2,000 to 5,000-count digital multimeters

From the learning stage to professional life, tools for all generations

Depending on the model:

- TRMS (AC+DC) measurements for precise and accurate results
- A bandwidth up to 100 kHz
- An innovative design with a compact and sturdy casing
- An excellent degree of readability for the results: a wide screen, a tendency display (bar graph), backlighting, etc.
- Numerous functions: MIN./MAX., AVG., MEM. and/or AUTO. MEM., etc.
- A unique way of accessing the batteries and fuses with improved safety mechanisms
- A optical serial link for reading and processing data on the computer with a user-friendly and high-performance software package
- An elastomer protective sheath along with numerous other accessories

metrix

The choice of professionals

MX 26 – MX 24 – MX 23 – MX 22 – MX 21: 2,000 to 5,000-count digital multimeters

Design and sturdiness

In addition to their harmonious lines, MX Concept multimeters are particularly well balanced and fit naturally into one's hand.
Moreover, protected in their elastomer sheath, they are able to withstand even the most severe conditions of usage. Besides, the primary method for putting the instrument away consists in inserting it back into its sheath, thereby perfectly protecting the screen and keys.

Simplicity at all levels

A rotary switch and real keys suffice to offer you all the necessary functions (MIN., MAX., AVG., measurement storage, etc.).
The indications marked on the keys are specially explicit so that the user might intuitively master the instrument's functionalities.

The result in the twinkling of an eye

All MX Concept multimeters have a large display; in this way, the unit and the conditions of measurement (batteries too low, AC or AC+DC measurement, change of automatic range, etc.) can be specified.
On the MX 26, 24 and 23, a bar graph of 34 segments instantaneously indicates the tendency of the measurement, and backlighting makes reading the result easier when the instrument is used in a poorly lit environment.

Measurement storage

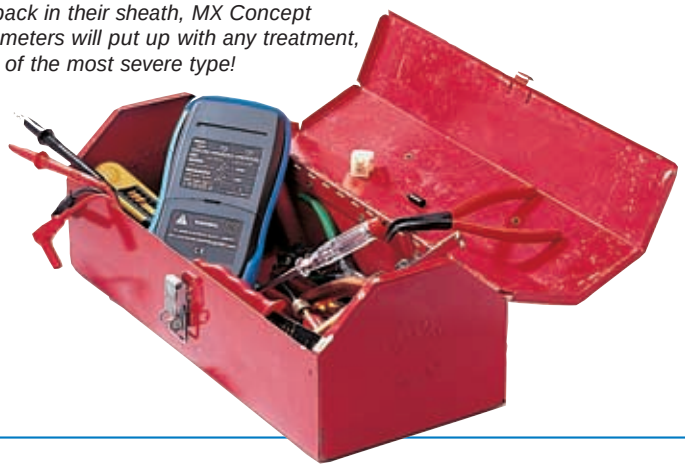
All the instruments in the MX Concept range have the MEM function. A short press on this key blocks the display, and a second short press brings the user back to the normal display.
The MX 26, 24 and 23 are, moreover, equipped with an AUTO MEM function, enabling the last value measured other than zero and stable to be automatically maintained for at least 1 s. after the measuring circuit has been opened. This is particularly advantageous when the measurement points are difficult to access, forcing the user to fix his attention on the test probes.

Changing the battery and fuses, no longer any need to rack your brains!

What can be more tedious than looking for a screwdriver to change the batteries or fuses? The MX Concept casing enables you to perform this operation quickly and easily using any utensil: coin, pen, etc.

Particularly easy to access, the batteries and fuses can be changed without any risk, since it is impossible to open a MX casing without having disconnected the leads beforehand.

Put back in their sheath, MX Concept multimeters will put up with any treatment, even of the most severe type!



Increased safety

Everything is safe! To begin with, the instrument automatically switches itself off after 30 minutes of it not being used (disengageable in the case of the MX 26 and 24), which guarantees a longer life for your batteries. Then, an automatic detection mechanism indicates the presence of a voltage greater than 24 V or a current greater than 10 A (MX 26, 24 and 23).
Lastly, the batteries and fuses can only be accessed if the measuring leads are disconnected.

Direct display of currents

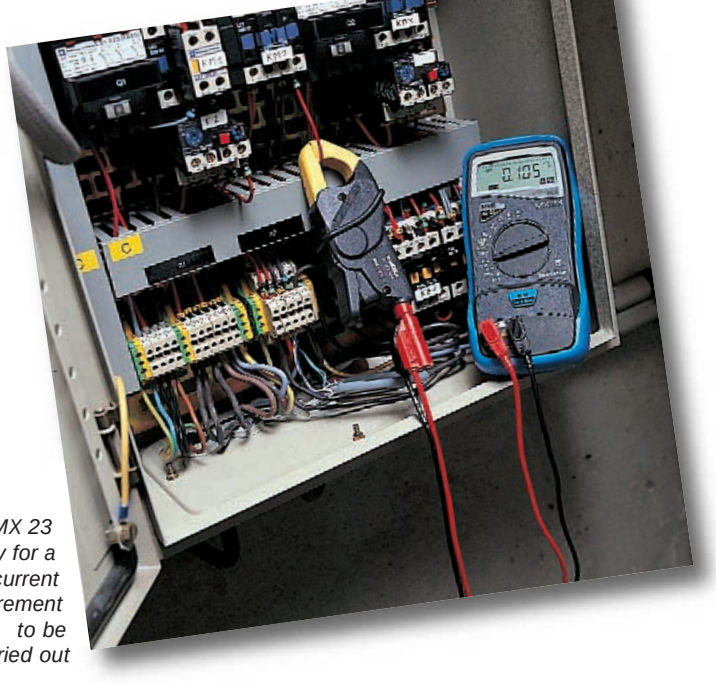
Although it has no current input, the MX 21 offers an original function which allows the measurements to be read in amps. To do this, simply use the AM 89N ammeter clamp and put the rotary switch into the clamp position. The instrument then automatically manages the transformation coefficient and directly displays the value of the AC currents.

Current clamps	
AM0001AM	0.1
AM0019N	10
AM0089N	0
AM0069N	1 r
AM0600N	0 0
AM1000N	0 0

* L = lead

µA measurements

With a resolution of up to 0.1 µA, the MX 22 enables very weak currents to be measured, whether they be alternative or direct. This point is highly advantageous when it comes to electronics applications.



The MX 23 ready for a current measurement to be carried out

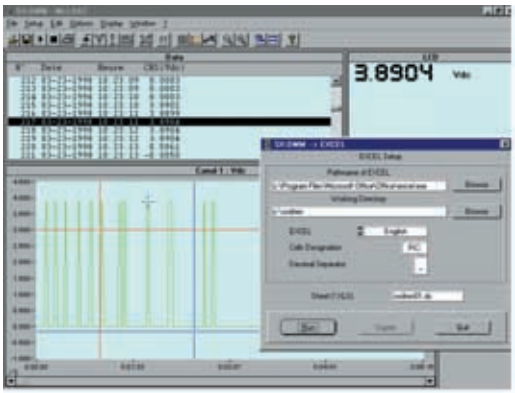
Dedicated functions

In order to simplify their use, some models (MX 26, MX 24 and MX 23) have dedicated functions.
Thus, when the rotary switch is positioned on ADP, these multimeters offer a 500 mVDC or AC+DC range intended for use with additional accessories: temperature probe, tachometric probe, etc.
Moreover, their V low Z (low impedance) function avoids the phantom voltages we sometimes come across in electricity having to be measured.

With the AE0190 case, you have a real bag in which you will be able to put away all the tools you use on a daily basis.

Communication and software

Thanks to its infrared digital output, the MX 26 can be connected directly to a computer without any risk. Data acquisition is continuous The user can record the data, represent it in the form of a graph and export it, at leisure, to an Excel® type spreadsheet (SX-DMMC software).
He can also calibrate the instrument without opening it and edit a list mentioning all the corrections which have been made to the instrument.



The SX-DMMC multilingual software package can easily be used with the MX 26 for data acquisition.

Current	Output (V or A)	O/I ratio	Connection*	Band width	Clamp Ø (mm)
mA to 4.5 AAC/DC	VAC	1 mV/mA	C	500 Hz	3.9
mA to 240 AAC	VAC	1 mV/mA	C	10 kHz	20
.5 to 240 AAC	VDC	10 mV/A	C	10 kHz	20
mA to 1200 AAC	VAC	1 mV/mA, 1 mV/A, 10 mV/A, 100 mV/A	C	3 kHz	52
.2 to 400 AAC .4 to 600 ADC	VAC	10 mV/A 1 mV/A	C	10 kHz	30
.5 to 1000 AAC .5 to 1400 ADC	VAC	1 mV/A	C	5 kHz	43

The connector for the MX 26's optical digital interface plugs directly into the instrument without any other manipulation.

TECHNICAL CHARACTERISTICS	MX 26	MX 24	MX 23	MX 22	MX 21
• DC voltages					
Ranges	0.5 - 5 - 50 - 500 1,000 V	0.5 - 5 - 50 - 500 1,000 V	0.5 - 5 - 50 - 500 1000 V	40 - 400 mV 4 - 40 - 400 - 600 V	20 - 200 mV 2 - 20 - 200 - 600 V
Resolution	0.1 mV to 1 V	0.1 mV to 1 V	0.1 mV to 1 V	0.01 mV to 1 V	0.01 mV to 1 V
Basic accuracy*	0.3% rdg + 2 digits	0.3% rdg + 2 digits	0.3% rdg + 2 digits	0.3% rdg + 2 digits	1% rdg + 4 digits
Input impedance	10 MΩ (11 MΩ/ 5V)	10 MΩ (11 MΩ/ 5V)	10 MΩ (11 MΩ/ 5V)	1.5 MΩ (40 mV) 40 MΩ (400 mV) 8 MΩ	5 MΩ
Protection	±1,100 VPEAK 775 VRMS	±1,100 VPEAK (600 VRMS/0.5 V)	±1,100 VPEAK (600 VRMS/0.5 V)	600 VRMS	600 VRMS
• AC voltages					
Peak factor	6	3	3	-	-
Ranges	0.5 - 5 - 50 500 - 750 V	0.5 - 5 - 50 500 - 750 V	0.5 - 5 - 50 500 - 750 V	40 - 400 mV 4 - 400 - 600 V	200 mV 2 - 20 - 200 - 600 V
Resolution	0.1 mV to 1 V	0.1 mV to 1 V	0.1 mV to 1 V	0.1 mV to 1 V	0.1 mV to 1 V
Bandwidth	40 Hz to 100 kHz	40 Hz to 1 kHz	40 Hz to 1 kHz	40 Hz to 500 Hz (100 Hz for 40 mV)	40 Hz to 500 Hz (100 Hz for 200 mV)
Basic accuracy*	1% rdg + 3 digits	1.5% rdg + 2 digits	1.5% rdg + 2 digits	1% rdg + 4 digits	1.5% rdg + 8 digits
Input impedance	10 MΩ (11 MΩ/ 5V)	10 MΩ (11 MΩ/ 5V)	10 MΩ (11 MΩ/ 5V)	1.5 MΩ (40 mV) 40 MΩ (400 mV) 8 MΩ	3 MΩ (200 mV) 5 MΩ
Protection	±1,100 VPEAK 775 Vrms	±1,100 VPEAK (600 Vrms/0.5 V)	±1,100 VPEAK (600 Vrms/0.5 V)	600 VRMS	600 VRMS
• AC voltages (low Z)					
Ranges	5 - 50 - 500 - 750 V	5 - 50 - 500 - 600 V	5 - 50 - 500 - 600 V	-	-
Resolution	1 mV to 1 V	1 mV to 1 V	1 mV to 1 V	-	-
Basic accuracy*	1% rdg + 3 digits	1% rdg + 2 digits	1% rdg + 2 digits	-	-
Input impedance	500 kΩ	500 kΩ	500 kΩ	-	-
Protection	±1,100 VPEAK 775 VRMS	600 VRMS	600 VRMS	-	-
• DC currents					
Range	500 mA / 10 A	50 mA / 10 A	-	400 µA, 4 - 40 - 400 mA, 4 - 10 A	-
Resolution	100 µA / 10 mA	10 µA / 10 mA	-	0.1 µA à 10 mA	-
Basic accuracy*	0.3% rdg + 2 digits / 1% rdg + 2 digits	0.3% rdg + 2 digits / 1% rdg + 5 digits	-	1% rdg + 3 digits	-
Protection	600 VRMS – HBP fuse	600 VRMS – HBP fuse	-	600 VRMS – HBP fuse	-
• AC currents					
Peak factor	6	3	-	-	-
Range	500 mA / 10 A (AC+DC)	50 mA / 10 A (AC+DC)	-	400 µA, 4 - 40 - 400 mA, 4 - 10 A	200 A (with AM 89N clamp)
Resolution	100 µA / 10 mA	10 µA / 10 mA	-	0.1 µA to 10 mA	0.1 A
Bandwidth	40 Hz to 30 kHz / 40 Hz to 10 kHz	40 Hz to 1 kHz	-	40 Hz to 500 Hz	40 Hz to 500 Hz
Basic accuracy*	1.5% rdg + 2 digits / 2.5 % rdg + 2 digits	1,5% rdg + 2 digits / 2.5 % rdg + 5 digits	-	1.2% rdg + 5 digits	1% rdg + 4 digits (2% with the AM 89N clamp)
Protection	600 VRMS – HBP fuse	600 VRMS – HBP fuse	-	600 VRMS – HBP fuse	600 VRMS
• Resistances					
Ranges	500 Ω, 5 - 50 - 500 kΩ, 5 - 50 MΩ	500 Ω, 5 - 50 - 500 kΩ, 5 - 50 MΩ	500Ω, 5 - 50 - 500 kΩ, 5 - 50 MΩ	400 Ω, 4 - 40 - 400 kΩ, 4 - 40 MΩ	200 Ω, 2 - 20 - 200 kΩ, 2 - 20 MΩ
Resolution	100 mΩ to 10 kΩ	100 mΩ to 10 kΩ	100 mΩ to 10 kΩ	100 mΩ to 10 kΩ	100 mΩ to 10 kΩ
Basic accuracy*	0.3% rdg + 3 digits	0.3% rdg + 3 digits	0.3% rdg + 3 digits	0.5% rdg + 4 digits	1% rdg + 4 digits
Protection	600 VRMS	600 VRMS	600 VRMS	600 VRMS	600 VRMS
• Continuity					
Detection threshold	10 to 15 Ω	10 to 20 Ω	10 to 20 Ω	< 40 Ω •))	750 Ω •))
• Diode test					
Diode voltage	0 to 1.999 V	0 to 1.999 V	0 to 1.999 V	0 to 4 V	0 to 3 V
• Capacity					
Ranges	50 - 500 nF, 5 - 50 500 µF, 5 - 50 mF	50 - 500 nF, 5 - 50 500 µF, 5 - 50 mF	50 - 500 nF, 5 - 50 500 µF, 5 - 50 mF	-	-
Basic accuracy*	1% rdg + 2 digits	1% rdg + 2 digits	1% rdg + 2 digits	-	-
• Frequency					
Ranges	5 - 50 - 500 Hz, 5 - 50 - 500 kHz**	5 - 50 - 500 Hz, 5 - 50 - 500 kHz**	5 - 50 - 500 Hz, 5 - 50 - 500 kHz**	4 - 40 - 400 Hz, 4 - 40 MHz**	-
Basic accuracy*	0.03% rdg + 1 digits	0.03% rdg + 1 digits	0.03% rdg + 1 digits	0.1% rdg + 3 digits	-

* Accuracy of the best range

** Measurement on 50,000 counts

GENERAL CHARACTERISTICS	MX 26	MX 24	MX 23	MX 22	MX 21
Nature of the measurements	TRMS AC or AC+DC	TRMS AC or AC+DC	TRMS AC or AC+DC	AC	AC
Display	5,000 counts	5,000 counts	5,000 counts	4,000 counts	2,000 counts
MIN.-MAX.	Yes	Yes	-	Yes	-
MEM. or AUTO-MEM.	AUTO-MEM.	AUTO-MEM.	AUTO-MEM.	MEM.	MEM.
Bar graph	Yes	Yes	Yes	-	-
Backlighting	Yes	Yes	-	-	-
Serial link and software	Yes	-	-	-	-
IEC 61010-1 safety	Cat.III, 600 V	Cat.III, 600 V	Cat.III, 600 V	Cat.III, 600 V	Cat.III, 600 V
Operating temperature	-10 to 55°C	-10 to 55°C	-10 to 55°C	0 to 50°C	0 to 50°C
Power supply	9 V battery	9 V battery	9 V battery	9 V battery	9 V battery
Autonomy	500 hrs	500 hrs	500 hrs	200 hrs	300 hrs
Dimensions (height x length x depth)	170 x 80 x 35	170 x 80 x 35	170 x 80 x 35	170 x 80 x 35	170 x 80 x 35
Weight	300 g	300 g	300 g	300 g	300 g
Guarantee	3 years	3 years	3 years	1 year	1 year

Accessories and information for ordering

Accessories included

Each model is delivered with an elastomer sheath, a set of 2 safety leads, one 9 V battery (installed), a verification certificate and an operating manual.

Accessories available as optional extras

SX-DMMK	Communication kit for MX 26*
HT0203	THT 3 kVAC/DC voltage probe
HT0212	THT 30 kVDC voltage probe
HK0210N	-25 to 350°C general usage temperature probe
HA1237	Tachometric probe, 100 r.p.m. to 60,000 r.p.m.
AE0190	Sheathlike case for carrying the instrument from place to place (185 x 270 x 60)
HX0009	Small and flat portable case

*Includes 1 HX2002 serial link lead and 1 SX-DMMC software package

The MX 26, 24 and 23 are delivered with a multifunctional sheath, whereas the MX 22 and 21 are delivered with a "sock-shaped" sheath.

To order:

MX0021-Z	MX 21 2,000-count digital multimeter
MX0021-W	MX 21 2,000-count digital multimeter and AM 89N clamp
MX0022-Z	MX 22 4,000-count digital multimeter
MX0023-G	MX 23 5,000-count digital multimeter
MX0024-G	MX 24 5,000-count digital multimeter
MX0026-G	MX 26 5,000-count digital multimeter with a digital link
MX0021-L	MX 21 in small case
MX0021-T	MX 21 and AM 89N clamp in small case
MX0022-L	MX 22 in small case
MX0023-L	MX 23 in small case
MX0024-L	MX 24 in small case
MX0026-T	MX 26 with communication kit in small case

All MX Concept multimeters can also be purchased in a small and flat portable case.

Characteristics subject to modifications according to technological developments.

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Instruments by Chauvin Arnoux

FRANCE
6, avenue du Pré de Challes - BP 330
74943 ANNECY-LE-VIEUX Cedex
Tel. : 33 4 50 64 22 22 - Fax : 33 4 50 64 22 13

190, rue Championnet
75876 PARIS Cedex 18
Tel. : 33 1 44 85 44 86 - Fax : 33 1 46 27 95 59

UNITED KINGDOM
CA UK Ltd - Metrix
Waldeck House - Waldeck Road
Maidenhead SL6 8BR
Tel. : (01628) 788 888
Fax : (01628) 628 099

For assistance and ordering

Code : 906 211 013 - Ed. 1 - 1/01