## 50,000 Count **Premium DMM**









5390

5380

5360

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				models
	5390	5380	5370	5360
Basic Functions		•		
Basic Accuracy	0.0	025%	0.05%	0.1%
Voltage (Best Resolution)	750VAC/1000VDC			750VAC/1000VDC
		$(10\mu V)$		(100µV)
Current (Best Resolution)		10AAC/DC		
		(10nA)		(1µA)
Frequency	V		V	
Temperature Probe			V	
Duty Cycle	<b>√</b>		√	√
Event Counter	√			
Backlight	1	√	√	

		5390	5380	5370			
AC VOLTAGE							
Auto/Manual Ranging	g, True RMS)						
Modes: AC or AC+E	DC, selectable						
Accuracy at greater th	han 10% of range, 5	0,000 counts at Full Scale:					
Ranges	DC to	1 kHz to	4 kHz to	10 kHz to	30 kHz to		Input
	1 kHz	4 kHz	10 kHz	30 kHz	50 kHz	Resolution	Impedance
500 mV (	0.3%R+30D	1%R+3D	5%R+30E	) No	t specified	10μV	10 MΩ/100 pl
							or I $G\Omega$
5V (	0.3%R+30D	1%R+3D	2%R+30E	2%R+30D	3%R+30D	100 μV	11 MΩ/100 pl
50V (	0.3%R+30D	1%R+30D	2%R+30E	2%R+30D	3%R+30D1 mV	10 MΩ/100 pF	
500V (	0.3%R+30D	1%R+30D	2%R+30E	2%R+30D	3%R+30D10 mV	10 MΩ/100 pF	
750V (	0.3%R+30D		Not specifie	ed		100 mV	10 MΩ/100pF

	53	660			model		
Accuracy at greater	than 10% of range, 5,000	counts at Full Scale:					
Ranges	DC to 1kHz	1 kHz to	5 kHz to	10kHz to	20 kHz to		Input
-		5 kHz	10 kHz	20 kHz	30 kHz	Resolution	Impedance
500 mV	1%R+3D	4%R+3D		Not specified		100µV	10 MΩ/100 pF
5V	1%R+3D	1%R+3D	2%R+30D	2%R+3D	3%R+3D	Im V	11 MΩ/100 pF
50V	1%R+3D	1%R+3D	2%R+3D	2%R+3D	3%R+3D	10m√	10 MΩ/100 pF
500V	1%R+3D	1%R+3D	2%R+3D	2%R+3D	3%R+3D	100 mV	10 MΩ/100 pF
750V	1%R+3D			Not specified		1 V	10 MΩ/100pF
Crest Factor: 3				•			•

## **Specifications** models 5390 5360 5380 5370 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) Input Resolution Impedance Ranges Accuracy 0.025%R+2D 0.025%R+2D 0.05%R+2D 0.1%R+2D 10 μV $10~\text{M}\Omega$ or 1 GΩ\* 5V 0.025%R+2D 0.025%R+2D 0.025%R+2D 0.05%R+2D 0.1%R+2D Η ΜΩ 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 $10~\text{M}\Omega$ 10 ΜΩ 1000V 0.025%R+2D 0.025%R+2D 0.05%R+2D 0.3%R+2D 100 mV \*(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) Max Burden Voltage Ranges Accuracy Resolution 500µA 0.2%R+5D Not Available 10 nA 700 mV 0.2%R+2D 0.2%R+2D 100 nA 700 mV 5 mA 0.05%R+2D 0.2%R+2D 700 mV 50mA Ι μΑ

			me	odels		
	5390	5380	5	370		
AC CURRE	NT (Auto/Manual Ra	inging, True RMS) A	AC or AC + DC			
Accuracy at	greater than 10% of	range, 50,000 cou	ınts at Full Scale:			
		1 kHz to	10 kHz to	20 kHz to		Input
Ranges	DC to 1kHz	10 kHz	20 kHz	30 kHz	Resolution	Impedance
500 μA	0.75%R+50D	0.75%R+50D	1.0%R+50D	3.0%R+50D	10 nA	700 mV
5 mA	0.6%R+50D	0.6%R+50D	1.0%R+50D	2.0%R+50D	100 nA	700 mV
50 mA	0.6%R+50D	0.6%R+50D	1.0%R+50D	2.0%R+50D	Ι μΑ	700 mV
500 mA	0.7%R+50D	0.7%R+50D	Not specified		10 μA	1.5 V
10 A	1% of FS		Not specified		I mA	500 mV
Crest Facto	r: 6					

0.2%R + 2D

0.5%R+2D

	5360	mo	del
AC CURREN	Т		
Accuracy at ध	reater than 10% of	range, 5,000 co	ounts at Full Scale:
Ranges	DC to 5 kHz	Resolution	Max Burden Voltage
5 mA	1.0%R+3D	Ι μΑ	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

10 μΑ

1 mA

1.5 V

500 mV

					model	S
	5390	5380	5370	53	60	
RESISTANCE	(Auto/Manua	Ranging)				
			Accura	acy		
Ranges					Resolution	Test Current
500 Ω	0.07%	R+5D	0.1%R-	⊦5D	10 mΩ	I 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	ΙΩ	10 μA
500 kΩ	0.07%	R+2D	0.1%R-	⊦2D	10 Ω	1 μΑ
5 MΩ	0.3%	R+2D	0.3%R-	⊦2D	100 Ω	100 μΑ
50 MΩ	1.0%	R+2D	1.0%R-	⊦2D	1 kΩ	10 μA

		m	<u>lodels</u>	
5390	5380	5370	5360	
NCE (Auto/Manual Ran	ging)			
Accuracy		Measurement Resolution	Measurement Current	Max TIme
1.0%R+2D	1.0%R+2D	10 pF	100 nA	0.5 sec
1.0%R+2D	1.0%R+2D	100 pF	1 μΑ	0.5 sec
1.0%R+2D	1.0%R+2D	l nF	10 μA	0.5 sec
1.0%R+2D	1.0%R+2D	10 nF	100 μA	0.5 sec
1.0%R+2D	1.0%R+2D	100 nF	1 mA	1.5 sec
1.0%R+2D	2.0%R+2D	IμF	1 mA	3 sec/ mF
1.0%R+2D	2.0%R+2D	10 μF	ImA	3 sec/ mF
	ACE (Auto/Manual Ran Accuracy 1.0%R+2D 1.0%R+2D 1.0%R+2D 1.0%R+2D 1.0%R+2D 1.0%R+2D	Accuracy  1.0%R+2D 2.0%R+2D 2.0%R+2D 2.0%R+2D	5390         5380         5370           ACE (Auto/Manual Ranging)           Accuracy         Measurement Resolution           1.0%R+2D         1.0%R+2D         10 pF           1.0%R+2D         1.0%R+2D         100 pF           1.0%R+2D         1.0%R+2D         1 nF           1.0%R+2D         1.0%R+2D         10 nF           1.0%R+2D         1.0%R+2D         100 nF           1.0%R+2D         2.0%R+2D         1 μF	Accuracy         Measurement Resolution         Measurement Resolution         Measurement Current           1.0%R+2D         1.0%R+2D         10 pF         100 nA           1.0%R+2D         1.0%R+2D         1 nF         1 μA           1.0%R+2D         1.0%R+2D         1 nF         10 μA           1.0%R+2D         1.0%R+2D         10 nF         100 μA           1.0%R+2D         1.0%R+2D         1 00 nF         1 mA           1.0%R+2D         2.0%R+2D         1 μF         1 mA

0.2%R+2D

0.3%R+2D

	F700 F	380 5370 5	mod	els
FREQUENCY (Autoranging)	3370 3	300 5370 5	300	
Range: 0.6 Hz to 500 kHz				
Accuracy: ±(0.03% rdg+1 digit)				
	500 mV	5V to 500 V	750 V	10 A
Ranges	(5390, 5370)	500 μA to 500 mA		(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**

500 mA

10 A

CONTINUITY - Threshold: 10Ω to 20Ω	Computer Interface: RS232 capability built-in. Requires AK-5300
DIODE TEST - Measures forward voltage drop of diode 0 to 1.999V	GENERAL
dB MEASUREMENT - 5390 and 5370 - Measures value relative to a reference from 1 to 9999 $\Omega$ , 5380 at $600\Omega$	Display: 50,000 count resolution LCD, 0.55" (14mm) digit height,
PEAK HOLD - Selection: Peak + or Peak- (surge or sag) Acq. Time: < 1 rms	34 segment analog bargraph
DUTY CYCLE: 5390, 5370, 5360-Modes: Selectable %+ ,or %- Min	Measurement Rate: 2/sec., 20/sec - bargraph
EVENT COUNTER (Model 5390) - Range: 0 to 99999 (Totalize)	Power: 9V (NEDA 1604) Battery Life: 500 hrs
MIN PULSE DURATION: 2 $\mu$ s	Dimensions: 1.57 x 3.23 x 7.44" (40 x 82 x 189mm)
PULSE WIDTH (Model 5390) Modes: Selectable +, - Min. Pulse Width: 20μs Max Pulse Period: 12.5 μs	Weight: 14 oz (397g)
TEMPERATURE (Model 5370) Using Model TP-5300 Probe (Optional)	Three Year Warra
RANGE: -200° to +800°C	Three rear warra

