

## Functions



**DM393**

CE UL LISTED 1000V CAT III

- True RMS AC Volts and Amps
- 1000V AC/DC
- 10A AC/DC
- 0.5% basic DC accuracy
- Frequency 10Mhz
- Capacitance 100µF
- Temperature: -40° to 2372°F
- Resistance 40MΩ
- Diode test 4V
- Continuity >10Ω

- All inputs, ranges and functions protected to 1000 V CAT III
- Access to battery and fuses without breaking calibration
- 4,000 count backlit display
- Relative mode
- Hold
- Autoranging
- Five year limited warranty

ATL55, AAC3, ATT29, ATT70, 9V Bat., AF38, AF39

## Features



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ATL55, AAC3, 9V Bat., AF38, AF39

## Includes

## Specifications

Range	Resolution	Accuracy		Range	Resolution	Accuracy		Range	Resolution	Accuracy	
DC Volts		DM393	DM391	DC Current		DM393	DM391	Frequency & Duty Cycle		DM393	DM391
400mV	100µV	0.5% + 2	0.5% + 2	400µA	0.1µA	1.0% + 2	1.0% + 2	5Hz	0.001Hz	0.05% + 3	0.05% + 3
4V	1mV			4000µA	1µA			50Hz	0.01Hz		
40V	10mV			40mA	10µA			500Hz	0.1Hz		
400V	100mV			400mA	100µA			5kHz	1Hz		
1000V	1V	0.75% + 3	0.75% + 3	4A	1mA		1.5% + 5	1.5% + 5	50kHz	10Hz	
				10A	10mA			500kHz	100Hz		
NMRR		: >60db @ 50/60 Hz						5MHz	1kHz		
CMRR (COMMON MODE REJECTION RATIO)		: >120 db @ DC, 50/60 Hz, Rs=1kΩ		400µA	0.1µA	1.0% + 5 (40-400Hz)		10MHz	10kHz		
Input Impedance		: 10MΩ, 30 pF nominal (50 MΩ, 100 pF nominal for 400 mV range)		4000µA	1µA						
				40mA	10µA						
				400mA	100µA						
				400mA	1mA	1.5% + 5 (400Hz-10kHz)					
				4A-10A	10mA	1.5% + 10 (40-400Hz)	1.5% + 10				
						1.5% + 5 (400Hz-10kHz)					
<b>AC Volts</b>											
400mV	100µV	2.0% + 10	0.75% + 3								
4V	1mV	2.0% + 10									
40V	10mV	0.75% + 3 (40-400Hz)									
400V	100mV	2.0% + 3 (400Hz-20kHz)									
1000V	1V	1.0% + 5 (40-400Hz)	1.0% + 5	400Ω	0.1Ω	1.0% + 5	1.0% + 5				
		2.0% + 3 (400Hz-1kHz)		4000Ω	1Ω						
				40kΩ	10Ω						
				400kΩ	100Ω	0.5% + 3	0.5% + 3				
				4MΩ	1kΩ	1.0% + 5	1.0% + 5				
CMRR (COMMON MODE REJECTION RATIO)		: >60db @ DC Hz, Rs = 1 kΩ		10MΩ	10kΩ	1.5% + 10	1.5% + 10				
Input Impedance		: 10MΩ, 30 pF nominal (50 MΩ, 100 pF nominal for 400 mV range)									
<b>Continuity</b>											
		Beeper sounds between <10Ω and >60Ω									
<b>Capacitance</b>											
40nF		10pF		400nF		2.5% + 10	2.5% + 10				
400nF		100pF									
4µF		1nF									
40µF		10nF									
100µF		100nF									
<b>Frequency Counter Sensitivity</b>											
Range	Minimum Sensitivity (RMS Sine Wave)										
40Hz - 10kHz	500mV										
10Hz - 20kHz	500mV										
<b>Burden Voltage</b>											
Function	Range										
mA/µA	400µA										
	4000µA										
	40mA										
	400mA										
	4A										
	10A										
<b>Burden Voltage (Typical)</b>											
mA/µA	150µV/µA										
	150µV/µA										
	3.3mV/mA										
	3.3mV/mA										
	0.03V/A										
	0.03V/A										

# DIGITAL MULTIMETERS



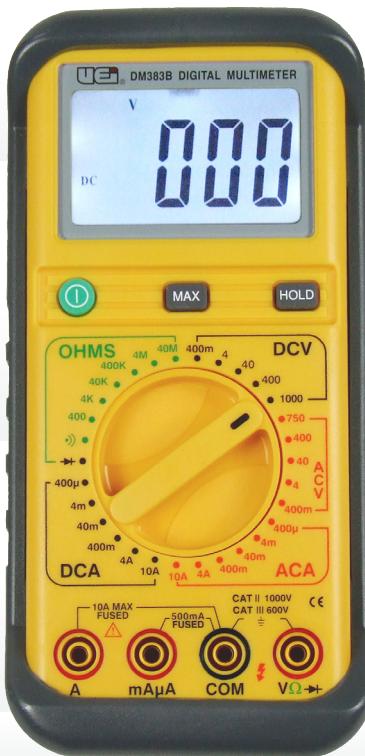
## DM384



- 750 Volts AC & 1000 Volts DC
- 10 Amps AC & DC
- Resistance to 40 MΩ
- .01 µA DC resolution for flame safe guard circuit testing
- Frequency to 40 MHz
- Capacitance to 40,000 Microfarad
- Diode Test
- Continuity

- 3-3/4" Digit, 4000 count display
- Analog bar graph
- MIN/MAX
- Data hold
- EasyView display
- Low Battery Indicator
- On-screen range and function indicators
- CE and UL listed 600V CAT III
- Five year limited warranty

ATL55, AAC3, 9V Bat., AF155, AF160



## DM383B



- 750 Volts AC & 1000 Volts DC
- 10 Amps AC & DC
- Resistance to 40 MΩ
- 0.1 µA DC resolution for flame safe guard circuit testing
- Diode Test
- Continuity

- New – EasyView Display
- 3 3/4" Digit, 4000 count display
- Max capture mode
- Data hold
- On-screen range and function indicators
- CE and UL listed 600V CAT III
- Five year limited warranty

ATL55, AAC3, 9V Bat., AF155, AF160

Range <b>DC Volts</b>	Resolution	Accuracy		Range <b>Resistance</b>	Resolution	Accuracy	
		DM384	DM383B			DM384	DM383B
400mV	100µV	±(0.5% Rdg + 3)	±(0.5% Rdg + 1)	400Ω	0.1Ω	±(1.0% Rdg + 3)	±(0.8% Rdg + 2)
4V	1mV			4000Ω	1Ω		
40V	10mV			40kΩ	10Ω		
400V	100mV			400kΩ	100Ω		
1000V	1V			4MΩ	1kΩ		
				40MΩ	10kΩ	±(3.0% Rdg + 7)	±(2.0% Rdg + 3)
<b>AC Volts (50 - 500Hz)</b>							
400mV	100µV	±(1.5% Rdg + 3)	±(1.5% Rdg + 3)	<b>Capacitance</b>			
4V	1mV			4nF	.001nF	±(3.0% Rdg + 4)	-
40V	10mV			40nF	.01nF		-
400V	100mV			400nF	.1nF		-
750V	1V	±(2.0% Rdg + 4)	±(2.0% Rdg + 4)	4µF	.001MF		-
				40µF	.01MF		-
				400µF	.1MF		-
<b>DC Current</b>							
400µA	0.1µA	±(1.0% Rdg + 3)	±(1.0% Rdg + 2)	4mF	.001mF		-
4000µA	1µA			40mF	.01mF		-
40mA	10µA						
400mA	100µA	±(1.5% Rdg + 3)	±(1.0% Rdg + 2)				
10A	10mA	±(2.0% Rdg + 2)	±(2.0% Rdg + 2)				
<b>AC Current (50 - 500Hz)</b>							
400µA	0.1µA	±(1.5% Rdg + 3)	±(1.5% Rdg + 3)				
4000µA	1µA						
40mA	10µA						
400mA	100µA						
400mA	1mA						
4A	10mA	±(3.0% Rdg + 5)	±(2.0% Rdg + 3)				
10A	10mA	±(3.0% Rdg + 5)	±(2.5% Rdg + 4)				



**DM200**



600V  
CAT II

- Volts 600 AC & DC
- Continuity
- Resistance to 200 ohms

- Manual ranging
- 3-1/2" digit, 2000 count display
- Protective rubber boot
- One year limited warranty

ATL55, AAC3, 9V Bat.



**DM5B**

- 750 Volts AC & DC
- 5 Amps AC & DC
- Continuity
- Resistance to 40MΩ

- Pocket-sized
- Auto ranging
- Data hold
- Fuse protected current ranges
- Three year limited warranty

ATL250, AF250, AF251, AB13

Range	Resolution	Accuracy	
<b>DC Volts</b>			
20V	100mV	±(1.5% Rdg + 3)	
200V	10mV		
600V	1V		

<b>AC Volts (45 - 450Hz)</b>		
200V	10mV	±(1.5% Rdg + 5)
600V	1V	

<b>Resistance</b>		
200Ω	0.1Ω	±(1.5% Rdg + 3)

<b>Continuity</b>		
Beeper sounds @ <50Ω		

Range	Resolution	Accuracy	Protection
<b>DC Volts</b>			
300mV	100µV	±(1.2% Rdg + 2)	1000V
3V	1mV	±(0.5% Rdg + 2)	
30V	10mV	±(1.2% Rdg + 2)	
300V	100mV		
750V	1V	±(1.5% Rdg + 3)	

<b>AC Volts</b>		
3V	1mV	±(2.0% Rdg + 3)
30V	10mV	
300V	100mV	
750V	1V	±(2.0% Rdg + 4)

<b>DC Current</b>		
30mA	10µA	±(1.5% Rdg + 2)
300mA	100µA	
5A	10mA	±(3.0% Rdg + 4)

<b>AC Current</b>		
30mA	10µA	±(2.0% Rdg + 4)
300mA	100µA	
5A	10mA	±(3.0% Rdg + 4)

<b>Resistance</b>		
300Ω	0.1Ω	±(1.2% Rdg + 3)
3KΩ	1Ω	
30kΩ	10Ω	
300kΩ	100Ω	
3MΩ	1kΩ	
30MΩ	10kΩ	±(3.0% Rdg + 5)

<b>Diode Test</b>		
<b>Resolution</b>	<b>Max Current</b>	<b>Max Voltage</b>
1mV	0.8mA	3.3V

# QUICK COMPARISON



<b>FUNCTIONS</b>	<b>DM393</b>	<b>DM391</b>	<b>DM384</b>	<b>DM383B</b>	<b>DM200</b>	<b>DM5B</b>
True-RMS	X	-	-	-	-	-
AC Volts	1000	1000	1000	1000	600	750
DC Volts	1000	1000	750	750	600	750
AC Amps	10	10	10	10	-	5
DC Amps	10	10	10	10	-	5
Resistance	400Ω ~ 10MΩ	400Ω ~ 10MΩ	400Ω ~ 40MΩ	400Ω ~ 40MΩ	200Ω	30MΩ
Continuity	X	X	X	X	X	X
Capacitance	40nF ~ 100 µF	40nF ~ 100 µF	4nF ~ 40,000 µF	-	-	-
Frequency	0.5Hz ~ 10MHz	0.5Hz ~ 10MHz	4kHz ~ 40MHz	-	-	-
Diode Test	X	X	X	X	-	X
Temperature °F	-40° ~ 2,372°	-	-	-	-	-
Temperature °C	-40° ~ 1,300°	-	-	-	-	-

## **FEATURES**

Display Count	4,000	4,000	4,000	4,000	2,000	4,000
Low Battery Indicator	X	X	X	X	X	X
Auto Power Off	X	X	-	-	X	X
Data Hold	X	X	X	X	-	X
MIN/MAX	X	-	X	MAX	-	-
Backlit Display	X	X	X	X	-	-
Relative Mode	X	X	-	-	-	-
Closed Case Calibration	X	X	-	-	-	-
Analog Bar Graph	-	-	X	-	-	-

## **Accessories Included**

Test Leads	ATL55	ATL55	ATL55	ATL55	ATL55	ATL250
Alligator Clips	AAC	AAC	AAC	AAC	AAC	AAC
Battery	9V	9V	9V	9V	9V	AB13 (2)
Fuse	AF38, AF39	AF38, AF39	AF155, AF160	AF155, AF160	-	AF250/AF251
Temperature Probe	ATT29	-	-	-	-	-
Temperature Plug Adapter	ATT70	-	-	-	-	-

## **Warranty & Safety Rating**

Limited Warranty	5yr	5yr	5yr	5yr	1yr	3yr
Safety Ratings	UL CAT III 1000V	UL CAT III 1000V	UL CAT III 600V	UL CAT III 600V	UL CAT II 600V	-

## **CAN'T FIND THE METER YOU ARE LOOKING FOR?...**

UEi offers a variety of digital and analog multimeters not included on this data sheet, including a wide range of clamp meters. We have grouped our products specifically to make it easy to find what you're looking for. Here are a few related products and data sheets. For a complete list visit: [www.ueitest.com](http://www.ueitest.com)

### **Product Part #**

**DM397**

**Digital Clamp Meters (DL369, DL379, DL389, CH3, DL49, DL99B, DL235)**

**Analog Clamp & Multimeters (M110A, M75A, MCP9A, MCP4)**

### **Order Lit. #**

**L645**

**L333**

**L339**

### **DM397**

Our most advanced diagnostic multimeter made for HVAC/R. Designed specifically for engineers for electrical and industrial process diagnosis.



# ACCESORIES

## INCLUDED

### Test Leads

- ATL55** UL listed Insulated test leads for industry standard multimeters.  
(DM393, DM391, DM384, DM383B, DM200)  
**ATL250** Insulated test leads for DM5B.  
**AAC3** Screw-on alligator clips



### Temperature Probes (DM393)

- ATT29** 4' Standard fiber glass coated K-Type Temperature probe.  
(-40° to 950°F / -40° to 510°C)  
**ATT70** K-Type Temperature Probe adapter  
*NOTE: for use with meters that include temperature function*



### Batteries & Fuses

<b>AB13</b>	Battery, A76VP	DM5B
<b>AF38</b>	Fuse, 440mA, 1000V	DM393, DM391
<b>AF39</b>	Fuse, 11A, 1000V	DM393, DM391
<b>AF155</b>	Fuse, 500mA, 1000V	DM384, DM383B
<b>AF160</b>	Fuse, 12A, 1000V	DM384, DM383B
<b>AF250</b>	Fuse, .5A, 600V	DM5B
<b>AF251</b>	Fuse, 5A, 600V	DM5B



*NOTE: 9V Battery is standard.*

## OPTIONAL ACCESSORIES

### Clips & Adapters

- ATHA1** Gas Valve Thermocouple Adapter (Measure mV during use)  
**DLMAT2** Micro Amp Adapter



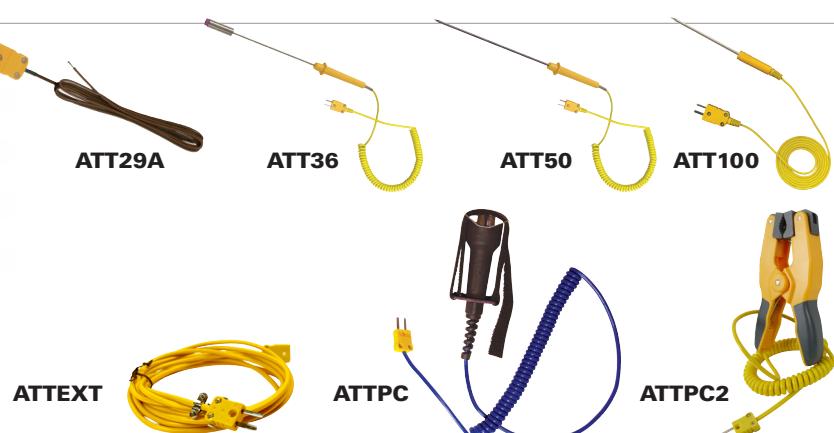
### Test Leads

- AAC** Push-on Alligator clips with insulators for pointed test leads  
**ATL60** Test Lead, Microwave Diode booster for all DMM (except DM5B)  
**ATL301KIT** Deluxe Test Lead Kit  
**ATLFSG** Flame safeguard relay kit, w/ test lead and alligator clip



### K type Temperature Probes

- ATT29A** 4' Standard fluoroplastic coated K-Type Temperature probe.  
(-40° to 950°F / -40° to 510°C)  
**ATT29APACK** ATT29A (10 Pack)  
**ATT36** 8" Surface Probe and handle (-40° to 950°F / -40° to 510°C)  
**ATT50** 8" Liquid Probe and handle (-40° to 1.550°F / -40° to 850°C)  
**ATT100** 6" Liquid Probe and handle (-40° to 950°F / -40° to 510°C)  
**ATTEXT** 10' K-Type extension  
**ATTPC** K-Type Pipe Clamp Adapter (Wrap style)  
**ATTPC2** K-Type Pipe Clamp Adapter (Grip style)



### USA

1-800-547-5740 • Fax: (503) 643-6322  
www.ueitest.com • Email: info@ueitest.com

8030 SW Nimbus Ave.  
Beaverton, OR 97008

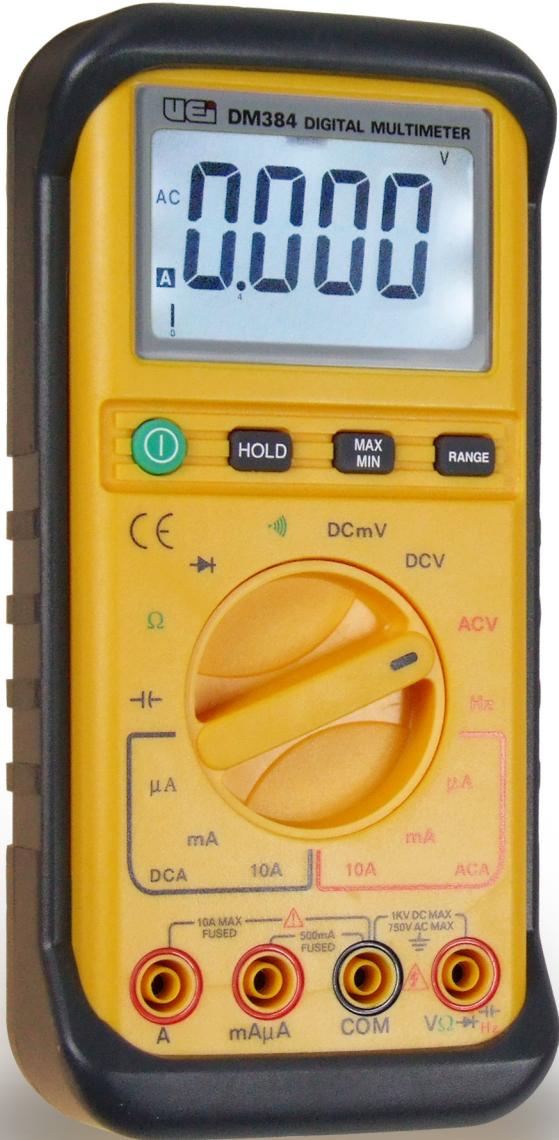
### CANADA

1-877-475-0648 • Fax: (604) 278-8299  
www.ueitest.com • Email: infocanada@ueitest.com

150-13571 Verdun Place  
Richmond, B.C.  
V6V 1W5

### EUROPE

+44 1707 375550 • Fax: +44 1707 393277  
www.ueitest.com • Email: info@ueitest.com



## **DM384** **HVAC Multimeter**

The DM384 is a full-sized multimeter specifically upgraded to meet the needs of today's HVAC/R technicians, plant maintenance professionals, and electricians. Features include MIN/MAX capture for unattended monitoring, capacitance for checking run/start capacitors, and frequency for quick verification of generators, inverters, and control circuit operation.

**Also included in this  
Data Sheet**

**DM393, DM391,  
DM383B, DM200, DM5B**