## **Low-cost Handheld DMM**

# Model **73201** 73202 73203 73204







- 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

Auto hold, overvoltage and current warning Additional Functions Digital display: 4300-count digital reading
Digital display: Approx. 2 times/sec
0 to 50°C; 80% RH or less at 0°C to 40°C, or 70% RH or less at Display Measuring Rate Operating Temp.and Humidity

40°C to 50°C (no condensation) Storage Temp.and Humidity

Temperature Coefficient

-20  $^{\circ}$  C to 60  $^{\circ}$  C, 70 RH or less (no condensation) Add accuracy x 0.1/  $^{\circ}$  C to the basic accuracy at a temperature

Dimensions

Compliance with Standards

Weight

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) Two AAA (LR03 or R03) dry cells

Power Supply Approx. 600 hours

**Battery Life** 

(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

To approx. 20 minutes (can be disabled). N/A for 73204
74 (W) x 155 (H) x 31 (D) mm
Approx. 240 g (including batteries)
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

#### Option Code Specification 732□□/R With rubber case

Model	Specification
F05	500 mA/600 V
F02	15 A/600 V
RD031	Red / black (1 set)
B9646GB	Houses the DMM and test leads
93007	For DMM
	F05 F02 RD031 B9646GB

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

#### DC Voltage Measurement (...V)

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

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

Response time: 2 seconds or less

## • DC Current Measurement (... A)

	Not available with 73204						
D		Accuracy			V-4 D	Management Comment	
	Range	73201	73202	73203	Voltage Drop	Maximum Input Current	
	400.0 μA *1						
	4000 μΑ		1% + 2		<0.17 mV/μA	400 mA (500 mA/600 V	
	40.00 mA *1	176 + 2		<3 mV/mA	fuse-protected)		
	400.0 mA				<3 IIIV/IIIA		
	4.000 A	2% + 2			.0.041//4	10 A	
	40.00 4 *2		270 + 2		<0.04 V/A	(15 A/600 V fuse-protected)	

\*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						
	Accuracy (40 - 500 Hz)			1		
Range	73201	73202	73203	Voltage Drop	Maximum Input Current	
400.0 μΑ*1	*1 2% + 20			<0.17 mV/μA		
4000 μΑ	2% + 5 2% + 20		<0.17 ΠΙν/μΑ	400 mA (500 mA/600 V		
40.00 mA*1				fuse-protected)		
400.0 mA	2% + 5					
4.000 A		0.5% . 00			10 A	
10.00 A*2	2.5% + 20			<0.04 V/A	(15 A/600 V fuse-protected)	

11: Drift in the least significant digit may occur.
12: 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	Open-circuit	Input Protection Voltage
Range	73201 to 73204	Current	Voltage	
400.0 Ω	0.75% + 2	<1 mA	<3.4 V	
4.000 kΩ		<0.5 mA	<1.0 V	
40.00 kΩ	0.75% + 1	<70 μΑ		600 V
400.0 kΩ		<7 μΑ	<0.7 V	000 V
4.000 MΩ	2% + 1	<0.7 μΑ	<0.7 V	
40.00 MΩ	5% + 2	<70 μΑ		

Response time: 1 second or less for 400 k $\Omega$  range or less, 5 seconds or less for 4 M $\Omega$  range, 15 seconds or less for 40 M $\Omega$  range

### • Continuity Check (→))

D	Continuity Beeper	Open-circuit Input Protection Vo		
Range	73201 to 73204	Voltage	Input Protection Voltage	
400.0 Ω	Buzzer sounds at 50 $\pm$ 20 $\Omega$ or less	<3.4 V	600 V	

Response time: 0.2 second or less (buzzer response)

#### Diode Test (-⟨-⟩)

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

## Capacitor Check (⊣⊢)

		Accuracy		Inner Destruites
Range	e 73201/04 73202 73203		73203	Input Protection
20.00 nF		·		
200.0 nF		00/ . 5		
2.000 μF	Not available	(20 nF range: Accurac	, typical y after zero calibration)	500 mA/250 V fuse-protected
20.00 μF		(======================================		
200.0 μF				

Response time: 1 second or less



Thank you for reading this data sheet.

For pricing or for further information, please contact us at our UK Office, using the details below.

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Please note - Product designs and specifications are subject to change without notice. The user is responsible for determining the suitability of this product.