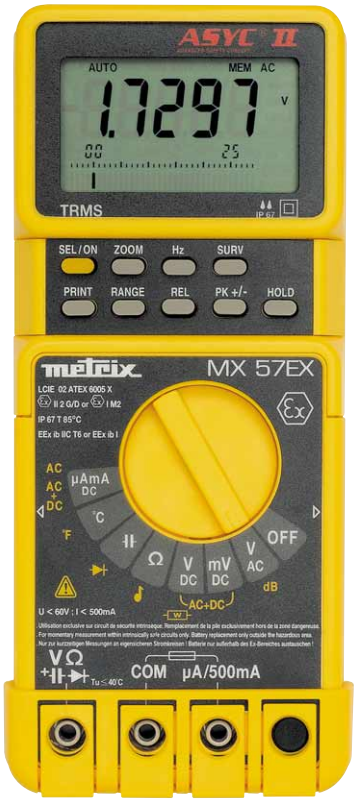
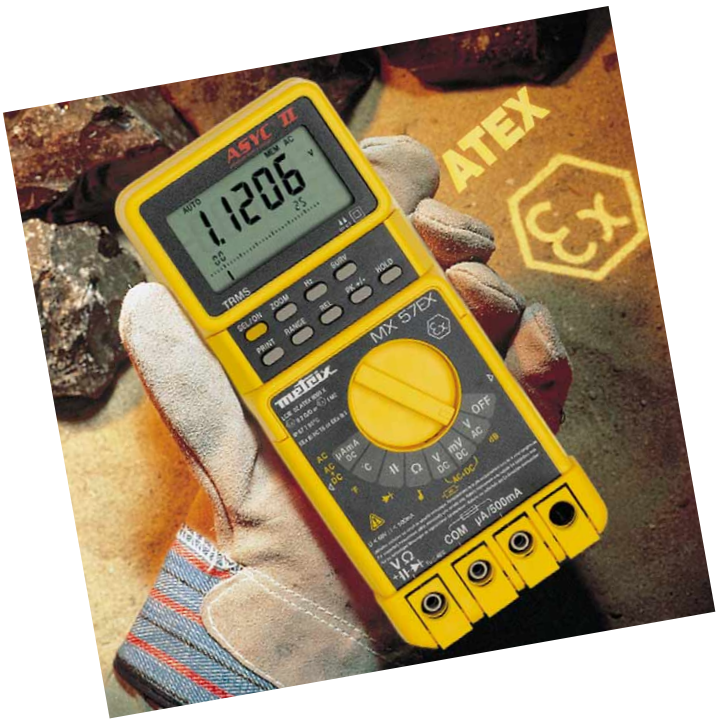
50,000-count TRMS Digital Multimeter

for use in hazardous and explosive atmospheres





A high-performance multimeter that is more than intrinsically safe

- ⟨Ex⟩ II 2 G/D EEx ib IICT6 or ⟨Ex⟩ 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)

The choice of professionals

MX 57Ex:

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

Meets the EN 50014 and EN 50020 standards, Ex II 2 G/D EEx ib IICT6 or Ex 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.

Technical specifications	MX 57Ex				
DC voltages					
Range	500 mV	5 V	50 V	500 V*	1000 V*
Resolution	10 µV	100 µV	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 MΩ / 1 GΩ	11 MΩ	10 MΩ	10 MΩ	10 MΩ
Protection	±1100 Vpk (1min max. on the 500mV range)				
AC and AC+DC voltages					
Range	500 mV	5 V	50 V	500 V*	750 V*
Resolution	10 µV	100 µV	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 MΩ / 1 GΩ	11 MΩ	10 MΩ	10 MΩ	10 MΩ
Protection	±1100 Vpk (1 min max. on the 500 mV range)				
DC currents					
Range	500 µA	5 mA	50 mA	500 mA	
Resolution	10 nA	100 nA	1 µA	10 µA	
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 µA	5 mA	50 mA	500 mA	
Resolution	10 nA	100 nA	1 µA	10 µA	
Bandwidth	DC to 5 kHz				
Basic accuracy	0.75%R + 30d	0.6%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 Ω - 5 kΩ- 50 kΩ- 500 kΩ - 5 MΩ- 50 MΩ				
Resolution	10 mΩ - 100 mΩ - 1 Ω - 10 Ω - 100 Ω - 1 kΩ				
Basic accuracy	0.07%R + 5d / 500 Ω - 0.07%R + 2d / 5 kΩ to 500 kΩ - 0.3%R + 2d / 5 MΩ - 1%R + 2d / 50 MΩ				
Protection	600 VRMS (automatic reset electronic mechanism)*				
Continuity detection	Threshold: 10 Ω to 20 Ω - Response time: 1 ms				
Diode test					
Diode voltage measurement	0 to 1.999 V - Current measurement: 1 mA ±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 °C to +800 °C - Resolution: 0.1 °C - Pt100 and Pt1000 probes				
Other measurements	dB Function and Resistive Power U^2/R (reference adjustable from 1 Ω to 9999 Ω)				

* 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.

General specifications	MX 57Ex
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 - Ex II 2 G/D EEx ib IICT6 or Ex 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

Characteristics subject to modifications according to technological developments.

metrix
Instruments by Chauvin Arnoux

906 211 040 - Ed02 - 02/03 VS