

HELAGO-CZ, s.r.o. Commercial Register maintained by the Regional Court in Hradec Králové Section C, File 17879 Kladská 1082 500 03 Hradec Králové 3

Company ID: 25 96 39 61, VAT: CZ 25963961 Phone: 495 220 229, 495 220 394

Fax: 495 220 154 GSM gate: 602 123 096 E-mail: info@helago-cz.cz Web: http://www.helago-cz.cz

# 727100 - Power Analyser CASSY

Order code: **5210.727100** 



# Information about product price on demand

**Parameters** 

Sensors Fyzika

Quantitative unit ks

The Power Analyser CASSY is a combination of an isolated and differential oscilloscope, multimeter, wattmeter, energy analyser and recorder. It is designed for demonstration and laboratory experiments.

## The Power Analyser CASSY is suited to the following areas of application:

## Energy networks

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

### **Electrical machines**

- Inrush current from transformers and machines
- Transformation 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, φU, φI, f and P
  - o Instantaneous values U, I and P
  - o Averaged values U, I and P
  - o RMS values (AC+DC) U and I
  - o Fundamental wave filters
  - Delta connection adjustment
- Universal connection options
  - Via USB connection with PC or laptop
  - o Via WiFi with the school network or setting up an access point
- Automatic or manual range selection
- Supports the prize-winning measurement software CASSY Lab 2 for computer-aided measurements and simple to highly complex evaluations:
  - o Electrical power calculation S, P, QC and QL
  - o Electrical work WS, W and WQ
  - o Resistance calculation R, Z, XC, XL, G, Y BC and BL
  - o Positive sequence component, negative sequence component and zero sequence component in 3-phase systems
  - o Time derivative, integral over time, FFT analysis, mean value, histogram, and modelling
  - Drivers for LabVIEW and MATLAB available
- Possibility of direct manual operation of the device by means of a rotary selector with cursor keys direct value readings on 9 cm backlit display
  - Display of up to 24 measured values on one display
  - Display of all values for each channel
  - o Display of all values in tabular form
  - o Display of measured values in a diagram
  - o Display of a vector diagram
- Wireless connection to the CASSY app via WiFi for experimentation with tablets and smartphones (iOS, Android and Windows)
- Measuring instrument category CATIII 300: allows the use of the measuring instrument for tests with safety extra-low voltage (SELV) via 3-phase systems with or without neutral conductor, up to testing in power electronics, e.g. DC link voltage of 700 V DC
- 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

## **Technical data**

#### **DISPLAY & OPERATION**

- Graphic display: 9 cm (3,5"), QVGA, colour, light (adjustable up to 400 cd/m²)
- Operation: Button and incremental encoder with button

#### **INPUTS & OUTPUTS**

- Inputs: 4 isolated measurement channels CATIII 300, each with I and U measurement (max. 8 usable simultaneously)
- Input A-D: U and I connection via 4 mm safety sockets
- Measurement range U: 25/70/250/700 VAC ±36/±100/±360/±1000 VDC
- Measurement range I: 0.7/1.6/7/16 AAC ±1/±2.5/±10/±16 ADC
- Sampling rate: max. 1.000.000 samples per channel for U, max. 500.000 samples for I

## **GENERAL**

- Data storage: integrated micro SD card (4 GB) for more than a thousand measurement files and screenshots
- Remote access: full remote access and distribution of measurement data
- WLAN: as access point or client
- USB port: Type C
- Dimensions: 300 mm x 300 mm x 180 mm

# Scope of Delivery

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