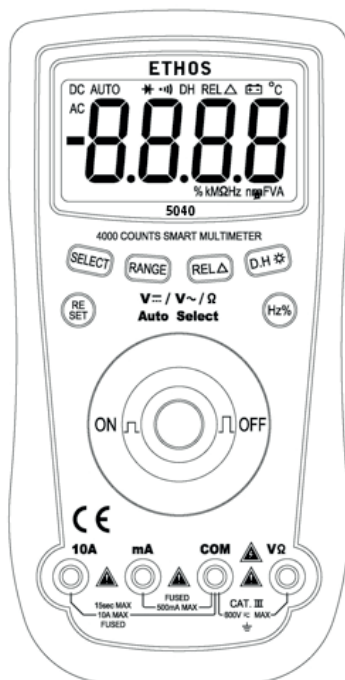


# ETHOS 5040 SPECIFICATION

## General Specification

Display	LCD with a max. reading of 4000
Range control	Auto range & Manual range control
Polarity	Automatic negative polarity indication
Zero adjustment	Automatic
Over range indication	The "OL" or "-OL" display
Low battery indication	Display "🔋" sign
Data hold	Display "DH" sign
Relative measurement	Display "RELIII" sign
Safety standards	CE EMC/LVD. CATIII 600V. The meter is up to the standards of IEC1010 Double Insulation, Pollution Degree 2, Overvoltage Category III
Operating environment	Temperature 32 to 104°F (0°C to 40°C), Humidity ≤ 80% RH
Storage environment	Temperature -4 to 140°F (-20°C to 60°C), Humidity ≤ 90% RH
Fuse	F0.5AL 250V 5 x 20mm, F10AL 250V 5 x 20mm
Power supply	9V battery (6F22)
Test lead probe	RE10, CATIII 600V / CATIII 1000V, 10A, L=90cm
Dimension	177(H) x 92(W) x 40(D) mm
Weight	Approx. 320g (including battery)



**ETHOS**  
Test Instruments

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### 3.2.1 DC Voltage

Range	Accuracy	Resolution
4V	$\pm (0.5\%+2)$	1mV
40V		10mV
400V		100mV
600V	$\pm (0.8\%+2)$	1V

Overload protection: 600V DC or AC rms  
Impedance: 10M $\Omega$

### 3.2.2 AC Voltage

Range	Accuracy	Resolution
4V	$\pm (0.8\%+3)$	1mV
40V		10mV
400V		100mV
600V	$\pm (1.2\%+3)$	1V

Average sensing, calibrated to rms of sine wave  
Frequency: 40~500Hz  
Overload protection: 600V DC or AC rms  
Impedance: 10M $\Omega$

### 3.2.3 DC Current

Range	Accuracy	Resolution
40mA	$\pm (1.2\%+2)$	10 $\mu$ A
400mA		100 $\mu$ A
4A	$\pm (2.0\%+3)$	1mA
10A		10mA

Overload protection: 0.5A/250V, 10A/250V fuse  
Continuous testing the maximum steady-state current of 1A



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### 3.2.4 AC Current

Range	Accuracy	Resolution
40mA	± (1.5%+3)	10µA
400mA		100µA
4A	± (2.5%+5)	1mA
10A		10mA

Average sensing, calibrated to rms of sine wave

Frequency: 40~500Hz

Overload protection: 0.5A/250V, 10A/250V fuse


Continuous testing the maximum steady-state current of 1A

### 3.2.5 Resistance

Range	Accuracy	Resolution
400Ω	± (1.0%+2)	0.1Ω
4kΩ		1Ω
40kΩ		10Ω
400kΩ		100Ω
4MΩ		1kΩ
40MΩ	± (1.5%+3 )	10kΩ

Overload protection: 250V DC or AC rms

### 3.2.6 Diode and Audible continuity test

Range	Description	Test condition
	Display read approximately forward voltage of diode Built-in buzzer sounds if resistance is less than 120Ω	Forward DC current approx. 0.4mA Reversed DC voltage approx. 1.5V Open circuit voltage approx. 0.5V

Overload protection: 250V DC or AC rms

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### 3.2.7 Capacitance

Range	Accuracy	Resolution
40nF	$\pm (3.0\%+10)$	10pF
400nF	$\pm (2.5\%+5)$	100pF
4 $\mu$ F		1nF
40 $\mu$ F	$\pm (5.0\%+10)$	10nF
100 $\mu$ F		100nF

Overload protection: 250V DC or AC rms

### 3.2.8 Frequency

Range	Accuracy	Resolution
10Hz	$\pm (0.1\%+5)$	0.001Hz
100Hz		0.01Hz
1000Hz		0.1Hz
10kHz		1Hz
100kHz		10Hz
500kHz		100Hz

Sensitivity: sine wave 1.9V rms or 20mA rms

Overload protection: 250V DC or AC rms

### 3.2.9 Duty cycle

0.1%~99.9%:  $\pm (2.0\%+2)$  Frequency lower than 10kHz

Sensitivity: sine wave 1.9V rms or 20mA rms

Overload protection: 250V DC or AC rms



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