



# ReSENSE POWER

- 3-PHASE MEASUREMENT
- HARMONIC FREQUENCIES
- RELAY OUTPUT
- ETHERNET/WIFI CONNECTION
- MQTT PROTOCOL WITH TLS
- MODBUS-TCP/UDP



ReSENSE POWER devices offer non-intrusive 3-phase consumption measurement using current probes. Together with voltage monitoring, it can measure the power factor, and thus active, apparent, and reactive power. The package also includes a current probe for the N conductor to detect uneven load. ReSENSE POWER also offers the possibility of monitoring harmonic frequencies, which makes it possible to identify individual connected appliances or problematic loads like noisy Variable Frequency Drives. Using the integrated relay, it is possible to switch a power relay and thus control the connected load.

TECHNICAL SPECIFICATION	
MEASUREMENT PARAMETERS	
Resolution, accuracy, and sampling	24-bit resolution, 50 SPS, accuracy $<\pm 1\%$
Voltage	3x L-N 80-270VAC, L-L 150-470 VAC direct connection via terminals
Current probes	4x 100A 0.5% ( $\varnothing 16\text{cm}$ ) / 4x 300A 0.5% ( $\varnothing 36\text{cm}$ ) non-invasive 1m
Rogowski coils	4x $\leq 100\text{KA}$ 0.5% ( $\varnothing 70\text{cm}$ ) non-invasive 1m
Frequency	50/60Hz
Functionality	actual consumption, accumulated consumption (electricity meter)
Relay output	5A 230VAC / 30VDC
POWER SUPPLY	
Type	external source/passive PoE
Voltage	9-24V
Consumption	max. 2W
Protection	against reverse polarity
COMMUNICATION	
WiFi	2.4GHz 802.11 b/g/n WEP/WPA-TKIP/WPA2-CCMP/WPA3-PSK 2 dBi antenna, magnetic mount, 3m cable
Ethernet	10/100 Base-TX Auto MDI/MDI-X Passive PoE
Protocol	MQTT TLS/SSL + Modbus-TCP/UDP
HOUSING AND ENVIRONMENTAL	
Material,dimensions,protection	ABS, 72x109x74mm, IP20
Terminals and mounting	screw terminals 0.5-1.5mm <sup>2</sup> (28-16 AWG), DIN rail mounting
Operating (storage) conditions	-25 °C ~ +75 °C (-30 °C ~ +80 °C) 10 ~ 90% RH, non-condensing