

PSU MONITOR POWER SUPPLY MANAGING UNIT FOR 1-PHASE HIGH VOLTAGE AND 1-PHASE LOW VOLTAGE

- Network parameters monitoring
- Remote access via GSM network
- Redundant operation with battery
- Outside construction
- Max. current feed through 18A (60VAC)

GENERAL DESCRIPTION

The PSU monitor device is able to monitor and control the CATV network remote power supply. It was developed for continuous monitoring the 1 phase 50Hz network and its voltage and current characteristics.

Continuous communication with a computer is not necessary but there is a possibility for remote access by the built-in GSM module. Device remote access and remote update is possible by the built-in GSM module. The PSU monitor is continuously monitoring the 230V network parameters regarding the below mentioned problems. Should anyone of these occur the 60V remote CATV network will be switched off from the power network by a relay. This relay will be switched off until the measured parameters are not in the right range! There is a possibility to order a solid-state relay. It protects the power network against the blasts which come from the CATV network.

In case the power goes off you can continuously monitor the parameters because there is a built-in battery. Monitor is done by standard SNMP protocol. Necessary MIB files are available free of charge.

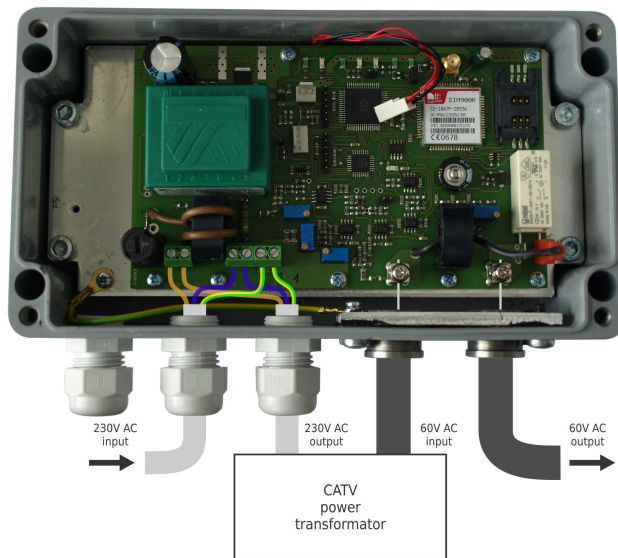
Sample rate is 40ms. PSU monitor makes average values -from network parameters- and supervises the below mentioned parameters regarding the EN 50160:

- 1) **Overvoltage:** The 40ms average value is 10% higher than the nominal value. The voltage should be lower then the 110% average value to cancel overvoltage.
- 2) **Dip:** The 40ms average value is 20% lower than the nominal value. To cancel voltage should be minimum 90% of nominal value.
- 3) **Voltage failure:** Voltage falls under the 10% of nominal value. To cancel voltage should be minimum 90% of nominal value.
- 4) **Vibration:** 5% - Instantaneous voltage chancing value (the 40ms average value minus previous value in absolute value) is bigger or equal to 5% of nominal voltage value but lower then 10% of nominal voltage.
10% - Instantaneous voltage chancing value (the 40ms average value minus previous value in absolute value) is bigger or equal to 10% of nominal value.

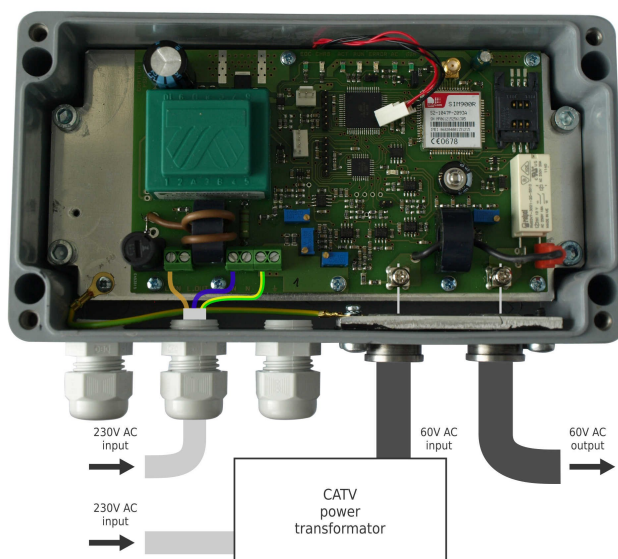
Specifications are subject to change without notice!

In normal case device supervises the right voltage and current values on primer and on secunder side too. There is a possibility to use alternative connection: network voltage is connected directly to the primer side. Primer side current is not supervised but the installation is easier.

PSU Monitor
Normal connection



PSU Monitor
Alternative connection



TECHNICAL PARAMETERS

Device parameters

Operation network voltage [VAC]	230
Power consumption [VA]	max. 5
GSM antenna connection type	SMA
Dimensions [mm]	120x220x90
Housing material	Forced polyester with molded fiberglass
Degree protection	IP65
Temperature range [°C]	-25...+50
Connector type	PG11 and 5/8"

Monitored network parameters (primer side)

Current [A]	0...12.8 ⁽¹⁾
Voltage range [V]	0...511 ⁽²⁾

Monitored CATV network parameters (secunder side)

Current [A]	0...25.6 ⁽³⁾
Voltage range [V]	0...128 ⁽⁴⁾

Remote monitored parameters

- Network voltage + current
- CATV network voltage + current
- CATV network voltage isolation relay status
- Network voltage isolation relay status
- Aggregate Query Error
- Event-memory check
- Date/Time check
- GSM signalquality parameters check

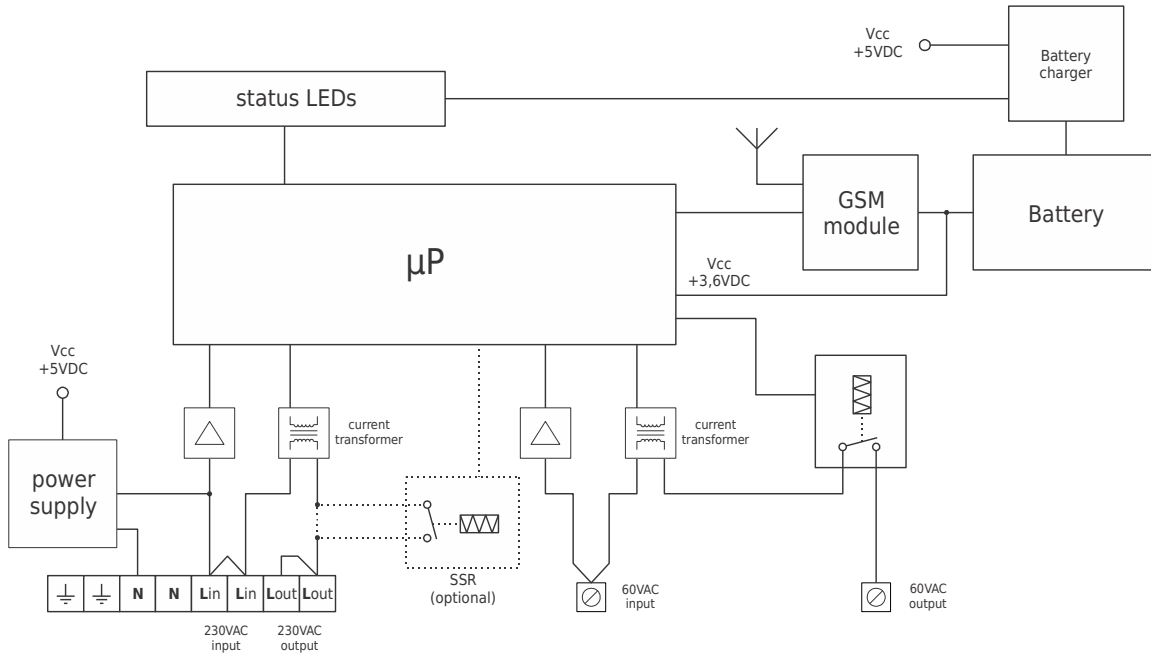
(1) 25mA resolution, ±3% accuracy

(2) 1V resolution, ±3% accuracy, Peak-To-Peak value

(3) 50mA resolution, ±3% accuracy

(4) 0.25V resolution, ±3% accuracy

BLOCK DIAGRAM



ORDERING INFORMATION

P S U M o n i t o r