



# Sistemi di misurazione dei parametri legati all'energia

Analizzatori di Qualità per la Potenza II

ETS DIDACTIC



## ENERGY MEASUREMENT

Power Quality Analyzer II

Visita il nostro store



another way to care

[www.mydidactstore.it](http://www.mydidactstore.it)

 **Didact**  
STORE

# Intelligent measuring technology

## Power Quality analyzer II



## Power measurement Device / network analysis Device



1

### Learning objectives:

- › Determination of essential electrical parameters as active, apparent and reactive power (of e.g. light fittings)
- › measurements of the network load caused by harmonics (3-phase presentation)
- › Measurements of power factor  $\Lambda$  and  $\cos\phi$
- › Determination of electrical parameters of electric motors
- › use and application of energy meters
- › energy study of various consumers
- › Vectorial presentation of the three-phase system
- › oscilloscope function for voltage and current

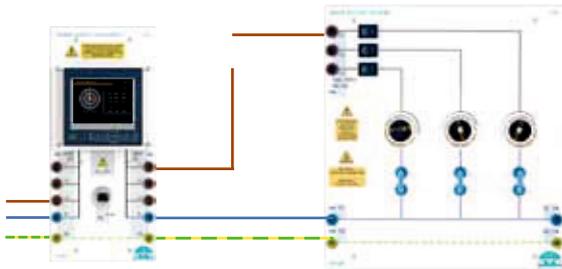
### Technical data

- › test voltage 0 – 600 V ac, max. 5 a
- › operating voltage 230 V ac
- › lan interface
- › Integrated oscilloscope function
- › Webserver
- › modbus IP - interface

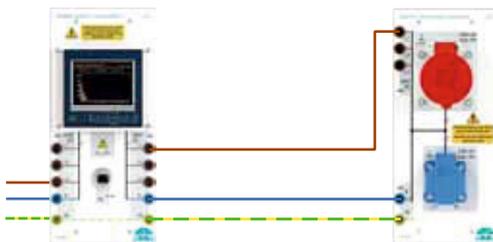
No.	Description	Order No.
1	Power Quality analyzer II	40307

# Intelligent measurement technology

## Possible applications



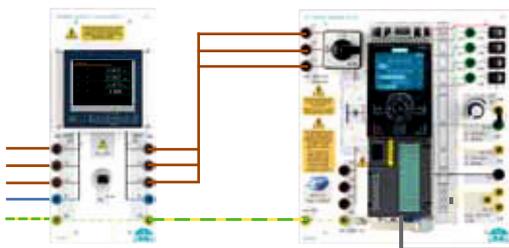
e.g. measuring von active power, reactive power und apparent power of light fittings



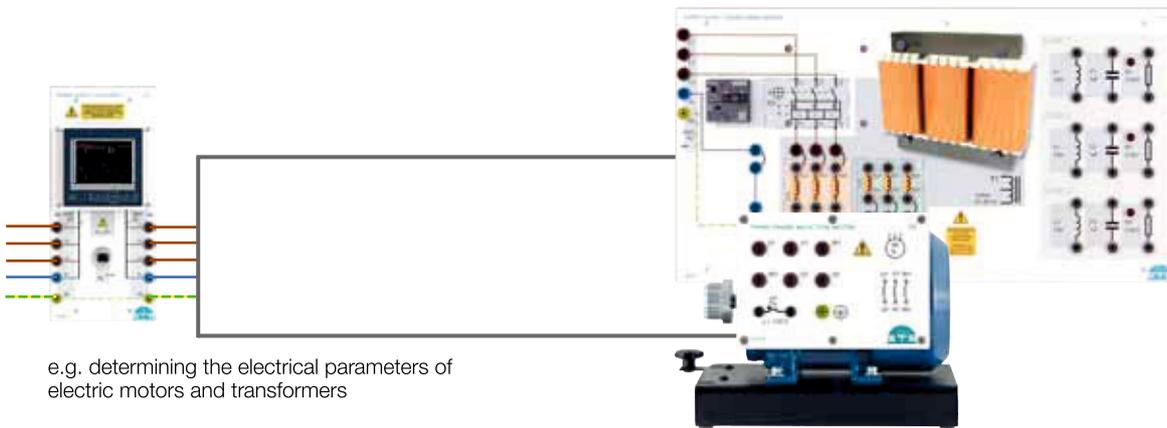
switching power supply



e.g. measuring the network load caused by harmonics and produced by the switching power supply of the laptop



e.g. measuring the power factor  $\Lambda$  and  $\cos\phi$  when operating a frequency converter



e.g. determining the electrical parameters of electric motors and transformers

## Possible Indications on the Display



Vector diagram – three-phase system

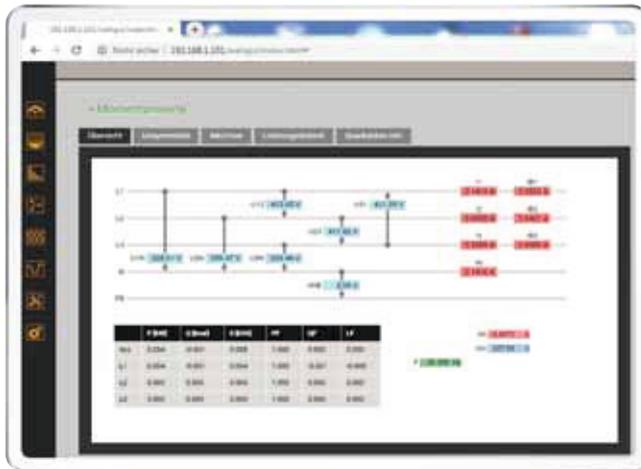


Display of power performance

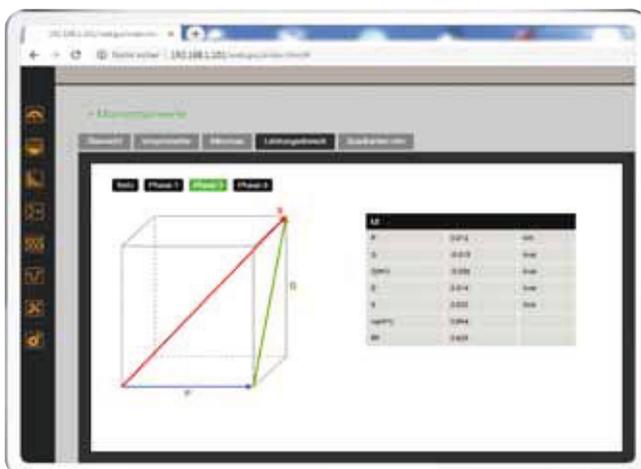
## Webserver for Visualisation of the measured Values



curve shape display of current and voltage (L1, L2, L3)



Display of the instantaneous values of current, voltage, power



Display of the performance triangle in case of a consumer with harmonics

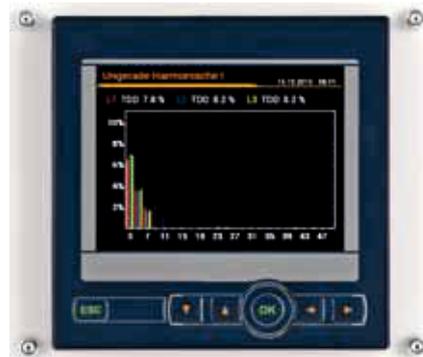




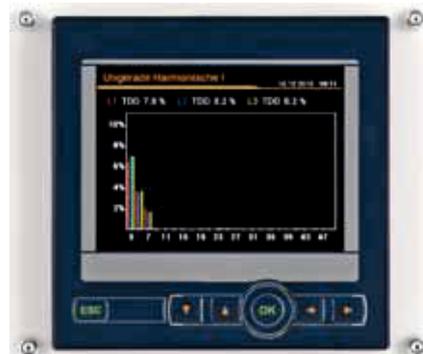
Display of the performance triangle in case of a linear consumer



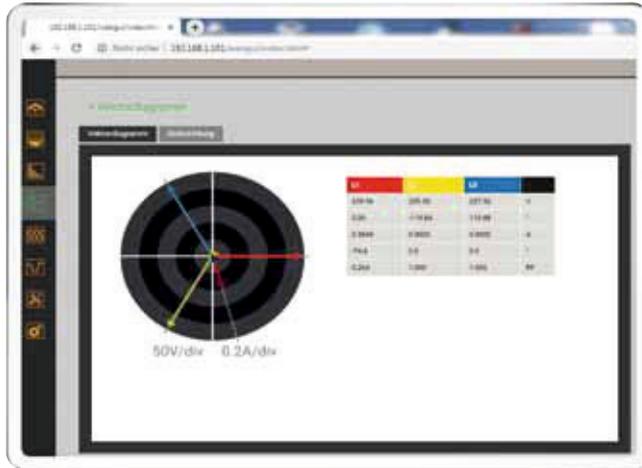
Display of voltage harmonics



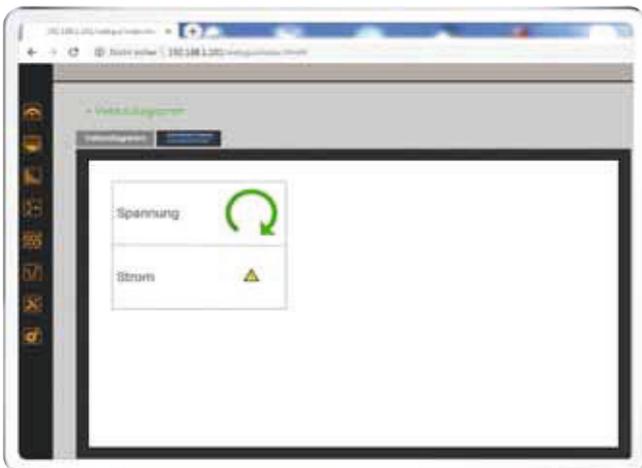
Display of current harmonics



### more webinterface displays

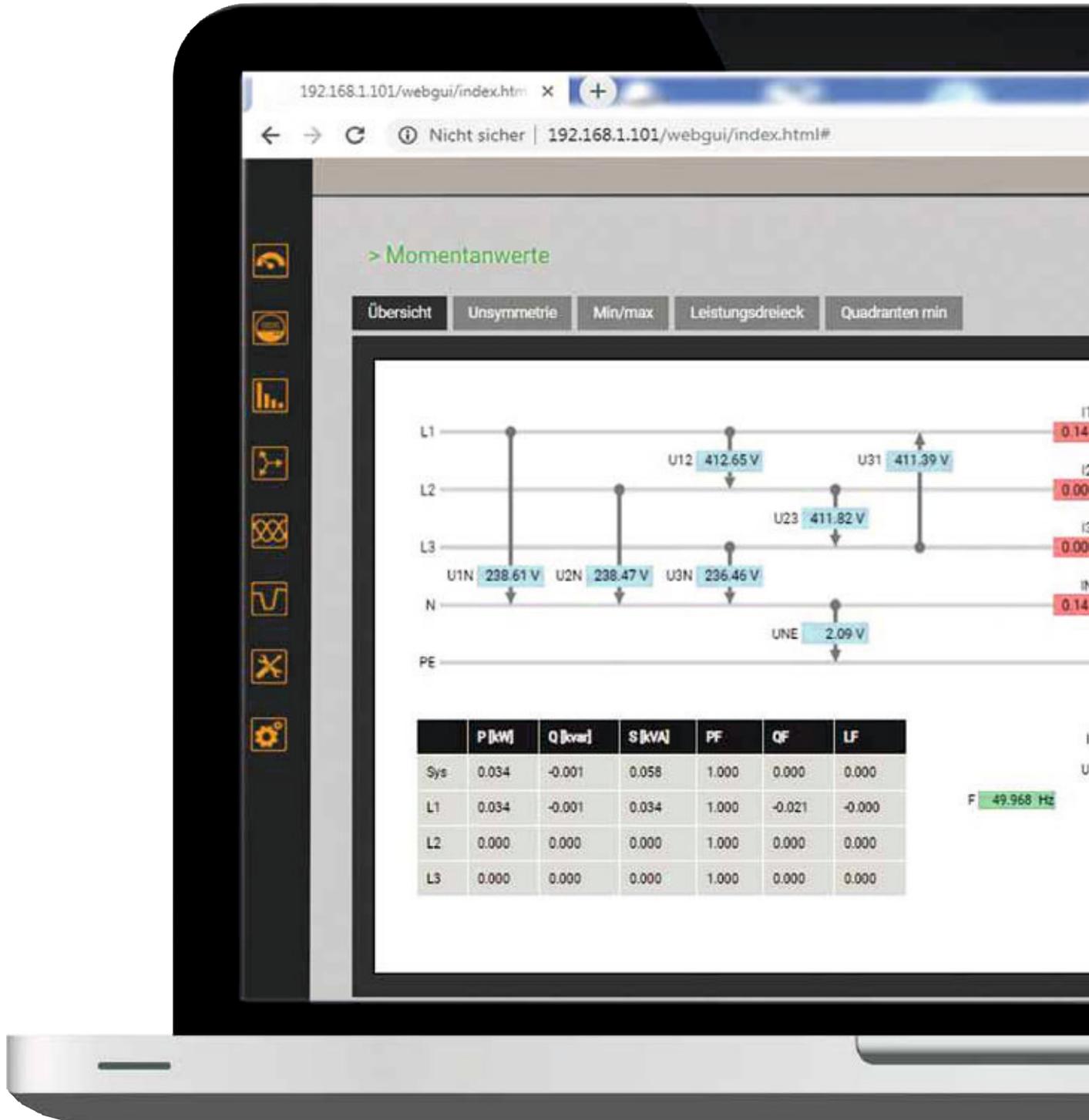


Display of the vector diagram of an inductive consumer, e.g. fluorescent lamp



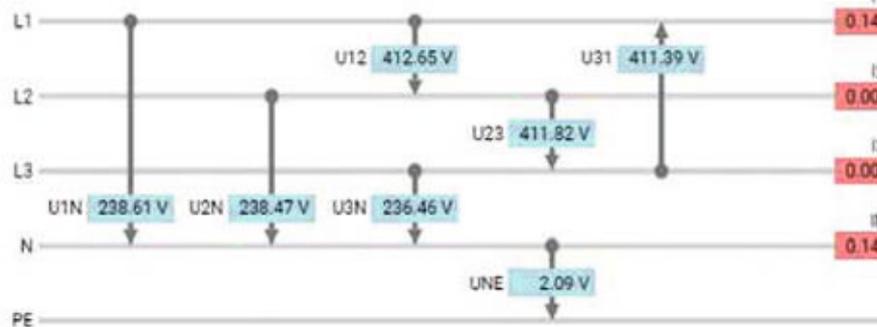
Display of the rotary field





> Momentanwerte

Übersicht Unsymmetrie Min/max Leistungsdreieck Quadranten min



	P [kW]	Q [kvar]	S [kVA]	PF	QF	LF
Sys	0.034	-0.001	0.058	1.000	0.000	0.000
L1	0.034	-0.001	0.034	1.000	-0.021	-0.000
L2	0.000	0.000	0.000	1.000	0.000	0.000
L3	0.000	0.000	0.000	1.000	0.000	0.000

F 49.968 Hz

# Intelligent measurement technology

## Webserver for Visualisation of the measured Values



control via iPad®



41053 communication center

40307 Power Quality analyzer



control via Pc

### Webserver

the webserver can be used for presenting and recording relevant parameters of the Power Quality analyzer II in tables, data loggings and bar charts by:

- › Pc
- › Projector
- › iPad

› smartphone  
 › Whiteboard  
 additionally, complex interrelations of currents, voltages, types of power (apparent power, active power, reactive power),  $\cos\phi$  and harmonics are represented graphically with well-known consumers.

the measuring device is particularly used in in experiment manuals on the subjects:

- › lighting technology
- › t transformers
- › electric drives etc.







Scarica il catalogo completo



Cataloghi digitali, alberi felici:  
scegli **Abintrax** che con **mydidactstore**,  
abbraccia la sostenibilità!

Concessionario



**Abintrax s.r.l.**

Via Marina del Mondo, 62 | 70043 Monopoli (Ba) Italy  
tel. +39 080 2149700 | [www.abintrax.com](http://www.abintrax.com) | [info@abintrax.com](mailto:info@abintrax.com)

[www.mydidactstore.it](http://www.mydidactstore.it)