MΩ	600.0Ω to 60.00MΩ	400.0Ω to 40.00MΩ	400.0Ω to 40.00MΩ	400.0Ω to 40.00MΩ	400.0Ω to 40.00MΩ	400.0Ω to 40.00MΩ
Max.Measurement Frequency	2.000Hz to 99.99kHz	2.000Hz to 99.99kHz	10.00Hz to 99.99kHz	10.00Hz to 99.99kHz	—	—	—	—	—
Max.Measurement Capcitance	5.000nF to 50.00mF	5.000nF to 50.00mF	10.00nF to 1000µF	10.00nF to 1000µF	—	20.00nF to 200.0µF	20.00nF to 200.0µF	—	—
Max.Measurement Temperature	+1372°C*1	+1372°C*1	+600°C*1	+600°C*1	—	—	—	—	—
Duty Ratio (%) Measuement	●	●	—	—	—	—	—	—	—
Low-Power	—	●	—	—	—	—	—	—	—
AC+DC Measurement	●	●	—	—	—	—	—	—	—
Max./Min./Ave. Value Memory	●	●	—	●	—	—	—	—	—
Diode Test	●	●	●	●	●	●	●	●	●
Continuity Check	●	●	●	●	●	●	●	●	●
Relative/Percentage (%) calculation	●	●	●	●	—	—	—	—	—
Decibel calculation	●	●	—	—	—	—	—	—	—
Selection Auto range or Manual range	●	●	●	●	●	●	●	●	—
Peak Hold	—	●	—	—	—	—	—	—	—
Data Hold	●*2	●	●	●	●	●	●	●	●
Auto Hold	●	●	●	●	●	●	●	●	—
Communication for PC	●*2	●*2	—	●*2	—	—	—	—	—
Data Logging Memory	●*2	●*2	—	●*2	—	—	—	—	—
Data Memory	1000	10000	—	1600	—	—	—	—	—
Operating Temp. and Humidity	-20 to 55°C	-20 to 55°C	-10 to 55°C	-10 to 55°C	0 to 50°C	0 to 50°C	0 to 50°C	0 to 50°C	0 to 50°C
Electric Safety 1000V	CAT Ⅲ		CAT Ⅲ		—				—
Electric Safety 600V	CAT Ⅳ		CAT Ⅳ		CAT Ⅱ			CAT Ⅲ	CAT Ⅲ
Electric Safety 300V	—		—		CAT Ⅲ			—	CAT Ⅱ

*1 Temperature probe is necessary when measuring temperature.
*2 The communications package (model: 92015) for DMM is necessary when connecting it with PC.
*3 73101,732Series minimum range of DCvoltage is 400. 0 mVDC.

Simple selection for replacing discontinued products

A New De Facto Standard for Handheld DMM

- Maximum Measurement Accuracy: 0.020% rdg + 2 dgt
- Highly Reliable: Closed case calibration
- Full Support of Data Management: Measured data stored in internal memory
- Safe Design: Shutters prevent erroneous insertion of test leads into current measurement-terminals (terminal shutters)
- Shockproof elastomer casing
- Wide operating temperature range: -20 °C to 55°C

General Specifications

Additional Functions	USB communication (optional adapter & software), data memory (TY720: 10,000 data, TY710: 1,000 data), max/min value memory, relative/percentage value computation, logarithm computation, data/auto hold, peak hold (TY720), overvoltage warning, backlight
Power Supply	Four AA (R6) dry cells
Battery Life	Approx. 120 hours
Dimensions	90 (W) × 192 (H) × 49 (D) mm
Weight	Approximately 560 g (including batteries)
Safety Standards	1000 V CAT. Ⅲ, 600 V CAT. Ⅳ

TY700 Series
Digital Multimeters

Item	Range	TY710 — RMS			TY720 — Switching detection (RMS or MEAN)		
		Accuracy					
DCV	50mV	0.05+10					
	500mV/2400mV	0.02+2					
	5V	0.025+5					
	50V/500V/1000V	0.03+2					
ACV [RMS]		Upper: 10 to 20Hz / Lower: 20Hz to 1kHz	Upper: 1kHz to 10kHz / Lower: 10kHz to 20kHz	Upper: 20kHz to 50kHz / Lower: 50kHz to 100kHz	Upper: 10 to 20Hz / Lower: 20Hz to 1kHz	Upper: 1kHz to 10kHz / Lower: 10kHz to 20kHz	Upper: 20kHz to 50kHz / Lower: 50kHz to 100kHz
	50mV	—	—	—	2+80 / 0.4+40	5+40 / 5.5+40	15+40 / 15+40
	50mV/5V/ 50V/500V	1.5+30	0.7+30 / 2+50	—	1+30	0.4+30 / 1+40	2+70 / 5+200
	1000V	0.7+30	3+30	—	0.4+30	3+30	—
ACV [MEAN]					10 to 20Hz	20Hz to 500Hz	500Hz to 1kHz
	50mV	—			4+80	1.5+30	5+30
	50mV/5V/ 50V/500V/1000V	—			2+30	1+30	3+30
DCV+ACV		Upper: DC,10 to 20Hz / Lower: DC,20Hz to 1kHz	Upper: DC,1kHz to 10kHz / Lower: DC,10kHz to 20kHz	Upper: DC,20kHz to 50kHz / Lower: DC,50kHz to 100kHz	Upper: DC,10 to 20Hz / Lower: DC,20Hz to 1kHz	Upper: DC,1kHz to 10kHz / Lower: DC,10kHz to 20kHz	Upper: DC,20kHz to 50kHz / Lower: DC,50kHz to 100kHz
	5V/50V/500V	1.5+10 / 1+10	1+10 / 2+10	—	1.5+10 / 0.5+10	0.5+10 / 1+10	2+10 / 5+20
	1000V	1.5+10 / 1+10	—	—	1.5+10 / 0.5+10	—	—
DCA	500μA/5000μA/ 50mA/500mA	0.2+5					
	5A	0.6+10					
	10A	0.6+5					
ACA [RMS]		10Hz to 20Hz	20Hz to 1kHz	1kHz to 5kHz	10Hz to 20Hz	20Hz to 1kHz	1kHz to 5kHz
	500μA/5000μA/ 50mA/500mA	1.5+20	1+20	—	1+20	0.75+20	1+30
	5A/10A				1.5+20	1+20	2+30
ACA [MEAN]					10Hz to 20Hz	20Hz to 1kHz	1kHz to 5kHz
	500μA/5000μA/ 50mA/500mA	—			2+20	1.5+20	2+30
	5A/10A	—			3+20	2+20	4+30
DCA+ACA		DC,10 to 20Hz	DC,20Hz to 1kHz	DC,1kHz to 5kHz	DC,10 to 20Hz	DC,20Hz to 1kHz	DC,1kHz to 5kHz
	500μA/5000μA/ 50mA/500mA	2+10	1.5+10	—	1.5+10	1+10	1.5+10
	5A/10A				2+10	1.5+10	3+10
Resistance	500Ω/5kΩ/50kΩ/ 500kΩ	0.1+2			0.05+2		
	5MΩ	0.5+2					
	50MΩ	1+2					
Low-power Resistance	5kΩ/50kΩ/500kΩ	—			0.2+3		
	5MΩ	—			1+3		
Frequency	2.0Hz to 99.9kHz	0.02+1					
Capacitance	5nF/50nF/500nF 5μF/50μF	1+5					
	500μF	2+5					
	5mF/50mF	3+5					
Continuity check	550Ω	Buzzer sounds at 100±50Ω or less					
Diode test	2.4V	1+2					
Temperature	-200 to 1372°C	1+1.5°C					

● **DMM of dedicated application software (Model: 92015)**
DMM's and you can easily manage the data in memory. Is also capable of real-time communications

Features
- Data saved in the internal memory PC transfer is possible (Save memories or Logging Memories)
- DMM measurements show in real time monitor display is possible.
- Large amounts of data not covered by the internal memory PC communication with data transfer is possible. At the same time Excel transferable is also. Maximum incoming data: 32767
- Measurement data to Excel direct deployment is possible. Automatically creates a chart sheet.

92015 product specification:
Communication cable
  Communications cable: infrared communication adapter + communications cable (USB specifications) 2 m length
  Interface standards: USB specification conforms to the 1.1
  Available models : TY710 , TY720 , TY530

Application software
Operating environment of the personal computer
OS: Windows XP / Vista / 7
CPU: Pentium 133 MHz or higher
Memory: 64 MB
Hard disk has free space or more storage:
  10 MB Over, CD drive
Excel: since the Excel2000
Software: CD, communication cable (including adapter), User's manual

Provides Safety Levels Demanded in Field Work

TY500 Series

Digital Multimeters

3.5 digits (6,000-count, 31-segment bar graph display), RMS type
Measurement Functions: Voltage, Current, Resistance, Continuity Check, Diode Test, Frequency, Capacitance, Temperature
Features: Closed case calibration, Hi-impact overmold case, USB communication (optional adapter & software) (TY530 only), data memory (1,600 data for TY530 only)
Safety Standards: 1000 V CAT. Ⅲ, 600 V CAT. Ⅳ

TY500 Series Specifications

Accuracy: (23°C ±5°C, Less than 80% RH), ±(% rdg + dgt)

		TY520		TY530	
Detection		RMS		Switching detection (RMS or MEAN)	
Item	Range	Accuracy			
DCV	600mV/6V/60V/600V	0.09 + 2			
	1000V	0.15 + 2			
ACV		50/60Hz	40 to 500Hz	500Hz to 1kHz	
	600mV/6V/60V/600V	0.5 + 5	1 + 5	1.5 + 5	
	1000V			—	
DCA	600µA/6000µA/60mA	0.2 + 2			
	600mA/6A/10A	0.5 + 5			
ACA		50/60Hz		40Hz to 1kHz	
	600µA/6000µA/60mA/600mA/6A/10A	0.75 + 5		1.5 + 5	
Resistance	600Ω/6kΩ/60kΩ/600kΩ	0.4 + 1			
	6MΩ	0.5 + 1			
	60MΩ	1 + 2 (0 to 40MΩ) 2 + 2 (40 to 60MΩ)			
Frequency	10.0Hz to 99.99kHz	0.02 + 1			
Capacitance	10nF	2 + 10			
	100nF/1µF/10µF	2 + 5			
	100µF/1000µF	3 + 5			
Continuity check	600Ω	Buzzer sounds at 50±30Ω or less			
Diode test	2V	1 + 2			
Temperature	-50 to 600°C	2 + 2°C			

General Specifications
•External dimensions:
    90 (W) × 192 (H) × 49 (D) mm
•Weight: Approx. 570 g
•Power Supply: Four AA (R6) dry cells

Low-cost Handheld DMM

732 Series

Digital Multimeters

3.5 digits (4,300-count), Mean value type
Measurement Functions: Voltage, Current, Resistance, Continuity Check, Diode Test, Capacitance
Features: Auto hold, Auto power-off

732 Series Specifications

Accuracy: (23°C ±5°C, Less than 80% RH), ±(% rdg + dgt)

Model		73201	73202	73203	73204
Detection		Mean value			
Item	Range	Accuracy			
DCV	400.0 mV/4.000 V/ 40.00 V/400.0 V/600 V	0.5%+1 0.75%+1	0.5%+1	0.3%+1	0.5%+1
ACV	4.000 V/40.00 V/ 400.0 V/600 V	1.0%+5		0.75%+5	
DCA	400.0 µA/4000 µA/ 40.00 mA/400.0 mA/ 10.00 A	1.0%+2 2.0%+2		–	
ACA (40 to 500 Hz)	400.0 µA/4000 µA/ 40.00 mA/400.0 mA/ 10.00 A	2.0%+20 2.0%+5 2.0%+20 2.0%+5 2.0%+20		–	
Resistance	400.0 Ω/4.000 kΩ/ 40.00 kΩ/400.0 kΩ/ 4.000 MΩ/40.00 MΩ	0.75%+2 0.75%+1 2.0%+1 5.0%+2			

General Specifications
•External dimensions:
    74 (W) × 155 (H) × 31 (D) mm
•Weight: Approx. 240 g
•Power Supply:
    Two AAA (LR03 or R03) dry cells

Pocket DMM with Superb Portability

73101

Pocket Digital Multimeter

4300 count display
Continuity Check and Diode Test
Auto Hold
Auto Power Off

73101 Specifications

Accuracy: (23°C ±5°C, Less than 80% RH), ±(% rdg + dgt)

Item	Range	Accuracy	Input Resistance
DCV	400.0 mV 4.000 V 40.00/400.0/600 V	1.2%+2 0.7%+1 1.2%+1	>100 MΩ 11 MΩ 10 MΩ
ACV	4.000 V 40.00/400.0/600 V	2.0%+5	10 MΩ
Resistance	400.0 Ω 4.000 k/40.00 k/400.0 kΩ 4.000 MΩ 40.00 MΩ	1.2%+2 2.0%+3 5.0%+3	
Continuity check	400.0 Ω	–	
Diode test	2.00 V	1.5%+1	Open-circuit Voltage<3.4 V Testing Current<1.0 mA

General Specifications
•External dimensions:
    76 (W) × 117 (H) × 18 (D) mm
•Weight: Approx. 110 g
•Power Supply: Two LR-44 dry cells

96095
AD/DC Clamp-on Probe

- Light and compact, easy to carry and easy to clamp on crowded wirings.
- Expands measuring span of currents and assure safety when measuring with any kind of DMM.

$\mathsf{C}\mathsf{E}$

Specifications

Model	96095		
Conductor Size	φ12mm		
Measurement range	Output voltage	Accuracy (at 23°C±5°C)	
AC 0.1 to 130A	AC10mV/A(AC 1~1300mVrms)	50/60Hz	40Hz to 1kHz
		1.2%＋0.4mV	2.5%＋0.4mV
DC 0 to ±180A	DC10mV/A (DC 0~±1800mV)	1.2%＋0.4mV	
General specifications			
Operating Temp&Humidity range	-10 to 55°C relative Humidity 85% or less (no condensation)		
Storage Temp&Humidity range	-30 to 70°C relative Humidity 85% or less (no condensation)		
Power source	DC3V(Size AAA alkaline Battery LR03 × 2pcs) Low battery warning：2.2V±0.2V or less red LED flash 1.9V±0.2V or less Power off		
Continuous use	Approx．35Hours till a low battery indicator flashes *1		
Dimensions&Weight	127 (L) × 42 (W) × 22 (D) mm Cord length: Approx.1200mm Weight: Approx 140g		
Applicable standards	EN61010-1：CATⅢ Pollution degree2, Altitude 2000m or less for indoor use EN61326-1：ClassB, EN61326-2-032		
Accessories	Soft case(94030),Battery,User's Manual		

*1 From low battery warning to power off is about 5hours

Standerd Accessories

Name	Model	Specification	Applicable DMM Models							
			TY700		TY500		732			
			TY710	TY720	TY520	TY530	01	02	03	04
Test leads	98073	1000V CATⅢ 600V CAT Ⅳ Red/Black(1set)	●	●	●	●				
	RD031	L-plug,Red/Black(1set)					●	●	●	●
Fuse	99015	440mA/1000V	●	●	●	●				
	99016	10A/1000V	●	●	●	●				
	F02	15A/250V					●	●	●	●
	F05	500mA/250V					●	●	●	●

Accessorise

Name	Model	Specification	Applicable DMM Models							
			TY700		TY500		732			
			TY710	TY720	TY520	TY530	01	02	03	04
Communication Package for Digital Multimeters	92015	Communication Adapter for USB+cable+Application Software	●	●		●				
Test leads with Alligator Clip	99014	1000V CATⅢ 600V CATⅣ Red/Black(1set)	●	●		●				
Alligator Clips	B9646HF	Red/Black(1set)	●	●	●	●	●	●	●	●
Rubber Case	93007						●	●	●	●
Carrying Case	93029	Hard case	●	●	●	●				
	B9646GB	Hard case	●	●	●	●	●	●	●	●
Temperature Probe (Thermocouple type K) (Banana plag output)	90050	-50 to 150°C for liquld	●	●	●	●				
	90051	-50 to 600°C for liquld	●	●	●	●				
	90055	-20 to 250°C for surface	●	●	●	●				
	90056	-20 to 500°C for surface	●	●	●	●				
Currents Clamp-on probe	96001	For 400AAC Output:AC10mV/A*1	●	●	●	●	●	●	●	●
	96095	For 130AAC/180ADC Output: AC10mV/A or DC10mV/A*2	●	●	●	●	●	●	●	●

*1 Please use it with the ACV range. It is necessary to read the indicated value in a different way as TY710 and the TY720,732 series. The example: In AC1V display = 100A TY520 and TY530, it is possible to scale it. (Even 60A or less display is possible in case of 96001.)

*2 Please use it with ACV or DCV range. It is necessary to read the indicated value in a different way as TY710 and the TY720,732 series. The example: In AC1V display = 100A TY520 and TY530, it is possible to scale it. (Even 60A or less display is possible in case of 96095.)

DMM Accessories

93029

92015

98073

96095

96001

RD031

90050

90051

90055

90056