ASYC IV

metrix®

The 1st multimeters with graphical color screens

METRIX® revolutionizes multimeters !

- In the lab or in the field, the reference for multimeters
- Graphical display of trends and multiple parameters
- 200 kHz bandwidth
- 0.02 % basic accuracy
- Multiple analytical tools: time/date-stamped MIN/MAX/AVG and PEAK monitoring

... Plus unrivalled simplicity of use, as always!

SAFETY 600V CAT III RATING * SAFETY 300V CAT IV RATING * SAFETY 1000V CAT III RATING SAFETY 600V CAT IV RATING

*Model 3290 only

IP 67 CE

* *Models 3292B & 3293B

WEATHER PROOF

* Models 3292B-BT & 3293B-BT

Measure Up WITH AEMC INSTRUMENTS

ERGONOMICS AND STRENGTHS

Ideal for both portable and benchtop use, the ASYC IV multimeters are simple and intuitive to use. Accessible directly, the different measurements are indicated explicitly by pictograms on the electronic switch. The display can be used to view the measurement results either as numeric values or as graphs showing the trend over time. Recorded measurements can be displayed as a trace, with the possibility of positioning cursors and zooming on part of the recorded curve.

Help in French and English is integrated into the instrument and provides information about the measurements in progress.
USB communication is provided for transferring data to a PC, for recording and for programming with the LV/LW drivers.
The instrument's firmware can be upgraded by connecting to a PC and then accessing the website.

SECURE TERMINAL STRIP

Audible alert when the cables are connected to the wrong inputs and automatic recognition of the function.

DISPLAY WITH LARGE DIGITS

Multiple parameters and 3 levels of backlighting which varies automatically according to the ambient lighting for better visibility and more comfortable reading.

F1 → F4 FUNCTION KEYS

For direct access to the function menus.

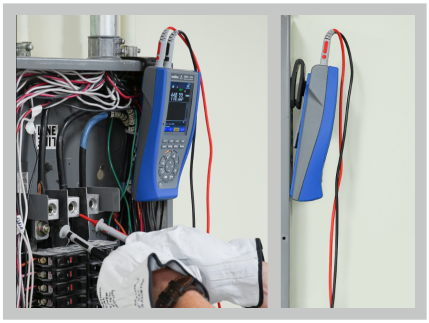
SELECTION OF THE MEASUREMENT FUNCTION

By means of a function key which then lights up to remind you for intuitive configuration.

IP 67 MOULDED CASING

For excellent handling.

- The ASYC IV models can be powered by normal batteries, rechargeable batteries or the mains supply.
- The battery-powered ASYC IV models offer a battery life of up to 400 hrs for easier use in the field.
- To optimize the ASYC IV's consumption, the standby mode can be activated and the internal accelerometer allows you to wake up the instrument simply by touching its keyboard.



A magnetic suspension system is available as an option for simple installation and viewing while freeing your hands for other tasks.

Magnetized soft case suitable for the Multifix system.

APPLICATIONS

The ASYC IV multimeters are ideal for many applications in industry, telecommunications and defense. Their multiple functions make them easy to use for electrical and electronics maintenance, as well as machine maintenance. In electronics, the ASYC IV models can be used both for wiring tests on computer or medical equipment and for component testing.

In industry, they can be used for the applications encountered in departments dealing with automatic control systems and processes in a wide variety of sectors: food, plastics, concrete, metal, paper, wood, oil, nuclear, etc.
The ASYC IV models are also useful for the maintenance of many industrial machines: numerical control, motors, generators, etc.
Their versatility makes them ideal for the needs of expert electrical installers and professionals in the transport and energy sectors.

The high-performance, accessible and ergonomic ASYC IV multimeters also have a key role to play in education and research.

For metrology...

... or After-Sales Service

Measurements on electrical cabinets

MEASUREMENTS

MEASUREMENTS

The TRMS measurements of AC voltages and currents are also accurate on non-linear signals.

AC, DC OR AC+DC VOLTAGE

Voltage measurement can be performed in total safety up to 1000 V.

CURRENT

AC, DC and AC+DC current measurement with direct readings up to 10 A.

FREQUENCY

The ASYC IV models measure the frequency up to 600 kHz (MTX 3290 and MTX 3291) and up to 5 MHz with the 2 top-of-the-range models, the MTX 3292B and MTX 3293B.

TEMPERATURE

Depending on the models, J/K thermocouples or Pt100 / Pt1000 sensors can be used to measure temperature.

Continuity with audible beep

RESISTANCE

Resistance can be measured up to 100 MΩ. A reminder of the connections is constantly displayed at the top of the display.

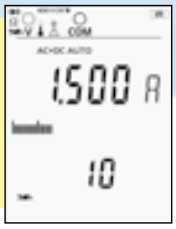
CAPACITANCE

A broad measurement range is provided for capacitance measurements: from 1 nF to 60 mF depending on the model.

The mV/A or A/A ratio can be set on the MTX 3292B/3293B. Fixed mV/A ratio on the MTX 3290/3291

VOLTAGE

The ASYC IV multimeters offer direct readings of current measurements with a clamp, which also extends the measurement range up to 100 A.



SETUP

General configuration and customization of the measurement functions.

Recording

Depending on the model, ASYC IV multimeters can record up to 30,000 values. The simplified parameter settings concern the number of measurements, the recording interval (1 s to 24 h), the duration and the storage capacity.

FUNCTIONS

CONTROL OF MEASUREMENT WITH THE SURV AND PEAK FUNCTIONS

The capture of time/date-stamped minimum / maximum / average and PEAK values makes it possible to record the transient values and variations automatically. This function enables effective detection of a signal's variations or anomalies.

RECORDING OF 30,000* MEASUREMENTS IN THE MULTIMETER'S MEMORY

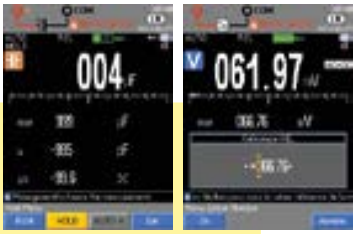
Main value + secondary values with graphical trace.

*Model 3293B

MEASUREMENT WITH CURRENT CLAMP

Depending on the model, users can integrate the transformation ratio for direct readings of the current value, whether the clamp is equipped with a V or A output.

RELATIVE VALUES FOR GREATER PRECISION



The REL relative mode can be used to express measurements as absolute and relative differences with regard to the reference measured.

ACCURATE MEASUREMENTS, INCLUDING ON VARIABLE SPEED DRIVES

A 300 Hz low-pass filter ensures accurate voltage and frequency measurements on the drive units of PWM variable-speed motors.

MATH FUNCTION

This function is adapted for the measurement of any physical quantity by appropriate unit conversion and offers direct readings (Ax+B).

FLEXIBILITY

The RANGE function allows you to select the most suitable measurement range for the measurements in progress, either automatically or manually.

Hz FUNCTIONS

Frequency can be measured up to 5 MHz. This function can be used in addition to +/- duty cycle measurement to analyse the active or inactive intervals of switching signals or logic signals. PW+/- pulse width measurement allows you to check electronic fuel injection systems and switching power supplies.

USER-FRIENDLY AND TIME-SAVING

The "user/basic" function saves the preferred settings when the instrument is powered down, on the basis of the user's preferences, so it is no longer necessary to repeat the settings!

Communication

The ASYC IV models are equipped with a universal communication mode based on the SCPI standard, via USB or Bluetooth. The SX-DMM software provides a simple and effective way of viewing, processing and analysing the data, while also allowing real-time processing of the data on a PC, upgrading of the instrument and even calibration with new functions: automatic clock adjustment. It is also possible to display the available storage capacity.

MTX 3290 & MTX 3291

These portable multimeters with **digital display** allowing direct measurement of the main electrical quantities benefit from an innovative design making them compact, rugged, leakproof and comfortable to grip.

You can use these training multimeters in total safety in electrical engineering and electronics. The design of these 2 easy-to-use models is based on the principle of "1 key, 1 function". The dynamic recording functions (time/date-stamped Min, Max and AVG) are just as simple. Monitoring of voltage and current peaks enables you to capture all the faults very easily.

Simple multimeters

- Easy-to-read 70 x 52 mm LCD screen
- Contextual reminder of connection on the screen
- Current autoranging, single terminal up to 10 A
- Secondary measurements in addition to the main measurement to facilitate analysis
- Surveillance of the MIN/MAX and AVG data with relative time/date-stamping and of voltage and current peaks
- SX-DMM software for real-time processing of the data on a PC (MTX 3291)

And much more...

- IP67 protection against water projection and dust ideal for outdoor conditions
- Powered by 4 standard AA batteries or 4 Ni-MH batteries rechargeable with an HX0051B external module (option)
- Operation for up to 400 hrs on batteries

MTX 3290

MTX 3291

Type	Digital display	
Models	MTX3290	MTX3291
Display	digital monochrome 70 x 52 mm	backlit digital monochrome 70 x 52 mm
No. of counts	6,000 cts	60,000 cts
Power supply	4 x R6 batteries or 4 rechargeable batteries (external charger)	
Communication	-	IR/USB

	MTX 3290
Display resolution (counts)	6 k
VAC/DC/AC+DC	•
VLowZ	•
IAC / I DC	•
IAC+DC	•
IAC/DC direct reading	•
Resistance	•
Capacitance	•
Frequency meter	•
Audible continuity / Diode test	• / •
Temperature with K TC / Pt100	- / •
dBm (/R) / dB (/Vref)	- / -
Resistive power	-
Duty cycle / Pulse width / Pulse counting	- / - / -
HOLD / Auto- HOLD	• / •
Min / Max / Avg	• / • / •
Peak+ / Peak- / CF	• / • / -
Relative measurements	
MATH function	-
Recording	-
USB communication / Bluetooth	-
CAT III / CAT IV	600 V / -
3-year warranty	•

MTX 3292B & MTX 3293B

These portable multimeters with **graphical color display** allow direct measurement of the main electrical quantities and show the trends instantaneously. They benefit from an innovative design making them compact, rugged, leakproof and comfortable to grip. Their strengths lie in the product HMI, the advanced measurement functions and the help provided when measuring.

High-performance graphical multimeters...

- Easy-to-read 320 x 240-pixel colour matrix screen with black background
- Graphical display of the trends on a summary screen
- Trace, cursors and zoom on recordings
- Recording of 10 sequences

Dynamic loggers

- Storage of up to **30,000** measurements **(model 3293B)**
- Simplified setting of the number of measurements, interval, duration and storage capacity
- Internal storage of measurement 10 sequences
- Interactive zoom function on the recordings
- A simple surveillance mode displaying the time/date-stamped MIN/MAX and AVG values

... And much more!

- Contextual reminder of the connections
- Normal USB communication or Bluetooth available as an option
- IP67 protection against water projections and dust, ideal for outdoor conditions
- Ni-MH AA rechargeable battery, the best solution in terms of quality and price
- Operation for up to 100 hrs on batteries with management of the battery charge level
- No time-wasting: the instrument operates while charging

MTX 3291	MTX 3292B	MTX 3293B
60 k	100 k	100 k
•	•	•
•	•	•
•	•	•
•	•	•
•	•	•
•	•	•
•	•	•
•	•	•
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• / • / -	• / • / •	• / • / •
•	•	•
-	•	•
-	10,000	30,000
•	• / • (option)	• / • (option)
1000 V / 600 V	1000 V / 600 V	
•	•	•

Type	Graphical	
Models	MTX 3292B	MTX 3293B
Display	Graphical colour (70 x 52 mm)	
Keypad	7 function keys + setup	
Power supply	4 x R6 batteries or 4 rechargeable batteries (internal charger)	
Communication	IR/USB	(Bluetooth as an option)
Storage	10,000 measurements	30,000 measurements

MTX 3292B

MTX 3293B

	MTX 3290	MTX 3291 *	MTX 3292B	MTX 3293B
DC, AC and AC+DC voltages	60 mV to 1,000 V		100 mV to 1,000 V	
DC accuracy	0.3 %	0.05 %	0.03 %	0.02 %
AC and AC+DC bandwidth	20 kHz	100 kHz	100 kHz	200 kHz
DC, AC and AC+DC current	600 µA to 10 A /20 A (30 s max)*		1000 µA to 10 A /20 A (30 s max)	
DC accuracy	0.08 %		0.01 %	
Frequency	60 Hz to 600 kHz		10 Hz to 5 MHz	
Resistance	600 Ω to 60 MΩ		100 Ω to 100 MΩ	
Audible continuity	600 Ω SIGNAL < 30 Ω ±5 Ω < 5 V		1000 Ω SIGNAL < 20 Ω < 3,5 V	
Diode test	3 V with 1 mV resolution		Diode 0 -2.6 V < 1 mA + Zener Diode or LED 0-20 V < 11 mA	
Capacitance	6 nF to 60 mF		1 nF to 10 mF	
Temperature PT100/1000	-200 °C to 800 °C			
Temperature TK/TJ	-		-40 to +1,200 °C	
OTHER FUNCTIONS				
Surveillance	Time/date-stamped MAX/MIN /AVG or PEAK ±, on all the main positions		SURV time/date-stamped MAX/MIN /AVG or PEAK ±, on all the main positions	
REL	REL relative value + measured reference value on secondary display*		Relative value REF-delta unit or on 3 displays + main measurement	
PWM filter	4th-order 300 Hz low-pass filter for measuring on variable speed drives of asynchronous motors			
V-output clamp function for direct reading	Integration of the ratio: 1/1 ,1/10,1/100,1/1000 mV/A		Parameterizable Ax ratio	
Secondary functions or measurements	dBm and VA resistive power, +/- duty cycle, and pulse width*		3 measurements + main measurement	
SPEC	-		Display of measurement tolerance: Smin, Smax	
GRAPH	-		Trends of main measurements < 60 s + Zoom + Cursor	
Central zero	Selectable or automatic* bargraph for VDC and IDC		Automatic trend bargraph	
Measurement storage	-		10,000	30,000
GENERAL SPECIFICATIONS				
Type of display	LCD with backlighting* and digits 14 mm high – Double 60,000* or 6,000-count display		Colour graphical display (70 x 52) with backlighting on 4 100,000-count displays	
PC interfaces	-	USB optical connector & SX-DMM software	USB optical connector or Bluetooth (option)– SX-DMM software	
Power supply	4 x AA batteries or Ni-MH batteries		Charger or 4 x AA batteries or Ni-MH batteries	
Safety / EMC	Safety as per IEC 61010-1 1,000 V-CAT III/600 V CAT IV* or 600 V CAT III /300 V CAT IV Safety as per IEC 61010-2-033		Safety as per IEC 61010-1 1,000 V-CAT III /600 V CAT IV Safety as per IEC 61010-2-033	
Environment	Storage -20 °C to +70 °C – Operation -10 °C to +55 °C		Storage: -20 °C to +70 °C – Operation: 0 °C to +40 °C	
Mechanical specifications	Dimensions (L x P x H): 196 x 90 x 47.1 mm – Weight: 570 g			
Warranty	3 years			

Ships With:

- MTX 3290 delivered with 4 x 1.5 V alkaline batteries, 1 red straight/straight lead 1.5 m long, 1 black straight/straight lead 1.5 m long, 1 red CAT IV 1 kV test probe, 1 black CAT IV 1 kV test probe, 1 user manual on CD and 1 start-up guide on paper.
- MTX 3291 delivered with 4 x 1.5 V alkaline batteries, 1 red straight/straight lead 1.5 m long, 1 black straight/straight lead 1.5 m long, 1 red CAT IV 1 kV test probe, 1 black CAT IV 1 kV test probe, 1 user manual on CD and 1 start-up guide on paper plus 1 bag, 1 USB cable with SCPI remote programming manual and SX-DMM software.
- MTX 3292B and MTX 3293B delivered with 1 bag, 4 NiMH 2,400 mAH 1.5 V rechargeable batteries, 1 USB Type A charger, 1 red straight/straight lead 1.5 m long, 1 black straight/straight lead 1.5 m long, 1 red CAT IV 1 kV test probe, 1 black CAT IV 1 kV test probe, 1 optical USB cable + SX-DMM software, 1 user manual on CD and 1 SCPI remote programming manual and 1 start-up guide on paper.

REFERENCES

1 MTX 3290 multimeter ..... Cat. #2154.01
1 MTX 3291 multimeter ..... Cat. #2154.02
1 MTX 3292B multimeter ..... Cat. #2154.03
1 MTX 3293B multimeter ..... Cat. #2154.04
1 MTX 3292B-BT multimeter - Bluetooth version .. Cat. #2154.05
1 MTX 3293B-BT multimeter - Bluetooth version .. Cat. #2154.06

OPTIONS

MTX329X graphical color calibration software HX0059B
MTX digital DMM transport kit ..... Cat. #2125.96
Graphical color DMM transport kit HX0052C
MTX 3290 / 3291 calibration software P01196770
Kit of 4 external NiMH rechargeable batteries HX0051B
MTX 328X and MTX 329X external battery charger (4 batteries incl.) HX0053B

Google Play

(Android™ App available on Google Play for Models 3292B-BT & 3293B-BT)

To learn more, visit www.aemc.com

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