



Digital Multi Meter

Handheld Digital Multi Meter Selection

Handheld Digital Multi Meter Models									
Function item	TY710	TY720	TY520	TY530	73201	73202	73203	73204	73101
Measurement Function	Ture RMS	Ture RMS MEAN Select	RMS	RMS MEAN Select	MEAN	MEAN	MEAN	MEAN	MEAN
Max. Measurement 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 Dsplay (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 Capacitance	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 (%) Measurement	●	●	—	—	—	—	—	—	—
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

Existing model	4.5 Digits										3.5 Digits								
	Discontinued products for replacing	73402	73401	754402	754401	73301	73302	73303	753801	733704	733703	733702	753701	7534series	7533series	753203	753202	753201	73101
TY720	●		●																
TY710		●		●															
TY530							●		●										
TY520					●	●		●		●	●	●	●	●					
73201																		●	
73202																●			
73203																	●		
73101																			●



A New De Facto Standard for Handheld DMM



TY700 Series Digital Multimeters

- 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

Detection Item	Range	TY710 RMS			TY720 Switching detection (RMS or MEAN)		
		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
DCV	50mV				0.05+10		
	500mV/2400mV				0.02+2		
	5V				0.025+5		
	50V/500V/1000V				0.03+2		
ACV (RMS)	50mV	—	—	—	2+80	5+40	15+40
	50mV/5V/ 50V/500V	1.5+30	0.7+30	—	0.4+40	5.5+40	15+40
	1000V	0.7+30	3+30	—	1+30	0.4+30	2+70
					0.4+30	3+30	5+200
ACV (MEAN)	50mV	—	—	—	10 to 20Hz	20Hz to 500Hz	500Hz to 1kHz
	50mV/5V/ 50V/500V/1000V	—	—	—	4+80	1.5+30	5+30
DCV+ACV	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	—	—
	500µA/5000µA/ 50mA/500mA	—	—	—	—	—	—
	5A/10A	—	—	—	—	—	—
DCA	500µA/5000µA/ 50mA/500mA	—	—	—	0.2+5	—	—
	5A/10A	—	—	—	0.6+10 0.6+5	—	—
ACA (RMS)	500µA/5000µA/ 50mA/500mA	1.5+20	1+20	—	10Hz to 20Hz	20Hz to 1kHz	1kHz to 5kHz
	5A/10A	—	—	—	1+20	0.75+20	1+30
ACA (MEAN)	500µA/5000µA/ 50mA/500mA	—	—	—	1.5+20	1+20	2+30
	5A/10A	—	—	—	10Hz to 20Hz	20Hz to 1kHz	1kHz to 5kHz
DCA+ACA	500µA/5000µA/ 50mA/500mA	DC, 10 to 20Hz	DC, 20Hz to 1kHz	DC, 1kHz to 5kHz	2+20	1.5+20	2+30
	5A/10A	2+10	1.5+10	—	3+20	2+20	4+30
Resistance	500Ω/5kΩ/50kΩ 500kΩ	—	0.1+2	—	2+10	1.5+10	3+10
	5MΩ	—	—	—	—	—	—
Low-power Resistance	5kΩ/50kΩ/500kΩ	—	—	—	0.5+2	—	—
	5MΩ	—	—	—	1+2	—	—
Frequency	2.0Hz to 99.99kHz	—	—	—	—	0.2+3	—
	5nF/50nF/500nF 5µF/50µF 500µF	—	—	—	0.02+1	—	1+3
Capacitance	5nF/50nF/500nF 5µF/50µF 500µF	—	—	—	1+5	—	—
	5mF/50mF	—	—	—	2+5 3+5	—	—
Continuity check	550Ω	—	—	—	—	—	—
Diode test	2.4V	—	—	—	Buzzer sounds at 100±50Ω or less	—	—
Temperature	-200 to 1372°C	—	—	—	1+2	—	—
		—	—	—	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



Digital Multi Meter

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)

Detection		TY520	TY530	
Item	Range	RMS	Switching detection (RMS or MEAN)	
		Accuracy		
DCV	600mV/6V/ 60V/600V		0.09 + 2	
	1000V		0.15 + 2	
ACV	600mV/6V/60V/600V 1000V	50/60Hz	40 to 500Hz	500Hz to 1kHz
		0.5 + 5	1 + 5	1.5 + 5
DCA	600µA/6000µA/60mA		0.2 + 2	
	600mA/6A/10A		0.5 + 5	
ACA	600µA/6000µA/60mA/ 600mA/6A/10A	50/60Hz	40Hz to 1kHz	
		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 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 Specifications

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

Item	Range	Accuracy	Input Resistance
DCV	400.0 mV	1.2%+2	>100 MΩ
	4.000 V	0.7%+1	11 MΩ
	40.00/400.0/600 V	1.2%+1	10 MΩ
ACV	4.000 V	2.0%+5	10 MΩ
	40.00/400.0/600 V		
Resistance	400.0 Ω	1.2%+2	
	4.000 k/40.00 k/400.0 kΩ	2.0%+3	
	4.000 MΩ	5.0%+3	
	40.00 MΩ		
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

Oscilloscopes

Digital Power Analyzers

Generators, Sources, Meters etc.

Optical Measuring Instruments

Calibrator

Data Logger

Clamp-on Power Meter

Digital Multimeter

Clamp-on Tester

Insulation Tester

Earth Tester, Other Products

Thermometer

Precision Measuring Instruments

Meters Products

73101

Pocket Digital Multimeter

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





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.

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 : CAT III 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

Standard Accessories

Name	Model	Specification	Applicable DMM Models							
			TY700		TY500		732			
			TY710	TY720	TY520	TY530	01	02	03	04
Test leads	98073	1000V CAT III 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					●	●	●	●

Accessories

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 CAT III 600V CAT IV 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 plug output)	90050	-50 to 150°C for liquid	●	●	●	●				
	90051	-50 to 600°C for liquid	●	●	●	●				
	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} For 130AAC/180ADC Output: AC10mV/A or DC10mV/A ^{*2}	●	●	●	●	●	●	●	●
	96095		●	●	●	●	●	●	●	●

*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

