

727110 - Power Analyser CASSY Plus

Order code: **5210.727110**



Information about product price on demand

Parameters

Sensors

Quantitative unit

Fyzika

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The Power Analyser CASSY is a combination of isolated and differential oscilloscope, multimeter, wattmeter, energy analyzer and recorder. It was designed in its concept for demonstration and laboratory experiments.

The Power Analyser CASSY has been optimized for the following applications:

Energy grids:

- Voltage and frequency stability
- Load behavior of networks
- Effect of harmonics

Electrical machines:

- Inrush current of transformers and machines

- Ratio of transformers
- Efficiency of machines

Power Electronics:

- Rectifier
- DC / DC converter
- DC / AC converter
- Frequency converter
- Filter

POWER ANALYSER CASSY - IN DETAIL

- Simultaneous measurement of U, I, ju , j , f and P in 4 channels
 - Instantaneous values U, I and P
 - Averaged values U, I and P
 - RMS values (AC + DC) U and I
 - RMS values (AC) U and I
 - Fundamental wave filters
 - Delta connection adjustment
- Universal connection options
 - Via USB-Type C connection with PC or laptop
 - Via the WLAN option with the school network or setting up your own access point
- Automatic or manual range selection
- Support of the award-winning measurement software CASSY Lab 2 for computer-aided measurements and simple to highly complex evaluations.
 - Electrical power calculation S, P, QC and QL
 - Electrical work WS, W and WQ
 - Resistance calculation R, Z, XC, XL, G, Y BC and BL
 - positive sequence component, negative sequence component and zero sequence component in 3-phase systems
 - Derivative with respect to time, integral over time, FFT analysis, mean value, histogram, and model
 - Drivers allow you to evaluate the data with LabVIEW and MATLAB
- Possibility of manual operation directly on the device by means of a rotary selector with cursor keys
- Direct reading in 9 cm, backlit display
 - Display of up to 24 measured values in one display
 - Display of all values for each channel
 - Display of all values in tabular form
 - Display of measured values in diagram
 - Display of a vector diagram
- Wireless connection to the CASSY app via WLAN for experimenting with tablet and smartphone (iOS, Android and Windows)
- Measuring instrument category CATIII 300: allows the use of the measuring instrument from tests with safety extra-low voltage (SELV) via 3-phase systems with or without neutral conductor up to testing in power electronics, eg. B. DC link voltage of 700 V DC
- FPGA-based real-time processing in the device enables comprehensive network analysis in the three-phase networks, which are displayed directly on the device in the vector diagram

PLUS:

Isolation amplifiers:

- 4-channel isolation amplifier with the possibility of outputting I, U, U_{XI} to the assigned output U, V, W and X.
- Mathematical functions between the channels ($A + B$, $A \times B$, etc)

Function generator:

- 1 output channel Y as function generator
- DC / sine / rectangle / triangle and free function

Technical data

DISPLAY & OPERATION

- Graphic display: 9 cm (3.5 "), QVGA, colored, light (adjustable up to 400 cd / m²)
- Operation: Pushbutton and incremental encoder with pushbutton

INPUTS & OUTPUTS

- Inputs: 4 isolated measuring channels CAT III 300, each with I and U measurement (max. 8 can be used at the same time)
- Input A -D: U and I connection via 4 mm safety sockets
- Measuring ranges U: 25/70/250/700 VAC $\pm 36 / \pm 100 / \pm 360 / \pm 1000$ VDC
- Measuring ranges I: 0.7 / 1.6 / 7/16 / AAC $\pm 1 / \pm 2.5 / \pm 10 / \pm 16$ ADC
- Sampling rate: max. 1,000,000 values / s per channel at U and I max. 500,000 values / s
- Analog outputs: A-D ± 10 V 200 mA

FUNCTION GENERATOR

- Frequency range: 10 mHz ... 20 kHz
- Amplitude: ± 10 V 200 mA
- Waveform: Sine, Rectangle, Pulse Width, DC Offset, Triangle and Free Function fX
- Resolution of the analog inputs: 16 bits

GENERAL

- Loudspeaker: Error message when exceeding the measuring ranges
- Data storage: 100,000 readings for each measurement series, built-in Micro SD card (4 GB) for over a thousand measurement files and screenshots
- WLAN: 802.11 b / g / n as access point or client (WPA / WPA2)
- VNC server: integrated
- USB ports: Connect a USB Type C
- Mains voltage: 230 V 50 - 60 Hz (conversion to 115 V possible)
- Connected load: 50 W
- Dimensions: 300 mm x 300 mm x 180 mm Weight: 3.7 kg

Scope of Delivery

- 1 x Power cord
- 1 x USB A / C cord