

Five meters designed for electronic, electrical, plant maintenance and HVAC applications



Many DMM users find they need a "third hand" when taking a measurement with their meter. We designed the Magne-Grip™ holster to protect the meter and provide the "third hand" DMM users need. An innovative magnetic hanging strap secures the meter to a convenient steel surface, freeing both hands for work. Included with all XR meters.

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## Full-featured, full-size multimeters, XR Series

38XR

37XR

34X

### **38XR**

#### True-rms with optical PC interface.

Great for field troubleshooting in industrial, automation, process and plant environments.

- 10,000-count with high 0.25 % accuracy
- Bright blue backlight for dim environments
- Duty cycle, capacitance and frequency
- Magne-Grip<sup>™</sup> holster with magnetic hanging strap
- 4-20 mA loop current with % readout
- Temperature to 1300 °C (2372 °F), type K thermocouple included
- True-rms ac + dc coupled for accurate measurements
- RS-232 data out for use with optional software, Model 38-SW

### Three-year warranty



### 37XR

### True-rms with component and logic test.

True-rms meter for electronics troubleshooting at the bench or job site. The highest accuracy meter in the XR series.

- Autoranging 10,000 count with 0.1 % accuracy for the most accurate measurements
- LCR functions: inductance, capacitance and resistance
- Frequency, duty cycle and logic test
- Bright blue backlight for dim environments
- Magne-Grip<sup>™</sup> holster with magnetic hanging strap

### Three-year warranty



### **34XR** True-rms with temperature and backlight.

Designed for maintenance, repair and installation of electrical and electro-mechanical equipment. Ideal for contractors and field service technicians.

- True-rms for the most accurate measurements
- Extended 4000 µF capacitance range for motor run/start testing
- Bright blue backlight for dim environments
- Duty cycle, frequency and capacitance for complete measurement capability
- Temperature to 1000 °C (1832 °F) with a type K thermocouple included
- Magne-Grip  ${}^{\scriptscriptstyle \mathrm{M}}$  holster with magnetic hanging strap
- Data hold, Min/Max and bar graph

#### Three-year warranty







### 33XR

## Manual ranging with temperature and capacitance.

33XR gives the contractor and field service technician all the essential measurement functions they need in a rugged package.

- Temperature, frequency and capacitance
- Extended 4000 µF capacitance range for motor run/start testing
- Magne-Grip<sup>™</sup> holster with magnetic hanging strap
- Data hold, Peak Hold, Min/Max and REL
- **One-year warranty**



### **30XR**

### Includes VolTect™, a built-in non-contact voltage tester.

The 30XR has all the basic functions for automotive, residential and education applications.

- 9 functions, 30 ranges handles most measurement needs
- Magne-Grip<sup>™</sup> holster with magnetic hanging strap frees both hands for work
- Battery/fuse door designed for easy accessibility
- Battery tester

### **One-year warranty**





## Pick the multimeter that is right for you.

i	30XR	33XR	34XR	37XR	38XR
Measurement					
Voltage dc	600 V	1000 V	1000 V	1000 V	1000 V
Voltage ac	600 V Average	750 V Average	750 V Trms ac	750 V Trms ac	750 V Trms ac+dc
DC current	10 A	10 A	10 A	10 A	10 A
AC current	10 A	10 A	10 A TRMS	10 A TRMS	10 A TRMS
Resistance	20 MΩ	4 MΩ	40 MΩ	40 MΩ	40 MΩ
Continuity	•	•	•	•	•
Diode	•	•	•	•	•
Non-contact voltage detect	•				
Capacitance		4000 μF	4000 μF	400 μF	400 μF
Frequency		1 MHz	1 MHz	10 MHz	10 MHz
Temperature		1000 °C (1832 °F)	1000 °C (1832 °F)		1300 °C (2372 °F)
Duty cycle			•	•	•
Logic test				TTL/CMOS 20 MHz	
Inductance				40 H	
Battery test	1.5 V, 9 V				
Features					
Basic dc accuracy	1.0 %	0.7 %	0.5 %	0.1 %	0.25 %
Counts	2000	4000	4000	10,000	10,000
Auto power off		•	•	•	•
Analog bar graph		•	•	•	•
Backlight			•	•	•
Min/Max	•	•	•	•	•
Average				•	•
Relative		•		•	•
Data Hold	•	•	•	•	•
Peak Hold		•		•	•
Peak Hold 4-20 mA %		•		٠	•
		•		•	
4-20 mA %		•		•	•
4-20 mA % RS-232 output	Magne-Grip holster, test leads, battery	• Magne-Grip holster, test leads, alligator clips, Type K probe, temp adapter, battery	Magne-Grip holster, test leads, alligator clips, Type K probe, temp adapter, battery	-	•

### **Optional accessories**

- Padded carrying case, VC221A
- Hard carrying case, DC205B
- Silicone heavy duty test leads with threaded alligator clips, TL244A
- Test lead kit, silicone test leads, three different tips, DL243C
- Optional RS-232 cable and software, 38-SW • Real-time data acquisition • Expon
  - software logs and displays data from all 38XR measurement functions
- Stores data for retrieval or for further analysis
- Exports data for use in Excel® or other programs
- Supports Windows® 98, NT, XP and their variants



XR Series



### ELS2 AC Line Splitter.

- Measures load current without splitting line cord
- Two measurement points, X1 and X10 for increased sensitivity
- Built-in voltage measurement jacks
- One-year warranty

(not available in all countries)



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## Accessories and fuses

## Accessories cross-reference guide

Model	Description	XR Series	HD Series	XP Series	PM Series	DM73B	LCR55/ CR50	DM7/ DM9	AM8B/ DM2
Carrying	Cases								
VC3	Zippered denier				•				
VC11	Vinyl				1	•			
VC20	Padded vinyl, zipper								•
VC30	Padded vinyl, zipper, belt loop			•			CR50	•	
VC221A	Padded vinyl, zipper, belt loop	•	•				LCR55		
DC205B	Deluxe case, shoulder strap	•	•						
DC207B	Deluxe case with clamp pocket	•	•						
Test Lead	s and Probe Tips		,	,					,
TL35A	Standard leads with alligator clips, .15 cm (0.6 in) jaw	•	•	•			•		
TL36	Standard leads with alligator clips, .1 cm (0.4 in) jaw	А	•	•			A		
TL244A	Heavy duty leads, silicone, 121.9 cm (48 in) long, Ever Sharp™ tips, alligator clips	•	•	•			•		
TL245	Standard leads, shrouded 90° banana plugs	•	A	A			•		
TL246B	Silicone leads with large alligator clips	•	•	•			•		
TL73B	Replaceable ground test lead with alligator clip					•			
TP73B	Replacement probe tips					•			
DL243C	Basic test lead kit, silicone	•	•	•			•		
DL248C	Deluxe test lead kit, silicone	•	•	•			•		
Other Ac	cessories								
H-PM	Silicone holster				•				
TC253A	Temperature converter	В	В	В					
XR-TA	Temperature adapter	С							
38-SW	RS-232 cable and software, DMM	D							
TM-SW	RS-232 cable and software, HVAC	E							

### Notes

A: Originally supplied with instrument B: TC253A not required for 35XP, 33XR, 34XR and 38XR

c: Models 35XP, 33XR, 34XR, 38XR and AC75 D: Model 38XR Only

E: Models TMA10 and TMD90 only

### **Current transformers**

#### CT231A

• AC current clamp, 200 A (50/60 Hz)

### Wide ac bandwidths CT235

• AC/DC current clamp, 1000 A (50/10 kHz)

#### CT237

- AC/DC current clamp, 200 A (50/10 kHz)
- **CT238**
- AC/DC current clamp, 20 A (50/20 kHz)
- Low current version



	CT231A	CT235	CT237	CT238
Current range	200 A ac	1000 A ac/dc	200 A ac/dc	20 A ac/dc
Output	mA	mV	mV	mV
Conductor max	1.98 cm (0.78 in)	3.05 cm (1.2 in)	1.91 cm (0.75 in)	1.91 cm (0.75 in)
Warranty	One-year	One-year	One-year	One-year

Accessories and fuses





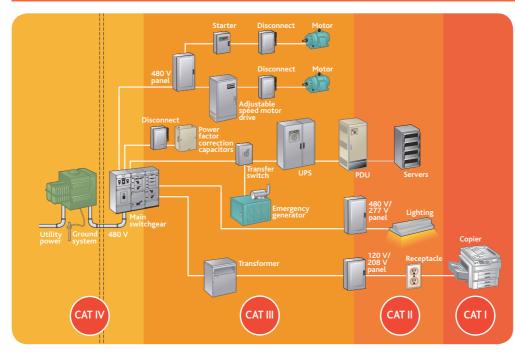
## Fuse replacement chart

Model Noun	FP100	FP125	FP150	FP160	FP200	FP225	FP260	FP300	FP375	FP425	FP500	FP600	FP900
Current/Volt	10 A	0.1 A	0.20 A	10 A	2 A	0.5 A	2 A	0.315 A	0.25 A	20 A	0.5 A	15 A	0.2 A
Rating	1000 V	250 V	250 V	600 V	1000 V	250 V	600 V	1000 V	700 V	600 V	1000 V	600 V	700 V
30XR				•					•				
33XR/34XR	•							•					
37XR/38XR	•										•		
HD110B/HD115B		•(Cap) (HD115)					•					•	
HD160B									•	•			
5XP								•					
15XP/35XP					•								
CR50/LCR55		•(Cap)											
AM8/AM8B			٠										
DM7			٠										
DM9						•							
EPM3		1		İ	İ	İ	İ			ĺ		1	•

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## Safety



# International safety standards

Test equipment must be designed to protect people who work in the high-voltage, high-current environment. In order to prevent injury the International Electrotechnical Commission (IEC) develops international general standards for safety of electrical equipment for measurement, control and laboratory use. The most current standard 61010 specifies overvoltage categories for electrical distribution systems. The category rating increases based on the closeness to the power source and a higher level of user protection is required from test equipment.

#### Proposed energy regions\*

CAT I Electronics, signal level single-phase receptacle loads	<b>CAT II</b> Appliances, portable tools,
CAT III	CAT IV
Three-phase	Three-phase at
distribution,	utility
large building	connection,
lighting	electricity
systems,	meters, outside
distribution	and service
panel devices	entrance

Meterman<sup>®</sup> Test Tools recommends only using test equipment in environments below or up to its Category rating, never in a Category above the instrument's rating.

\*Category Ratings per IEC1010-1. Category boundaries may not be exact.

	UL	cCSAus	CATI	CAT II	CAT III	<b>CAT IV</b>						
Multime	Multimeters											
30XR	Yes	cULus		600 V	300 V							
33XR	Yes	cULus		1000 V	600 V							
34XR	Yes	cULus		1000 V	600 V							
37XR	Yes	Yes		1000 V	600 V							
38XR	Yes	Yes			1000 V	600 V						
5XP		Yes	1000 V	600 V	300 V							
15XP		Yes	1000 V	600 V	300 V							
35XP		Yes	1000 V	600 V	300 V							
AM8B	Yes	cULus		300 V								
DM7				600 V								
DM73B	Yes			600 V	300 V							
DM78A	Yes		600 V	300 V								
DM9				600 V								
HD110B					1000 V							
HD115B					1000 V							
HD160B					1000 V							
PM51	Yes	cULus		600 V	300 V							
PM53	Yes	cULus		450 V	300 V							
PM55	Yes	cULus		600 V	300 V							
Electrica	al											
ECB50	Yes				150 V*							
EPM3		Yes			600 V							
VT500	Yes	cULus			300 V							
Clamp N	1eters											
AC40A		Yes			600 V							
AC50	Yes	cULus		600 V								
AC65				600 V	300 V							
AC68	Yes	Yes			600 V							
AC71		Yes		1000 V	600 V							
AC75		Yes		1000 V	600 V							
AD105					1000 V							
AD40A		Yes			600 V							
Bench Te	op Mete	er										
BDM40			1000 V									

\* US version. Products sold in other countries may vary. All of the products shown in this catalog are CE marked and for sale in the EC except: TP probes and TL246B.

## UL and CE EN61010-1 voltage ratings

EN61010-1 category and voltage ratings on multimeter products.

## Quality and service beyond compare

## **Our products**

The products shown in this catalog include an extensive selection of portable multimeters, clamp meters, component checkers, bench meters, HVAC testers and specialty tools such as logic probes to meet any testing application. Also shown is a complete selection of accessories including protective cases, test leads and adapters.

## **Our distributors**

The products shown in this catalog are sold and supported by a worldwide network of Meterman distributors and dealers. Should you require any assistance or have questions about our products or their applications, these local dealers stand ready to serve you.

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