

## Active Power Transducer Unit

"Four conductors, symmetrical"

**PMU150 (5A)**  
**PMU110 (1A)**

**PMU154 (5A)**  
**PMU114 (1A)**



### Function

The PMU1xx measuring transducers have a 4-quadrant multiplier which records the active power of the one-phase network connected with high precision. The active power is evaluated precisely, even with strongly distorted sine waves and failing half-sine waves. The total power is output at the 20mA output. Negative power (reverse power) is output at the output with negative current (-20mA). The unit is supplied with auxiliary voltage via the measuring voltage applied.

### Application

The measuring transformer is used in power supply units, emergency power supplies and interconnected networks for measuring, displaying or monitoring the active power in a 2- or 4-conductor AC current network. The input values come from power or current transformers as required.

The measuring transducer PMU150 (PMU110) is set according to user specifications. The maximum permissible current for the unit is 5A (1A) per phase. The maximum current without current transformer is 1155W (231W). When current transformers are connected, the currents are in the range of 3-5A (0,7-1A). The power is set in the factory according to customer specifications: rated voltage, rated power, turns ratio of current transformer. The customer can adjust the output value (internal adjuster).

The measuring transducer PMU154 (5A) or PMU114 (1A) is used for 4-20mA applications.

### Technical Data

Type	Active Power Transducer Unit PMU150, PMU110, PMU154, PMU114
Construction	Plastic housing on 35mm hat rail as per DIN EN 50022
Material of housing	Bayblend FR 1439/0240 modified ABS with burning protection UL 94 VO
Dimension, Weight	55x68x110mm (WxHxD), ca. 0.4 kg
Rated voltage	231V (L-N) +/- 20%, 50/60Hz, other voltages on request
Measuring delay	appr. 100 ms
Input Rated Current	5A (PMU150, PMU154), 1° (PMU110, PMU114), max current 120%, 200% up to 30 sec
Output signal	linear up to 120%, 100% = +/- 20mA with 500 Ohm load (PMU150 and PMU110) 4-20mA with 500 Ohm load (PMU154 and PMU114)
Class of accuracy	1,0%
Power consumption	2.5 VA
On period	100 %
Connecting terminals	for wire connection up to 2,5 mm <sup>2</sup>
Type of protection	Housing IP 40 , Terminals IP 20 ( VDE 0106T100/VBG4 )
Temperature range	-10 °C to +55°C, 95% Humidity
Mains isolating	EN 60 742 (Safety transformers)
General Regulations	EN 50 178 (electrical units in power current installation)
Radio interference	EN 55 022/B
EMV	EN 61000 und EN V 50 140
Installation position	Any position
Maintenance	Free of maintenance

Remark: 4-wire symm. = used designation