

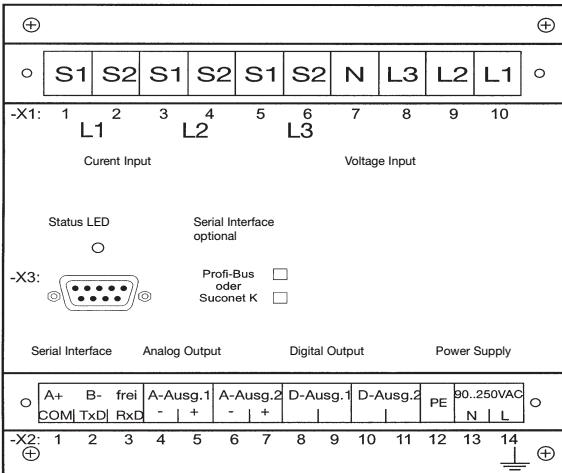
# UBN 400 Universal Power Meter



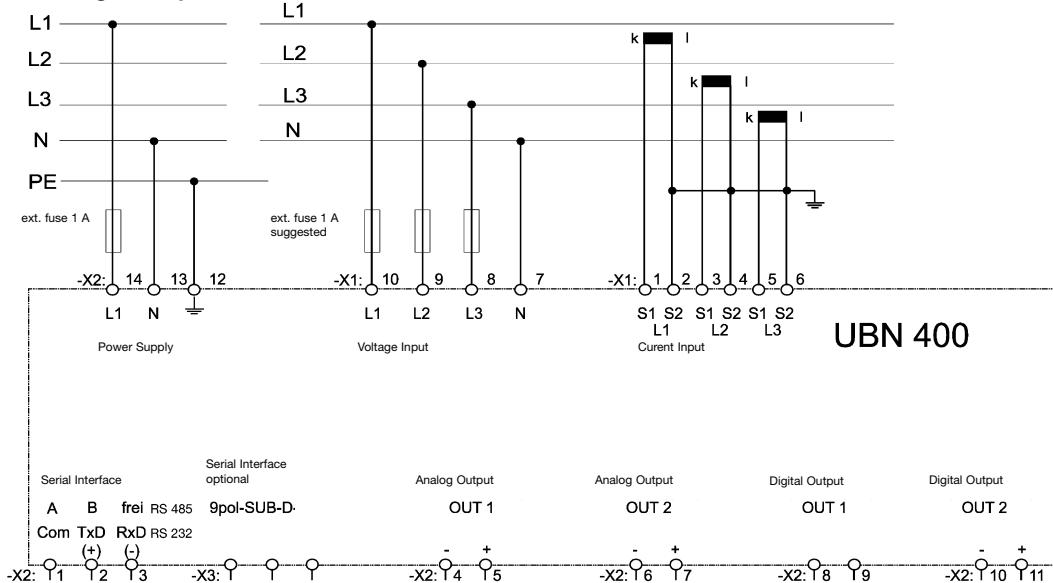
## Performable Measurements

Voltage [V]	U L1 - N, U L2 - N, U L3 - N U L1 - L2, U L2 - L3, U L3 - L1 U total (3-phase average)
Current [A]	I L1, I L2, I L3, I total
Power factor [PF]	PF L1, PF L2, PF L3, PF total (3-phase average)
Effective power [kW]	P L1, P L2, P L3, P total
Reactive power [kVAr]	Q L1, Q L2, Q L3, Q total
Apparent power [kVA]	S L1, S L2, S L3, S total
Average [15 min.]	Pav L1, Pav L2, Pav L3, Pav total I th1, I th2, I th3, I th total
Effective energy [kWh]	Wp L1, Wp L2, Wp L3, Wp total (bidirectional)
Reactive energy [kVArh]	WbL1, WbL2, WbL3, Wb total (ind./cap.)
Apparent energy [kVAh]	WsL1, WsL2, WsL3, Ws total (ind./cap.)
Extreme values	Imax L1, Imax L2, Imax L3, Imax total Pmax L1, Pmax L2, Pmax L3, Pmax total
Frequency [Hz]	f

## Terminals / Back view



## Wiring examples



## UBN 400 –

The new universal power meter for single phase and for 3-phase current networks. Including two programmable digital (optional analog) output and serial interface (RS 232/485). Available also with interface for Modbus RTU, Profibus-DP or Suconet K.

## Technical Specifications

<b>Power supply</b>	95 ... 265 VAC, 50/60 Hz external fuse necessary
<b>Power consumption</b>	max. 5 VA
<b>Voltage input</b>	UL - L 20 ... 500 VAC; permanent overload + 10 % peak 1000 V <sub>ms</sub> for 1 s input impedance 1,7 MΩ, burden max. 0,05 VA per phase voltage transformer suggested if UL - L > 460 VAC
<b>Current input</b>	0 ... 1 A / 0 ... 5 A (permanent overload up to 20 %, 100 % for 1 s) minimum measurable current 10 mA maximum measurable current 5 A
<b>Primary current</b>	1 A ... 9999 A in steps of 1 A adjustable
<b>Primary voltage</b>	10 V ... 999,99 kV in steps of 10 V adjustable
<b>Frequency range</b>	45 ... 65 Hz
<b>Accuracy</b>	current: 0,2 % fs voltage: 0,2 % fs power: 0,5 % fs energy: 0,5 % power factor: 1 % ± 1 digit von 0,5 ind. ... 1 cap. frequency: 0,5 % von 45 ... 65 Hz
<b>Display</b>	graphic LCD, green, 64 x 128 pixel, LED illumination
<b>Operating temperature</b>	-10 ... +50 °C (Feuchte < 80 %, nicht kondensierend)
<b>Storage temperature</b>	-10 ... +70 °C
<b>Output</b>	digital: 2 x relais, max. 350V <sub>AC/DC</sub> , max. 120 mA pulse length 20 ... 500 ms, adjustable analog*: 2 x Stromschmittstelle 0(4) ... 20 mA
<b>Norms</b>	EN 61010-1, EN 50081-2, EN 50082-1
<b>Housing</b>	full metal
<b>Protection</b>	Front side IP 40, terminals IP 20 acc. EN 60529
<b>Dimensions</b>	96 x 96 x 90 mm (w x h x d) incl. terminals panel cut-out 92 x 92 mm
<b>Terminals</b>	Voltage and current input via plug-in terminals max. 6 mm <sup>2</sup> Power supply, digital and analog out via plug-in terminals max. 4 mm <sup>2</sup>
<b>Weight</b>	appr. 650 g
<b>Warranty</b>	12 months

\*) = Option

Subject to change without notice

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# Go!



## The race is on

for the new universal power meter

# UBN 400

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