

# 50,000 Count Premium DMM



The 5300 Series handheld DMM is the most advanced digital multimeter available in this price range. These meters incorporate a special 50,000 count integrated circuit for high-accuracy (0.025%) basic accuracy, high-reliability design. Measure AC Volts (True RMS AC, AC + DC), Resistance, Capacitance and Frequency, in addition to dB, Duty Cycle, Pulse Width, Power Line Disturbances and Temperature. These meters also feature fuse and battery access without breaking a calibration seal, great for ISO facilities. All models offer Peak Hold, Hold, Relative Mode and Backlight.

- **Precision 50,000 count instruments**
- **0.025% Basic DCV accuracy (Models 5380 and 5390)**
- **True RMS reading**
- **Large LCD display provides easy readability, all test parameters in clear view.**
- **Best value of any DMM**
- **CE safety approved**

## Features

	5390	5380	5370	models 5360
Basic Functions				
Basic Accuracy	0.025%		0.05%	0.1%
Voltage (Best Resolution)	750VAC/1000VDC (10 $\mu$ V)			750VAC/1000VDC (100 $\mu$ V)
Current (Best Resolution)	10AAC/DC (10nA)			10AAC/DC (1 $\mu$ A)
Frequency	✓		✓	
Temperature Probe			✓	
Duty Cycle	✓		✓	✓
Event Counter	✓			
Backlight	✓	✓	✓	

## Specifications

	5390	5380	5370	models
<b>AC VOLTAGE</b> (Auto/Manual Ranging, True RMS)				
Modes: AC or AC+DC, selectable				
Accuracy at greater than 10% of range, 50,000 counts at Full Scale:				
Ranges	DC to 1kHz	1 kHz to 4 kHz	4 kHz to 10 kHz	10 kHz to 30 kHz 30 kHz to 50 kHz
500 mV	0.3%R+30D	1%R+3D	5%R+30D	Not specified
5V	0.3%R+30D	1%R+3D	2%R+30D	2%R+30D 3%R+30D
50V	0.3%R+30D	1%R+30D	2%R+30D	2%R+30D 3%R+30D1 mV
500V	0.3%R+30D	1%R+30D	2%R+30D	2%R+30D 3%R+30D10 mV
750V	0.3%R+30D		Not specified	100 mV
50 kHz to 100 kHz (5V, 50 V, 500 V ranges): $\pm 6\%$ FS typical				
Crest Factor: 6				

## model

### 5360

Accuracy at greater than 10% of range, 5,000 counts at Full Scale:							
Ranges	DC to 1kHz	1 kHz to 5 kHz	5 kHz to 10 kHz	10kHz to 20 kHz	20 kHz to 30 kHz	Resolution	Input Impedance
500 mV	1%R+3D	4%R+3D		Not specified		100 $\mu$ V	10 M $\Omega$ /100 pF
5V	1%R+3D	1%R+3D	2%R+30D	2%R+3D	3%R+3D	1m V	11 M $\Omega$ /100 pF
50V	1%R+3D	1%R+3D	2%R+30D	2%R+3D	3%R+3D	10mV	10 M $\Omega$ /100 pF
500V	1%R+3D	1%R+3D	2%R+3D	2%R+3D	3%R+3D	100 mV	10 M $\Omega$ /100 pF
750V	1%R+3D			Not specified		1 V	10 M $\Omega$ /100pF
Crest Factor: 3							

# Specifications

## models

**5390**
**5380**
**5370**
**5360**

Unless otherwise stated, accuracy specifications apply from 18°C to 28°C. Specifications stated as n%R + nD, mean ±(n% of reading + n least significant digits). Accuracy specifications stated as n%FS, mean ±(n% of Full Scale)

### DC VOLTAGE (Auto Manual Ranging)

Ranges	Accuracy				Resolution	Input Impedance
500 mV	0.025%R + 2D	0.025%R + 2D	0.05%R + 2D	0.1%R + 2D	10 µV	10 MΩ or 1 GΩ*
5V 0.025%R + 2D	0.025%R + 2D	0.025%R + 2D	0.05%R + 2D	0.1%R + 2D	11 MΩ	
50V	0.025%R + 2D	0.025%R + 2D	0.05%R + 2D	0.1%R + 2D	1 mV	10 MΩ
500V	0.025%R + 2D	0.025%R + 2D	0.05%R + 2D	0.2%R + 2D	10 mV	10 MΩ
1000V	0.025%R + 2D	0.025%R + 2D	0.05%R + 2D	0.3%R + 2D	100 mV	10 MΩ
*(10 MΩ only on 5360)						

### AC/DC VOLTAGE PROTECTION

Overvoltage Protection	±1100 V DC + AC Peak
Transient Protection	6kV for 10 µs

### DC CURRENT (Auto/Manual Ranging)

Ranges	Accuracy		Resolution	Max Burden Voltage
500µA	0.2%R + 5D	Not Available	10 nA	700 mV
5 mA	0.2%R + 2D		100 nA	700 mV
50mA	0.05%R + 2D		1 µA	700 mV
500 mA	0.2%R + 2D		10 µA	1.5 V
10 A	0.5%R + 2D		1 mA	500 mV

## models

**5390**
**5380**
**5370**

AC CURRENT (Auto/Manual Ranging, True RMS) AC or AC + DC  
Accuracy at greater than 10% of range, 50,000 counts at Full Scale:

Ranges	DC to 1kHz	1 kHz to 10 kHz	10 kHz to 20 kHz	20 kHz to 30 kHz	Resolution	Input Impedance
500 µA	0.75%R + 50D	1.0%R + 50D	2.0%R + 50D	3.5%R + 50D	10 nA	700 mV
5 mA	0.6%R + 50D	0.75%R + 50D	2.0%R + 50D	3.0%R + 50D	100 nA	700 mV
50 mA	0.6%R + 50D	0.75%R + 50D	2.0%R + 50D	3.0%R + 50D	1 µA	700 mV
500 mA	0.7%R + 50D	0.75%R + 50D	Not specified		10 µA	1.5 V
10 A	1% of FS		Not specified		1 mA	500 mV
Crest Factor: 6						

## model

**5360**

### AC CURRENT

Accuracy at greater than 10% of range, 5,000 counts at Full Scale:

Ranges	DC to 5 kHz	Resolution	Max Burden Voltage
5 mA	1.0%R + 3D	1 µA	700 mV
50 mA	1.0%R + 3D	10 µA	700 mV
500 mA	1.0%R + 3D	100 mA	1.5 V
10 A	1% of FS	10 mA	500 mV
Crest Factor: 3			

## models

**5390**
**5380**
**5370**
**5360**

### RESISTANCE (Auto/Manual Ranging)

Ranges	Accuracy		Resolution	Test Current
500 Ω	0.07%R + 5D	0.1%R + 5D	10 mΩ	1 mA
5 kΩ	0.07%R + 2D	0.1%R + 2D	100 mΩ	100 µA
50 kΩ	0.07%R + 2D	0.1%R + 2D	1 Ω	10 µA
500 kΩ	0.07%R + 2D	0.1%R + 2D	10 Ω	1 µA
5 MΩ	0.3%R + 2D	0.3%R + 2D	100 Ω	100 µA
50 MΩ	1.0%R + 2D	1.0%R + 2D	1 kΩ	10 µA

## models

**5390**
**5380**
**5370**
**5360**

### CAPACITANCE (Auto/Manual Ranging)

Range	Accuracy	Measurement Resolution	Measurement Current	Max Time
50 nF	1.0%R + 2D	1.0%R + 2D	10 pF	100 nA
500 nF	1.0%R + 2D	1.0%R + 2D	100 pF	1 µA
5 pF	1.0%R + 2D	1.0%R + 2D	1 nF	10 µA
50 µF	1.0%R + 2D	1.0%R + 2D	10 nF	100 µA
500 µF	1.0%R + 2D	1.0%R + 2D	100 nF	1 mA
5000 µF	1.0%R + 2D	2.0%R + 2D	1 µF	1 mA
50 mF	1.0%R + 2D	2.0%R + 2D	10 µF	1mA

## models

**5390**
**5380**
**5370**
**5360**

FREQUENCY (Autoranging)				
Range: 0.6 Hz to 500 kHz				
Accuracy: ±(0.03% rdg + 1 digit)				
Ranges	500 mV (5390, 5370)	5V to 500 V 500 µA to 500 mA	750 V	10 A (5390, 5370)
0.6Hz to 5kHz	2% of FS	2% of FS	100 V	2 A
5 kHz to 50 kHz	5% of FS	5% of FS	250 V	Not specified
50 kHz to 500 kHz	Not specified	10% of FS	Not specified	

# Accessories

### SUPPLIED:

Test Leads, Spare Fuses, Instruction Manual

### OPTIONAL:

- TL-130A General Purpose DMM Kit
- TP-5300 Platinum Temperature Probe (for 5370)
- AK-5350 Calibration Software (AK-5300 Hardware required)
- AK-5300 Communications Hardware & LabView® drivers

# Common Features

CONTINUITY - Threshold: 10Ω to 20Ω

DIODE TEST - Measures forward voltage drop of diode 0 to 1.999V

dB MEASUREMENT - 5390 and 5370 - Measures value relative to a reference from 1 to 9999 Ω, 5380 at 600Ω

PEAK HOLD - Selection: Peak + or Peak- (surge or sag) Acq. Time: < 1rms

DUTY CYCLE: 5390, 5370, 5360-Modes: Selectable %+, or %- Min

EVENT COUNTER (Model 5390) - Range: 0 to 99999 (Totalize)

MIN PULSE DURATION: 2 µs

PULSE WIDTH (Model 5390) Modes: Selectable +, - Min. Pulse Width: 20µs Max Pulse Period: 12.5 µs

TEMPERATURE (Model 5370) Using Model TP-5300 Probe (Optional)

RANGE: -200° to +800°C

Computer Interface: RS232 capability built-in. Requires AK-5300

### GENERAL

Display: 50,000 count resolution LCD, 0.55" (14mm) digit height, 34 segment analog bargraph

Measurement Rate: 2/sec., 20/sec - bargraph

Power: 9V (NEDA 1604) Battery Life: 500 hrs

Dimensions: 1.57 x 3.23 x 7.44" (40 x 82 x 189mm)

Weight: 14 oz (397g)

**Three Year Warranty**