

MX 57Ex50,000-count TRMS Digital Multimeter

FEATURES:

- II 2 G/D EEx ib IICT6 or I M2 EEx ib I assigned specifications
- 50,000-count display resolution
- Rugged casing and IP 67 sealed
- Measures AC current in TRMS values (AC or AC+DC coupling)
- Surveillance function for MIN, MAX and AVG values
- Measures rapid peaks 1 ms (Peak+ and Peak-)
- Rapid bargraph with zoom (x5) or center zero possible
- Patented SECURIX system prevents the leads from being accidentally pulled out
- RS232 optical link for transferring measurements to a PC or printer (optional)



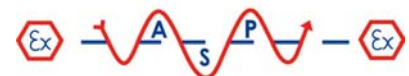
MX57Ex:

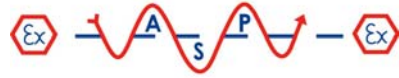
50,000-count Digital Multimeter for use in hazardous and explosive atmospheres

Meets the EN 50014 and EN 50020 standards, II 2 G/D EEx ib IICT6 or I M2 EEx ib I assigned specifications, IP 67 85°C (electrical equipment for use in explosive atmospheres). CE certificate: LCIE 02 ATEX 6005X. Quality certificate: LCIE 02 ATEX Q8021.

Characteristics subject to modifications according to technological developments.

- Display 50,000 counts - 2 measurements per second - Height of numbers: 14 mm
- Bargraph 34 segments - 20 measurements per second
- Safety & Approval EN 50014 - EN 50020 - II 2 G/D EEx ib IICT6 or I M2 EEx ib I
- EMC Emission and immunity as per NF EN 61326-1, 1998
- Temperature Operating: -10 to +40°C - Storage: -40 to +70°C
- Power supply 9 V alkaline battery (6LF22 or 6LR61) intrinsic safety approved - Low battery indicator
- Life 300 hour life DC mode - Automatic shut-off
- Mechanical characteristics Dimensions: 189 x 82 x 40 mm - Weight: 400 g - T85°C





Technical Specifications

DC voltages

Range	500 mV	5 V	50 V	500 V*	1000 V*
Resolution	10 μ V	100 μ V	1 mV	10 mV	100 mV
Accuracy	0.025%R + 2d	0.025%R + 2d	0.025%R + 2d	0.025%R + 2d	0.2%R + 2d
Input impedance	11 M. / 1 G.	11 M.	10 M.	10 M.	10 M.
Protection	\pm 1100 Vpk (1min max. on the 500mV range)				

Range	500 mV	5 V	50 V	500 V*	750 V*
Resolution	10 μ V	100 μ V	1 mV	10 mV	100 mV
Bandwidth	DC to 50 kHz				
Basic accuracy	0.3%R + 30d (1%R + 30d / 500V & 750 V) for DC at 1 kHz				
Input impedance	11 M. / 1 G.	11 M.	10 M.	10 M.	10 M.
Protection	\pm 1100 Vpk (1 min max. on the 500 mV range)				

DC currents

Range	500 μ A	5 mA	50 mA	500 mA
Resolution	10 nA	100 nA	1 μ A	10 μ A
Basic accuracy	0.2%R + 5d	0.2%R + 2d	0.05%R + 2d	0.2%R + 2d
Protection	600 VRMS / 500 mA fuse intrinsic safety approved			

AC and AC+DC currents

Range	500 μ A	5 mA	50 mA	500 mA
Resolution	10 nA	100 nA	1 μ A	10 μ A
Bandwidth	DC to 5 kHz			
Basic accuracy	0.75%R + 30d, .6%R + 30d, 0.6%R + 30d, 0.7%R + 30d, 40Hz to 5 kHz)			
Protection	600 VRMS / 500 mA fuse intrinsic safety approved			

Resistance & Continuity

Range	500 . - 5 k.- 50 k.- 500 k.- 5 M.- 50 M.
Resolution	10 m. - 100 m. - 1 . - 10 . - 100 . - 1 k.
Basic accuracy	0.07%R + 5d / 500 . - 0.07%R + 2d / 5 k. to 500 k. - 0.3%R + 2d / 5 M. - 1%R + 2d / 50 M.
Protection	600 VRMS (automatic reset electronic mechanism)*
Continuity detection	Threshold: 10 . to 20 . - Response time: 1 ms

Diode Test

Diode voltage measurement 0 to 1.999 V - Current measurement: 1 mA \pm 20% - resettable 600 VRMS protection *

Frequency measurements

Frequency (voltage or current)

Measurement range: 0.62 Hz to 500 kHz - 50,000-count resolution - Accuracy: 0.03 %R + 2d

Other Measurements:

Duty cycle - Pulse width / Chronometer - Event metering

Other functions

Capacitance measurement Range: 50 nF to 50 mF - Accuracy: 1%R + 2d (Not to be used in hazardous areas)

Temperature measurement Range: -200 $^{\circ}$ C to +800 $^{\circ}$ C - Resolution: 0.1 $^{\circ}$ C - Pt100 and Pt1000 probes

Other measurements dB Function and Resistive Power U₂/P (ρεφερενχε αδφυσταβλε φρομ 1 . to 9999 .)

* As an "intrinsically safe" instrument, operating voltages are limited to 60 V peak value or currents to 500 mA.

For the 500 Vdc, 1000 Vdc, 500 VAc and 750 VAc ranges, the accuracy given is without guarantee.

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