732 Series

Low-cost Handheld DMM

Model

73201
73202
73203
73204

3.5 digits

4300 count

3-year Warranty

• Photo shows the 73203 with optional rubber case.

CE

- **Compact size, ideal for carrying**
- **Large display for easy viewing**
- **Safe design allows measurement in excess of 20 A (excluding 73204)**
- **Special model for voltage measurement (73204)**
- **Simple auto hold function**
- **Capacitors can be checked (73202/73203)**

General Specifications

73201 / 02 / 03 / 04	
Additional Functions	Auto hold, overvoltage and current warning
Display	Digital display: 4300-count digital reading
Measuring Rate	Digital display: Approx. 2 times/sec
Operating Temp.and Humidity	0 to 50˚C; 80% RH or less at 0˚C to 40˚C, or 70% RH or less at 40˚C to 50˚C (no condensation)
Storage Temp.and Humidity	-20˚C to 60˚C, 70 RH or less (no condensation)
Temperature Coefficient	Add accuracy x 0.1/ ˚C to the basic accuracy at a temperature within 0˚C to 18˚C and 28˚C to 50˚C
Withstanding Voltage	3.7 kV AC for 1 minute (between input terminals and casing, for 73201,73202, 73203) 5.55 kV AC for 1 minute (between input terminals and casing, for 73204)
Power Supply	Two AAA (LR03 or R03) dry cells
Battery Life	Approx. 600 hours (for continuous DC voltage measurement with alkaline cells)
Auto Power Off	The power is automatically turned off when no operation is made for approx. 20 minutes (can be disabled). N/A for 73204
Dimensions	74 (W) x 155 (H) x 31 (D) mm
Weight	Approx. 240 g (including batteries)
Compliance with Standards	Safety EN61010-1 (1995) + Amend; EN61010-2-031 (1995) (600 V, CAT II; 300 V, CAT III; contamination level 2, indoor use: 73201,73202, 73203) (600 V, CAT III; contamination level 2, indoor use: 73204) EMC EMI: EN55011 (1991) (Class B, Group 1) EMS: EN50082-1 (1997)
Standard Accessories	Instruction manual: 1 Test lead set (RD031): 1 AAA (LR03/R03) dry cells (built in): 2 Spare fuse F05 (500 mA/250 V, not included for 73204): 1 Spare fuse F02 (15 A/250 V, not included for 73204): 1

Options

Option Code	Specification
732☐☐/R	With rubber case

Optional Accessories

Name	Model	Specification
Fuse	F05	500 mA/600 V
	F02	15 A/600 V
Test leads	RD031	Red / black (1 set)
Carrying case (hard)	B9646GB	Houses the DMM and test leads
Rubber case	93007	For DMM

Performance

Test conditions: Temperature and humidity = 23˚C ± 5˚C, 80% RH or less;Accuracy = ±(% of reading + digits).
Note: Response time is the time required for achieving accuracy specified for the corresponding range.

• DC Voltage Measurement (⎓V)

Range	Accuracy			Input Resistance	Maximum Input Voltage
	73201	73202/04	73203		
400.0 mV	0.5% + 1	0.5% + 1	0.3% + 1	>100 MΩ	600 V
4.000 V				11 MΩ	
40.00 V	0.75% + 1			10 MΩ	
400.0 V					
600 V					

Response time: 1.5 seconds or less for 400 mV range, 1 seconds or less for all other ranges

• AC Voltage Measurement (~V)

Mean-value detection and RMS-value calibration

Range	Accuracy			Input Resistance	Maximum Input Voltage
	73201	73202	73203/04		
4.000 V	1% + 5		0.75% + 5	>11 MΩ, <50 pF	600 Vrms
40.00 V				>10 MΩ, <50 pF	
400.0 V					
600 V					

Response time: 2 seconds or less

• DC Current Measurement (⎓A)

Not available with 73204

Range	Accuracy			Voltage Drop	Maximum Input Current
	73201	73202	73203		
400.0 µA *1	1% + 2			<0.17 mV/µA	400 mA (500 mA/600 V fuse-protected)
4000 µA					
40.00 mA *1				<3 mV/mA	
400.0 mA					
4.000 A	2% + 2			<0.04 V/A	10 A (15 A/600 V fuse-protected)
10.00 A *2					

*1: Drift in the least significant digit may occur.
*2: Measurement of 11 to 20 A can be performed within 30 seconds. A warning buzzer sounds when 30 seconds have passed.
Response time: 1 second or less

• AC Current Measurement (~A)

Not available with 73204

Mean-value detection and RMS-value calibration

Range	Accuracy (40 – 500 Hz)			Voltage Drop	Maximum Input Current
	73201	73202	73203		
400.0 µA*1	2% + 20			<0.17 mV/µA	400 mA (500 mA/600 V fuse-protected)
4000 µA	2% + 5				
40.00 mA*1	2% + 20			<3 mV/mA	
400.0 mA	2% + 5				
4.000 A	2.5% + 20			<0.04 V/A	10 A (15 A/600 V fuse-protected)
10.00 A*2					

*1: Drift in the least significant digit may occur.
*2: Measurement of 11 to 20 A can be performed within 30 seconds. A warning buzzer sounds when 30 seconds have passed.
Response time: 2 second or less

• Resistance Measurement (Ω)

Range	Accuracy	Maximum Testing Current	Open-circuit Voltage	Input Protection Voltage
	73201 to 73204			
400.0 Ω	0.75% + 2	<1 mA	<3.4 V	600 V
4.000 kΩ	0.75% + 1	<0.5 mA	<1.0 V	
40.00 kΩ		<70 µA	<0.7 V	
400.0 kΩ		<7 µA		
4.000 MΩ	2% + 1	<0.7 µA		
40.00 MΩ	5% + 2	<70 µA		

Response time: 1 second or less for 400 kΩ range or less, 5 seconds or less for 4 MΩ range, 15 seconds or less for 40 MΩ range

• Continuity Check (•))

Range	Continuity Beeper	Open-circuit Voltage	Input Protection Voltage
	73201 to 73204		
400.0 Ω	Buzzer sounds at 50 ± 20 Ω or less	<3.4 V	600 V

Response time: 0.2 second or less (buzzer response)

• Diode Test (⊣◀⊢)

Range	Accuracy	Open-circuit Voltage	Input Protection Voltage
	73201 to 73204		
2.00 V	1% + 1 (testing current 1 mA or less)	<3.4 V	600 V

Response time: 1 second or less

• Capacitor Check (⊣⊢)

Range	Accuracy			Input Protection
	73201/04	73202	73203	
20.00 nF	Not available	2% + 5, typical (20 nF range: Accuracy after zero calibration)		500 mA/250 V fuse-protected
200.0 nF				
2.000 µF				
20.00 µF				
200.0 µF				

Response time: 1 second or less