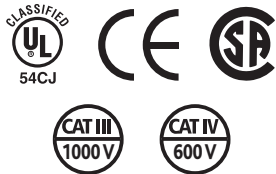


Data Sheet

# 38XR

## Digital Multimeter



True RMS digital multimeter with optical PC interface designed for field troubleshooting in industrial, automation, process and plant environments

- 10,000-count with high 0.25 % accuracy
- True rms AC + DC coupled for accurate measurements
- Frequency to 10 MHz, capacitance to 400 uF, temperature to 2372 °F, type K probe included
- 4-20 mA loop current with % readout
- Min/Max, Average, Relative, Peak, and Data Hold
- Bright blue backlight for dim environments
- Auto power off to save battery life
- Magne-Grip™ holster with magnetic hanging strap
- Three-year warranty

Specifications (at 23 °C ± 5 °C, <75 % R.H. non-condensing)

Function	Range	Accuracy
<b>Voltage</b>		
DC Voltage	1000 mV, 10 V, 100 V, 1000 V	± (0.25 % rdg + 5 dgt)
AC Voltage True RMS (45 Hz to 2 kHz)	1000 mV, 10 V, 100 V (45 Hz to 500 Hz) 1000 mV, 10 V, 100 V (500 Hz to 2 kHz) 750 V (45 Hz to 1 kHz)	± (1.2 % rdg + 10 dgts) ± (2.0 % rdg + 10 dgts) ± (2.0 % rdg + 10 dgts)
AC coupled True RMS specified from 5% to 100 % of range		
AC + DC Voltage (45 Hz to 2 kHz)	1000 mV, 10 V, 100 V (45 Hz to 500 Hz) 1000 mV, 10 V, 100 V (500 Hz to 2 kHz) 750 V (45 Hz to 1 kHz)	± (1.5 % rdg + 10 dgts) ± (2.5 % rdg + 10 dgts) ± (2.5 % rdg + 10 dgts)
DC coupled True RMS specified from 5 % to 100 % of range		
Resolution	100 μV	
Input Impedance	10 MΩ	
<b>Current</b>		
<b>DC Current</b>		
Ranges	100 μA 1000 μA, 10 mA, 100 mA, 400 mA 10 A	± (0.5 % rdg + 10 dgt) ± (0.5 % rdg + 5 dgts) ± (1.5 % rdg + 10 dgt)
AC Current True RMS, AC + DC Current (45 Hz to 1 kHz)	100 μA, 1000 μA, 10 mA, 100 mA 400 mA 10 A	± (1.5 % rdg + 20 dgts) ± (2.0 % rdg + 10 dgts) ± (2.5 % rdg + 20 dgts)
AC coupled True RMS specified from 5 % to 100 % of range		
AC + DC Accuracy	100 μA, 1000 μA, 10 mA, 100 mA, 400 mA 10 A	± (2.0 % rdg + 20 dgts) ± (3.0 % rdg + 20 dgts)
AC + DC: AC coupled True RMS specified from 10 % to 100 % of range		
Resolution	0.01 μA	
<b>Resistance</b>		
	1000 Ω, 10 kΩ, 100 kΩ, 1000 kΩ 10 MΩ 40 MΩ	± (0.5 % rdg + 8 dgts) ± (1.0 % rdg + 10 dgts) ± (2.0 % rdg + 10 dgts)
Resolution	100 mΩ	
<b>Capacitance</b>		
	40 nF, 400 μF 400 nF, 4 μF, 40 μF	± (3.0 % rdg + 10 dgts) ± (3.0 % rdg + 5 dgts)
Resolution	0.01 nF	
<b>Temperature</b>		
	-20 °C to 10 °C 10 °C to 200 °C 200 °C to 1300 °C -4 °F to 50 °F 50 °F to 400 °F 400 °F to 2372 °F	± (2.0 % rdg + 4 °C ) ± (1.0 % rdg + 3 °C ) ± (2.0 % rdg + 2 °C ) ± (2.0 % rdg + 8 °F) ± (1.0 % rdg + 6 °F) ± (2.0 % rdg + 4 °F)
Resolution	1 °C, 1 °F	



## Specifications *cont.*

Function	Range	Accuracy
<b>Frequency</b>	100 Hz, 1000 Hz, 10 kHz, 100 kHz, 1000 kHz, 10 MHz	± (0.1% rdg + 5 dgts)
<b>Resolution</b>	0.01 Hz	
<b>Duty Cycle</b>	0 to 90 %	5 V logic: ± (2.0% rdg + 10 dgts)
<b>Resolution</b>	0.01 %	
<b>Frequency Range</b>	0 % to 10 %: 40 Hz to 990 Hz 10 % to 90 %: 40 Hz to 20 kHz	
<b>4 mA to 20 mA DC Current Test</b>	0 to 100 %	± (0.5 % + 5 dgts)
<b>Resolution</b>	0.01 %	
<b>dBm</b>		
	-13 dBm to +50 dBm (45 Hz to 5 kHz) ± (0.7 dB + 8 dgts)	
	-13 dBm to +50 dBm (5 kHz to 10 kHz) ± (2.5 dB + 8 dgts)	
<b>Resolution</b>	0.01 dBm	
<b>Continuity</b>		
<b>Audible Indication</b>	< 40 Ω	
<b>Response Time</b>	100 ms	
<b>Diode Test</b>		
<b>Test Current</b>	0.5 mA (approximate)	
<b>Open Circuit Voltage</b>	3.0 V dc typical	
<b>Peak</b>		
<b>AC Volts Accuracy</b>	100 V, 750 V 1000 mV, 10 V	± (3.0 + 200 dgts) unspecified
<b>AC Current</b>	all ranges	± (3.0 + 200 dgts)
<b>Overload Protection</b>		
<b>AC/DC Voltage</b>	1000 V dc or 750 V ac rms	all ranges
<b>AC/DC Current</b>	μA/mA input: F0.5 A /1000 V fast-blow ceramic 6.3 mm x 32 mm 10 A input: F10 A /1000 V fast-blow ceramic 10 x 38 mm	
<b>Resistance, Continuity, Diode Test, Temperature, Capacitance, Frequency</b>	All ranges: 1000 V dc or 750 V rms	

No waiting.

No shipping  
charges.



## No hassle warranty

Our commitment to high-quality products and customer service is demonstrated by our industry exclusive

"No Hassle" warranty.

In the unlikely event that a Meterman test tool requires warranty service, any of our local dealers are authorized to replace it, on the spot.

## General Specifications

<b>Display (Autoranging)</b>	4-3/4 digit LCD, 10,000 counts with 41-segment analog bar graph
<b>Display Update Rate</b>	2/sec, nominal
<b>Power Battery</b>	9 V NEDA 1604, JIS 006P, IEC 6F22
<b>Battery Life</b>	150 hrs typical (alkaline) frequent use of backlight will decrease battery life
<b>Operating Temperature</b>	0 °C to 45 °C at < 70% R.H.
<b>Storage Temperature</b>	-20 °C to 60 °C, 0 to 80 % R.H. with battery removed from meter
<b>Temperature Coefficient</b>	0.1 x (specified accuracy) per °C (0 °C to 18 °C, 28 °C to 45 °C)
<b>Altitude</b>	2000 m (6562 ft)
<b>Dimensions</b>	196 mm x 96 mm x 60 mm (7.8 in x 3.55 in x 2.4 in)
<b>Weight (without holster, including battery)</b>	450 g (1 lb)
<b>Warranty</b>	Three-year

## Included Accessories

Test leads with threaded alligator clips (TL36), temperature adapter (XR-TA), Type K thermocouple probe (TP255), 9 V battery (installed), Magne-Grip™ Holster with magnetic hanging strap, spare fuse and users manual.

## Optional Accessories

<b>VC221A</b>	Padded Vinyl Carrying Case
<b>DL248C</b>	Deluxe Test Lead Kit
<b>DC207B</b>	Heavy Duty Carrying Case
<b>HV231-10</b>	High Voltage Probe
<b>TP254</b>	High Temperature Probe
<b>38-SW</b>	RS232 Cable and Software

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