

# CA 5292 & CA 5293

ASYC IV TRMS industrial graphic multimeters

**Simple and powerful,  
they display the signal  
and monitor its evolution**

- Ergonomic, educational and intuitive interface
- 100,000 resolution points, 12-bit TRMS AC+DC acquisition
- Bandwidth up to 200 kHz
- Large display with up to 4 simultaneous measurements or pieces of information
- Graphical display of measurement changes and signal shape
- Recording of up to 30,000 measurements
- Standard USB DATA+Power-Charge 5V interface, SCPI compatible

Designed and manufactured in France 



IP 67

CAT IV  
600 V

CAT III  
1000 V

3-year  
warranty



Measure up



# Ergonomics and key features

Both portable and benchtop multimeters, ASYC IV meters are simple and intuitive to use. Directly accessible, the various measurements are clearly displayed as pictograms on the electronic switch.

The display shows measurement results as numerical values or graphs representing trends over time. Recorded measurements can be displayed as traces, with the option to position cursors and zoom in on part of the recorded curve.

Help in French and English is integrated into the device and provides information on the measurements in progress. USB communication allows data transfer to a PC, recording, and programming with LV/LWi drivers. Once connected to the PC, the device's internal software can be updated simply by accessing the website.

## SECURE TERMINAL BLOCK

The measurement terminal block is located at the top of the device to ensure optimal screen readability. Audible alert if cables are connected to the wrong inputs and AUTO function recognition.  
- 4 terminals: 3 measurement inputs + 1 isolated connection for USB communication



## LARGE NUMBER DISPLAY

Multi-parameter and backlighting with 3 levels that automatically adjust according to ambient lighting, for better visibility and increased reading comfort.

## GRAPHICAL DISPLAY

Monitoring the evolution of the main parameter or visualising the waveform.



## FUNCTION KEYS F1 TO F4

To directly access the function menus.

## IP 67 ENCLOSURE

For the safety of the device and excellent grip.

## SELECTION

## OF THE MEASUREMENT FUNCTION

Via function key with light indicator for the selected function for intuitive configuration.



Special connector to USB for charging

# Applications



ASYC IV multimeters are suitable for numerous applications in the industrial, telecommunications and defence sectors. Their performance and measurement and analysis features facilitate and simplify electrical and electronic maintenance operations on machines, systems and installations.

On the electronics side, ASYC IV multimeters can be used for testing wiring, hardware, IT and medical equipment, as well as for component testing.

Designed for harsh environments, their IP67 protection rating ensures they are waterproof and dustproof.

In industry, they are suitable for applications found in departments that deal with automation and processes in a wide variety of sectors: food, plastics, concrete, metal, paper, wood, oil and nuclear.

ASYC IV devices can be used to maintain a wide range of industrial machinery, including digital controls, motors and generators.

Versatile, they are perfectly suited to the needs of expert electrical installers, as well as professionals in the transport and energy sectors.

High-performance, accessible and ergonomic, ASYC IVs also have a place of choice in education and research.



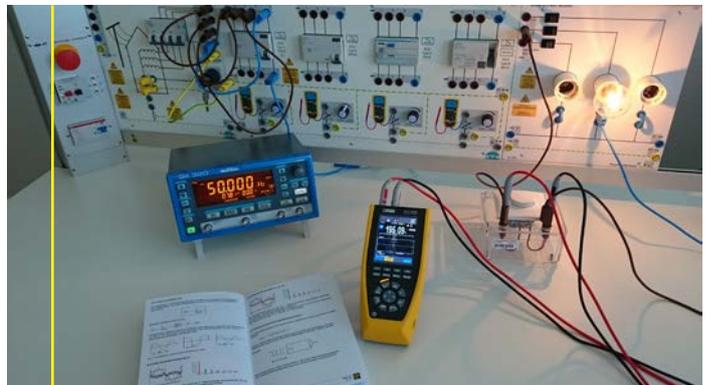
Temperature measurement on photovoltaic panels. The practical magnetic MultiFix accessory allows you to work hands-free.



Measurement on heating and air conditioning systems: current, voltage, temperature.



Measurement with leakage current clamp and fault recording.



High-performance functions for testing in R&D or laboratories.

# Measurements

TRMS, true root mean square measurements of alternating voltage and current, are accurate even on non-linear signals.

The terminal block display at the top of the screen is permanently visible.

**AC, DC OR AC+DC VOLTAGE**  
Voltage measurement can be carried out safely up to 1000 V.

**CURRENT**  
AC, DC, AC+DC direct current measurement up to 10 A continuous.

**FREQUENCY**  
ASYC IVs measure frequency up to 5 MHz, as well as duty cycle and power.

**TEMPERATURE**  
Depending on the model, the temperature is measured using a J/K thermocouple or Pt100/Pt1000.

**RESISTANCE**  
Resistance measurement is performed up to 100 MΩ and 1000 Ω for continuity. With a test voltage exceeding 20 V, the diode and semiconductor junction test allows a wide variety of components to be checked.

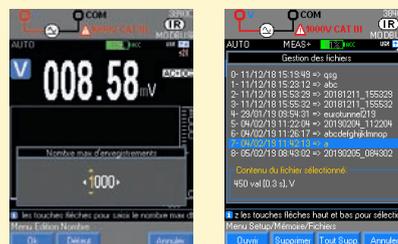
**CAPACITANCE**  
Capacitance measurement covers a wide range: from 1 nF to 60 mF depending on the model.

**SETUP**  
General configuration and customisation of measurement functions. Password lock possible. The device can be used to measure the following parameters:

**INTENSITY**  
In order to increase the current measurement range, ASYC IV devices allow the use of a current clamp. The measurement reading is immediate because the transformation ratio in mV/A or mA/A is configurable.

## RECORDING

Depending on the model, ASYC IV devices can record up to 30,000 values. The simplified configuration settings cover the number of measurements per interval (from 0.2 seconds to 24 hours), the duration, and the memory capacity.



## FILE MANAGEMENT

Files are displayed with a timestamp and campaign name.

# Features

Display of trends for each main variable with configurable time base.

## MEASUREMENT CONTROL THANKS TO SURV AND PEAK FUNCTIONS

Capturing time-stamped minimum/maximum/average and PEAK values allows transient values and variations to be recorded automatically.

This feature enables effective detection of variations or anomalies in a signal.



## MULTIMETER MEMORY RECORDING

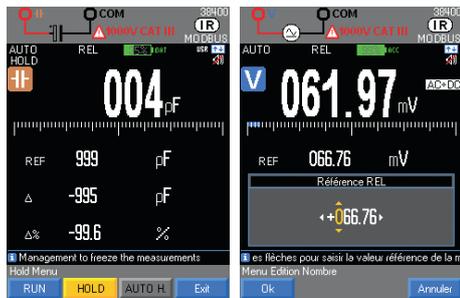
Main value and secondary values with graphical display.

Up to 30,000 values depending on model.



## RELATIVE VALUES FOR GREATER ACCURACY

The REL relative mode allows measurements to be expressed as absolute and relative deviations from the stored reference.



## WAVEFORM DISPLAY

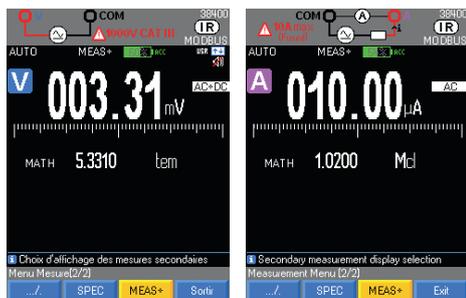
Visualisation of a V or I signal up to 600 Hz, auto trigger.

Useful for determining the shape and evolution of a signal.



## MATHEMATICAL FUNCTION

This function is suitable for measuring any physical quantity by means of appropriate unit conversion and provides a direct reading (Ax + B).



## MEASUREMENT WITH CURRENT CLAMP

Depending on the model, the user can integrate the transformation ratio to provide a direct reading of the current value, whether the clamp has a V or A output.



## Hz FUNCTION

The frequency measurement ranges up to 5 MHz. This function also allows the measurement of the duty cycle +/- for analysing the active or inactive intervals of switching signals or logic signals. The pulse width measurement PW +/- allows the control of electronic fuel injection systems and switching power supplies.



## PRECISE MEASUREMENTS,

## INCLUDING ON VARIABLE SPEED DRIVES

A 300 Hz low-pass filter ensures accurate voltage and frequency measurement on MLI variable speed motor drives.

## FLEXIBILITY

The RANGE function allows automatic or manual selection of the measurement range best suited to the measurements being taken.

## USER-FRIENDLINESS & TIME SAVING

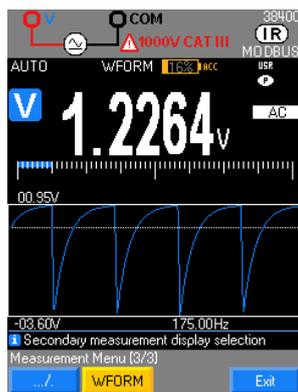
The 'user/basic' function saves the setting preferences when the device is switched off, according to the user's preferences. No need to reset the settings! Password lock.

# CA 5292 & CA 5293

These portable multimeters with colour graphic displays enable direct measurement of key electrical parameters and instant visualisation of trends. With their innovative design, these multimeters are compact, robust, waterproof and ergonomic for easy handling. Key features include the product's HMI, advanced measurement functions and measurement assistance.

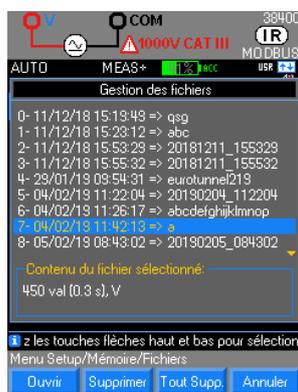
## HIGH-PERFORMANCE GRAPHIC MULTIMETERS..

- High-readability 320 x 240 px colour matrix display with black background
- Graphical display of trends on a summary screen
- Trace, cursors and zoom of recordings
- Recording of sequences up to 30
- Automatic waveform display



## DYNAMIC RECORDERS...

- Up to 30,000 measurements in memory
- Simplified configuration of the number of measurements per interval, duration and memory capacity...
- Internal storage of 30 measurement sequences
- File manager: with date, time and name
- Interactive zoom function on recordings + cursors
- Simple monitoring mode displaying MIN/MAX and AVG with timestamp



## ... AND MUCH MORE

- Contextual connection reminder
- Standard USB communication
- IP67 protection rating, splash-proof and dust-proof, suitable for outdoor conditions
- Standard rechargeable AA NiMH battery, the best value for money solution
- Up to 100 hours of battery life with battery level management
- No time wasted: the device works while charging



	CA 5292	CA 5293
Display resolution (dots)	100 k	100 k
VAC/DC/AC+DC (BP)	100 kHz	200 kHz
VLowZ	•	•
IAC / I DC	•	•
IAC+DC	•	•
IAC/DC Direct reading	•	•
Resistance	•	•
Capacitance	•	•
Frequency meter	•	•
Continuity sound / Diode test	• / •	• / •
Temperature TC K / 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	10 000	30 000
USB communication	•	•
CAT III / CAT IV	1 000 V / 600 V	1 000 V / 600 V
3-year warranty	•	•

## DOCUMENTS AVAILABLE

- Quick start guide in 20 languages
- Operating instructions in over 11 languages
- SCPI programming guide in 2 languages
- And, as always, the HMI in 5 languages!

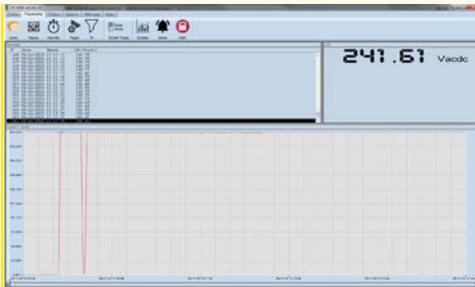
# CA 5292 & CA 5293

## COMMUNICATION



The ASYC IV devices feature a universal SCPI-standard communication mode via USB. The SX-DMM software is simple and effective for viewing, processing and analysing data. SX-DMM is supplied as standard.

Updates are available for free download from the support site. The SX-DMM software allows real-time data processing on a PC, device updates and calibration with new functions, including automatic time setting. Memory capacity display is also available.



Data display and curve plotting with spreadsheet export



Setting up registration campaigns



Mathematical functions applied to data

## THE LOADER!

### CHOOSE YOUR WORKING LANGUAGE FROM 5 AVAILABLE LANGUAGES

4 language packs available via an internal software update



- ✓ Translation of messages
- ✓ Translation of interactive menus

	CA 5292	CA 5293
<b>DC, AC and AC+DC voltages</b>	<b>TRMS</b>	
Range	100 mV* / 1000 mV / 10 V / 100 V / 1000 V	
Resolution	1 µV / 10 µV / 0.1 mV / 1 mV / 10 mV	
AC, AC+DC bandwidth	100 kHz	200 kHz
DC accuracy	0.03%	0.02%
Basic accuracy AC, AC+DC ( $V_{LowZ}$ )	0.3%	0.3%
<b>DC, AC, AC + DC currents</b>	<b>TRMS</b>	
Range	1000 µA / 10 mA / 100 mA / 1000 mA / 10 A / 20 A (30s max on 100 A range)	
Resolution	10 nA / 0.1 µA / 1 µA / 10 µA / 100 µA / 1000 µA	
DC / AC and AC+DC accuracy	0.08% / 0.3%	
AC AC+DC bandwidth	50 kHz	
<b>Frequency</b>		
Frequency range	10 Hz / 100 Hz / 1 kHz / 10 kHz / 100 kHz / 1 MHz / 5 MHz	
Resolution	0.0001 Hz / 0.001 Hz / 0.01 Hz / 0.1 Hz / 1 Hz / 10 Hz / 100 Hz	
<b>Resistance and continuity</b>		
Ranges	100 Ω* / 1000 Ω / 10 kΩ / 100 kΩ / 1000 kΩ / 10 MΩ / 100 MΩ	
Resolution	0.01 Ω* / 10 mΩ / 100 mΩ / 1 Ω / 10 Ω / 100 Ω / 1 kΩ	
Basic accuracy	0.07%	
Protection	Electronic protection 1000 V	
Continuity detection with audible tone	Measure up to 1000 Ω / SIGNAL <20 Ω <3.5 V	
<b>Diode test</b>		
Threshold voltage measurement	Diode: 0 to 2.1 ( $V_{test} < 3.5 V, I_{test} < 1.1 mA$ ) / Zener & LED: 0 to 20.0 V ( $V_{test} < 28 V, I_{test} < 11 mA$ )	
<b>Capacitance</b>		
Ranges	1 nF / 10 nF / 100 nF / 1000 nF / 10 µF / 100 µF / 1 mF / 10 mF	
Resolution*	1 pF / 10 pF / 0.1 nF / 1 nF / 0.01 µF / 0.1 µF / 1 µF / 10 µF	
<b>PT100/1000 and TK/TJ temperature</b>		
Operating range	-200°C to 800°C in Pt and -40 to +1200°C in TK	
Accuracy	0.1 %	
<b>Other Meas functions</b>		
SURV MAX/MIN /AVG	On all main positions, with time stamp	
REL	Relative or differential values (main measurement and up to 3 secondary values) on 3 displays + main measurement	
MLI filter	300 Hz low-pass filter of the 4 <sup>th</sup> order for measurement on asynchronous motor drives	
SPEC	Display of measurement tolerance + Smin + Smax	
GRAPH	Trend of main measurements with variable max time and 50/60 and 600 Hz waveform display	
Secondary measurements	3 measurements (in addition to the main measurement)	
Memory capacity	10,000 values	30,000 values

\* manual access

## GENERAL CHARACTERISTICS

Display type	Large screen (52x70 mm) matrix (240x320 dots) backlit graphic In measurement mode: display of 4 simultaneous values of 100,000 dots
PC interfaces	Optical USB connector – SX-DMM software and Android app
Power supply	USB charger or 4 AA batteries or NiMH batteries
Safety/EMC	Safety according to IEC 61010-1, IEC 61010-2-033 1000 V CAT III / 600 V CAT IV EMC according to EN 61326-1
Environment	Storage -20°C to +70°C – Use 0°C to +40°C
Mechanical	Dimensions (L x W x H): 196 x 90 x 47.1 mm – Weight: 570 g
Warranty	3 years

## REFERENCES

CA 5292.....P01196802  
CA 5293.....P01196803

## OPTIONS

Calibration software.....HX0059B  
4 NiMH battery kit.....HX0051B



## DELIVERY STATUS

- 1 paper quick start guide with instructions for downloading the operating manual
- 1 set of safety cords (red and black) 1000 V CAT IV / 1500 V CAT III
- 1 set of test leads (red and black) 1000 V CAT IV / 1500 V CAT III
- 1 set of 4 Ni-MH AA / R6 batteries
- 1 USB 5 VDC mains adapter (100-240 V, 50/60 Hz) and 1 USB/multimeter power cord
- 1 USB optical communication cable
- 1 USB stick containing the SX-DMM software
- 1 measurement log
- 1 carrying case

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