

DIGITAL MULTIMETERS



MODELS 5212, 5215, 5217, 5231 & 5233

Compact and simple to use, these multimeters with a large backlit display and non-contact voltage detection are exceptional products and a great value for today's market



SPECIFICATIONS

MODELS	5212	5215	5217	5231	5233
GENERAL					
True RMS	Yes				
AC Bandwidth	1000Hz				
Auto/Manual Ranging	Yes				
LCD Display	4000-count	6000-count	6000-count	6000-count + 61 segment bargraph	
Auto/Manual Range Select	Yes				
Voltage AC/DC	600V	750V _{ac} /1000V _{dc}	750V _{ac} /1000V _{dc}	6 ranges/60mV to 1000V; Resolution: 0.01mV	
Current AC/DC	4A/10A	6A/10A		With 1mV/A clamp: 600A Resolution: 0.1A	2 ranges / 6 to 10A Resolution: 0.001A
μAmps AC/DC	400/4000μA	600/6000μA	600/6000μA	-	
Resistance	40MΩ	60MΩ	60MΩ	6 ranges/60MΩ; Resolution: 0.1Ω	
Frequency/Duty Cycle	-	-	1000Hz/Yes	-	3 ranges: up to 3kHz/Yes
Capacitance	100mF		-	6 ranges/1000μF; Resolution: 0.01nF	
Temperature	-		-61° to 2192°F (-55° to 1200°C)	-	4° to 1400°F (-20° to 760°C) Resolution: 1°
Continuity with Beeper	Yes				
Diode Test	Yes				
V Low Z	Yes			4 ranges/60mV to 1000V; Resolution: 0.01mV	
Non Contact Voltage Detection (NCV)	Yes/Red flashing display with buzzer			Yes/Red display	
Max/Min/Max-Min	No	Yes/Yes	Yes/Yes	No/No	Yes/No
Δ REL	No	Yes	Yes	No	Yes
OTHER FEATURES					
Display Hold	Yes				
Flashlight	Yes			No	
Backlight	Yes - Blue/Red				
Removable Holster	Yes			No	
Magnetic Hanger	Yes - in the holster			No	
Auto Power OFF	Yes				
Auto Power OFF Disable	Yes				
Power Supply	2 x 1.5V AA			9V	
Battery Life	500 hrs			> 100 hrs	
Low Battery Indication	Yes				
Direct Fuse Access	Yes				
Protection Index	IP54				
Drop Resistant	Yes - 6.56ft (2m)			Yes - 3.28ft (1m)	
Operating Temperature Range	-4° to 122°F (-20° to 50°C)			32° to 122°F (0° to 50°C)	
Double Insulated	Yes				
WARRANTY/SAFETY					
Warranty	3 Years			2 Years	
CAT III	600V			1000V	
CAT IV	-			600V	

MODELS 5212, 5215 & 5217



Non-contact detection
of network voltage
(NCV Function-AC only)



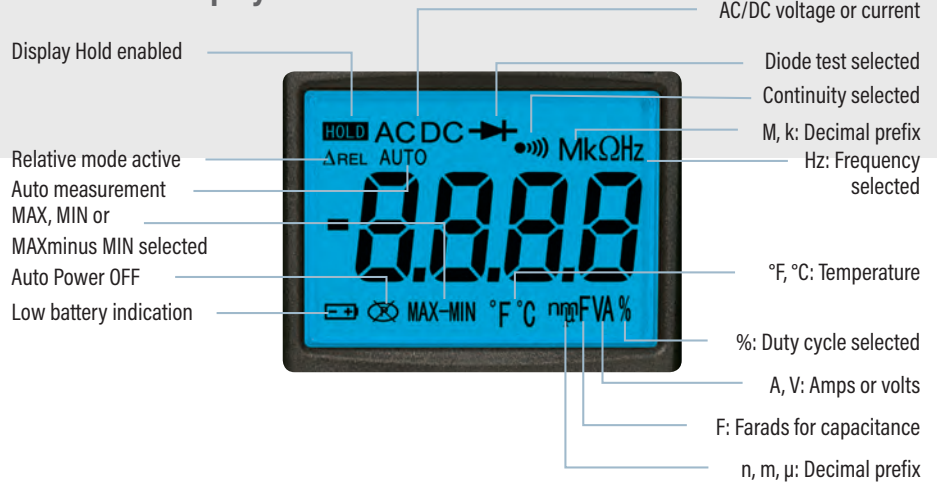
*(Models 5212, 5215 & 5217 only)



FEATURES

- AC/DC current up to 10A or 600A with a current clamp giving direct readings (Model 5231)
- High sensitivity with a resolution of 0.01mV
- Withstands overloads up to 8000V
- VLowZ function detects and eliminates ghost voltages by placing a burden on the circuit
- Multi-position mounting
- Battery life extended with "sleep mode" feature (Models 5212, 5215 & 5217)
- Backlight screen and flashlight (Models 5212, 5215 & 5217)
- Displays MAX, MIN and MAX-MIN (Models 5215 & 5217; Model 5233 displays MAX & MIN only)
- Displays relative measurement (Models 5215, 5217 & 5233)
- Measures temperature (Models 5217 & 5233)
- Measures frequency and duty cycle (Models 5217 & 5233)

Functional Displays



MODELS 5231 & 5233



PRODUCT INCLUDES

MODELS 5212, 5215 & 5217

Soft carrying pouch, set of two color-coded leads (red/black), 2 x 1.5V AA batteries and user manual.

THERMOCOUPLE ADAPTER

Included with Model 5217

MODELS 5231 & 5233

Soft carrying case, set of two 5ft color-coded test leads and user manual.

THERMOCOUPLE ADAPTER

Included with Model 5233

CATALOG NO.	DESCRIPTION
2154.07	DMM Model 5212 (TRMS, 4000-cts, NCV, V, A, AC/DC, Ohm, Auto Hold)
2154.08	DMM Model 5215 (TRMS, 6000-cts, NCV, V, A, AC/DC, Ohm, Auto Hold)
2154.09	DMM Model 5217 (TRMS, 6000-cts, NCV, V, A, AC/DC, Ohm, T, Frequency, Auto Hold)
2125.64	DMM Model 5231 (TRMS, 6000-cts, V, AC/DC, Ohm, CT, NCV)
2125.65	DMM Model 5233 (TRMS, 6000-cts, V, A, AC/DC, Cap, Ohm, T, NCV)

DIGITAL MULTIMETERS

3000 SERIES

MODELS MTX 3290 & MTX 3291

A compact, rugged, comfortable to grip, waterproof (to IP67 standard) meter



Model MTX 3290



Model MTX 3291



Model MTX 3290 only

SPECIFICATIONS

MODELS	MTX 3290		MTX 3291
ELECTRICAL			
DC, AC & AC+DC Voltages	60mV to 1000V		
DC Accuracy	±0.3%	±0.05%	
AC & AC+DC Bandwidth	20kHz	100kHz	
DC, AC & AC+DC Current	600µA to 10A / 20A (30s max) (MTX 3291)		
DC Accuracy	±0.08%		
Frequency	60Hz to 600kHz		
Resistance	600Ω to 60MΩ		
Audible Continuity	600Ω signal < 30Ω ±5Ω < 5V		
Diode Test	3V with 1mV resolution		
Capacitance	6nF to 60mF		
Temperature Pt100/1000	-328° to 1472°F (-200° to 800°C)		
Temperature K/J TC	-		
OTHER FUNCTIONS			
MIN/MAX/PEAK	Time/date-stamped MAX/MIN/AVG or PEAK ±, on all the functions		
Relative Mode (ΔRel)	Relative value + measured reference value on secondary display (MTX 3291)		
PWM Filter	4th-order 300Hz low-pass filter for measuring variable speed drives with asynchronous motors		
V-Output Clamp Function for Direct Reading	Integration of the ratio: 1/1, 1/10, 1/100, 1/1000mV/A		
Secondary Functions or Measurements	dBm and VA resistive power, +/- duty cycle, and pulse width (MTX 3291)		
SPEC Mode	-		
GRAPH	-		
Center Zero	Selectable or automatic (MTX 3291) bargraph for VDC and ADC		
Memory	-		
GENERAL			
Display	LCD with backlighting (MTX 3291) and digits 14mm high; Dual-line 60,000 (MTX 3291) or 6000-count display		
Communication	-	USB optical connector & SX-DMM software (included)	
Power Source	4 x AA batteries or NiMH batteries (included)		
Environment	Storage: -4° to 158°F (-20° to 70°C) Operation: 32° to 104°F (0° to 40°C)		
Dimensions / Weight	7.72 x 3.54 x 1.85" (196 x 90 x 47mm) / 20.1oz (570g)		

FEATURES

MODEL MTX 3290 & MODEL MTX 3291

- Easy-to-read 2.75 x 2.04" (70 x 52mm) backlit LCD screen
- On screen connection indicator
- Current: auto-ranging up to 10A
- Secondary measurements in addition to the main measurement to facilitate analysis
- MIN/MAX and AVG data with relative time/date-stamping and voltage and current peaks
- SX-DMM software for real-time processing of the data on a PC (MTX 3291)
- Powered by 4 standard AA batteries or 4 NiMH batteries rechargeable available with optional external charging module

PRODUCT INCLUDES

MTX 3290 & MTX 3291

Set of 2, Color-coded safety leads (Red/Black), Set of 2, Color-coded (Red/Black) test probes, quick start guide, 4-1.5V alkaline batteries (installed) and user manual on USB drive. Model MTX 3291 includes a soft carrying case, USB cable, and USB drive with SX-DMM software.



CATALOG NO.	DESCRIPTION
2154.01	DMM Model MTX 3290 (ASYC IV, TRMS, 6000-cts, Digital LCD)
2154.02	DMM Model MTX 3291 (ASYC IV, TRMS, 60,000-cts, USB, Backlit, Digital LCD)

DIGITAL MULTIMETERS

3000 SERIES



Model MTX 3292



Model MTX 3293



MODELS MTX 3292 & MTX 3293

Portable multimeter measuring resistance, capacitance, temperature, duty cycle, pulse counts, and frequency



FEATURES

MODEL MTX 3292 & MODEL MTX 3293

- Easy-to-read 320 x 240 pixel color matrix graphical screen with black background
- Trace, cursors and zoom on recordings
- Programmable storage rate
- Stores up to 6500 measurements (MTX 3293)
- On screen connection indicator (MTX 3293)
- USB or Bluetooth Class II communication available as an option
- NiMH AA rechargeable battery
- No downtime: instrument operates while charging

PRODUCT INCLUDES

MTX 3292, MTX 3292-BT, MTX 3293 & MTX 3293-BT

Soft carrying case, Set of 2, Color-coded safety leads (Red/Black), Set of 2, Color-coded (Red/Black) test probes, quick start guide, 4 NiMH 2400mAh 1.5V rechargeable batteries (installed), optical USB cable, power supply with US plug adapter, quick start guide, and USB drive with SX-DMM software.



SPECIFICATIONS

MODELS	MTX 3292		MTX 3293
ELECTRICAL			
DC, AC & AC+DC Voltages	100mV to 1000V		
DC Accuracy	±0.03%	±0.02%	
AC & AC+DC Bandwidth	100kHz	200kHz	
DC, AC & AC+DC Current	1000µA to 10A / 10 to 20A (30s max)		
DC Accuracy	±0.01%		
Frequency	10Hz to 5MHz		
Resistance	100Ω to 100MΩ		
Audible Continuity	1000Ω signal < 20Ω < 3.5V		
Diode Test	Diode 0 to 2.6V < 1mA + Zener Diode or LED 0 to 20V < 11mA		
Capacitance	1nF to 10mF		
Temperature Pt100/1000	-328° to 1472°F (-200° to 800°C)		
Temperature K/J TC	-40° to 2192°F (-40° to 1200°C)		
OTHER FUNCTIONS			
MIN/MAX/PEAK	SURV time/date-stamped MAX/MIN/AVG or PEAK ±, on all the functions		
Relative Mode (ΔRel)	Relative value REF-delta unit or on 3 displays + main measurement		
PWM Filter	4th-order 300Hz low-pass filter for measuring variable speed drives with asynchronous motors		
V-Output Clamp Function for Direct Reading	Programmable ratio		
Secondary Functions or Measurements	3 measurements + main measurement		
SPEC Mode	Display of measurement tolerance: Smin, Smax		
GRAPH	Trends of main measurements < 60s + Zoom + Cursor		
Center Zero	Automatic trend bargraph		
Memory	1000	6500	
GENERAL			
Display	Color graphical display (70 x 52) with backlighting on four-line 100,000-count display		
Communication	USB optical connector or Bluetooth Class II (optional) & SX-DMM software (included)		
Power Source	Charger or 4 x AA batteries or NiMH batteries (included)		
Environment	Storage: -4° to 158°F (-20° to 70°C) Operation: 32° to 104°F (0° to 40°C)		
Dimensions / Weight	7.72 x 3.54 x 1.85" (196 x 90 x 47.1mm) / 20.1oz (570g)		

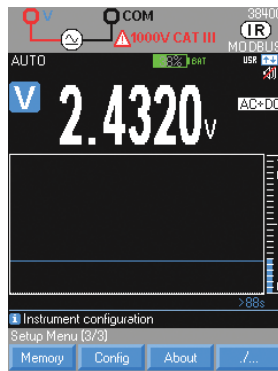
*Bluetooth Communication for Models 3292-BT & 3293-BT only

CATALOG NO.	DESCRIPTION
2154.03	DMM Model MTX 3292 (ASYC IV, TRMS, 100,000-cts, USB, Color Graphical Display)
2154.04	DMM Model MTX 3293 (ASYC IV, TRMS, 100,000-cts, USB, Color Graphical Display)
2154.05	DMM Model MTX 3292-BT (ASYC IV, TRMS, 100,000-cts, <i>Bluetooth</i> , USB, Color Graphical Display)
2154.06	DMM Model MTX 3293-BT (ASYC IV, TRMS, 100,000-cts, <i>Bluetooth</i> , USB, Color Graphical Display)

Functional Displays

The TRMS measurements of AC voltages and currents are also accurate on non-linear signals

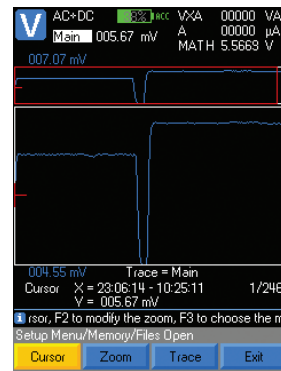
MODELS MTX 3292 & MTX 3293 COLOR MATRIX GRAPHICAL SCREENS



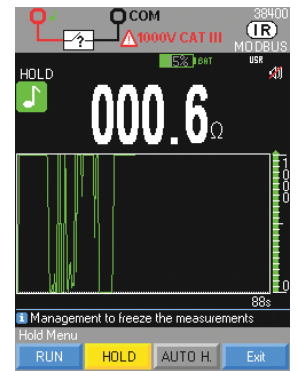
SETUP MENU
Configuration of measurements



MEASUREMENT
Configuration of the measurement parameters



MEM
Storing of the measurements, recording mode

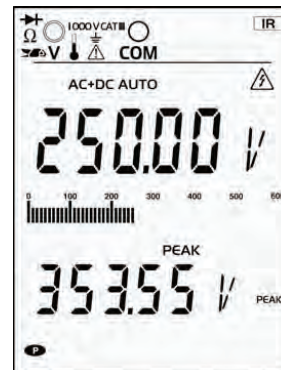


HOLD
Management and hold of the display

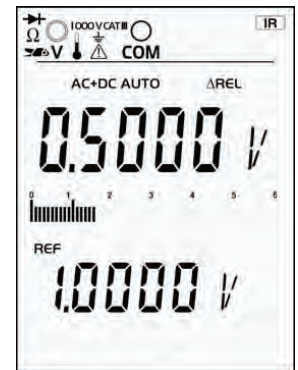
MODELS MTX 3290 & MTX 3291 BACKLIT LCD SCREENS



MAX/MIN AVG
Displays maximum, minimum and average values



PEAK MODE
Example of screen showing Peak+ value



ΔREL MODE
Displays relative values with respect to referenced measured value