



SECURITY ALARM & MONITORING:

How to connect TPS12 power supply to the module GTalarm2?
How to configure connected system for AC loss, AC OK function?

STEP BY STEP:

- Prepare the module GTalarm2
- Install configuration software SERA2 to your PC.
- Configure the module GTalarm2.
- Install the module GTalarm2 .
- Connect the TPS12 power supply and battery to the module GTalarm2.

APPLICATIONS:

- Security system,
- Emergency lighting system,
- Alarm system,
- UPS system,
- Central monitoring system,
- Access systems

FEATURES:

- Universal AC input / Full range
- Protections: Short circuit / Overload / Over voltage
- Battery low protection / Battery reverse polarity protection by fuse
- Alarm signal for AC OK and Battery low
- Cooling by free air convection

DESCRIPTION:

TPS12 series is a 36W AC/DC security power supply, allowing the universal input range between 90VAC and 264VAC and incorporating the built-in PFC function. In addition to the primary output, there is a charger output, with a smaller rated current, providing the backup application the security access systems normally need.

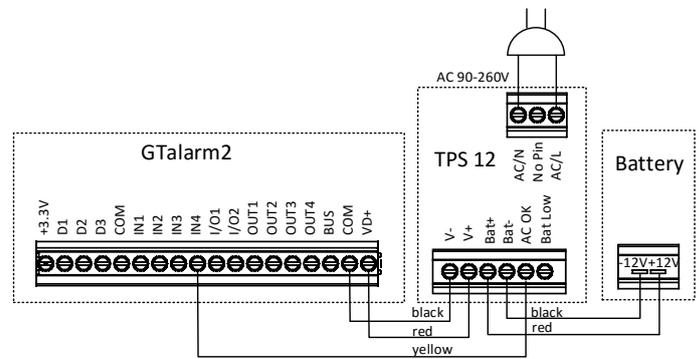
TPS12 delivers an efficiency up to 86%; it can operate with air convection under -30°C through 70°C. This series is designed with thorough alarm features, including AC OK and battery low signaling; moreover, the relay contact is provided to facilitate use system designs.

SUGGESTED APPLICATION WITH GTALARM2 MODULE:

Backup connection for AC interruption

It is possible to supply the security system from stabilized power supply source 10-15 V and not less than 1,5A. It is necessary to calculate max current of power supply. The current of the alarm system is the current used by sensors, relays, siren and other devices. It is most convenient to use power supply source applied for power supply of security systems with the option to connect backup lead battery.

The power supply charges the battery and provides energy to the load at the same time when the AC main is OK. The battery starts to supply power to the load when the AC mains fails. Please refer to the connection diagram for suggested connection.



Alarm Signal for AC OK and Battery Low

Alarm Signal is sent out through "AC OK" & "Battery Low" pins.

An external voltage source is required for this function. The maximum applied voltage is 50V and the maximum sink current is 30mA.

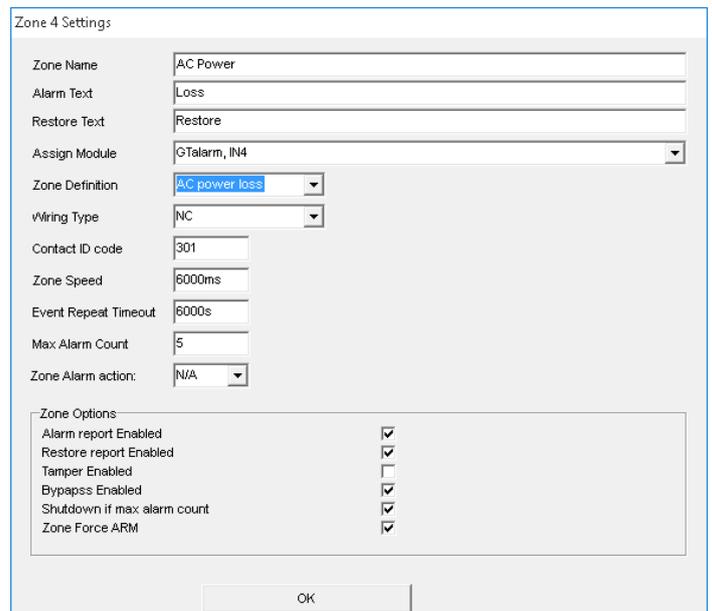
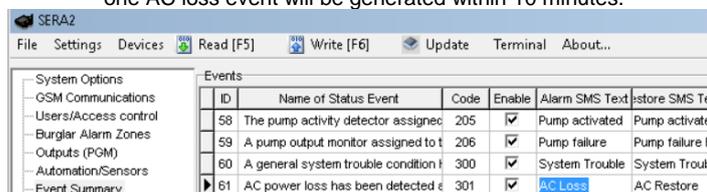
Function	Description	Output of alarm
AC OK	The signal is "Low" when the power supply turns on	Low (0.3V max. at 30mA)
	The signal turns to be "High" when the power supply turns OFF	High or open (External applied voltage 50V max.)
Battery Low	The signal is "Low" when the voltage of battery is under A:11V, B:22V	Low (0.3V max. at 30mA)
	The signal is "High" when the voltage of battery is above A:11V, B:22V	High or open (External applied voltage 50V max.)

The example how to configure the module GTalarm2 for AC failure, restore function

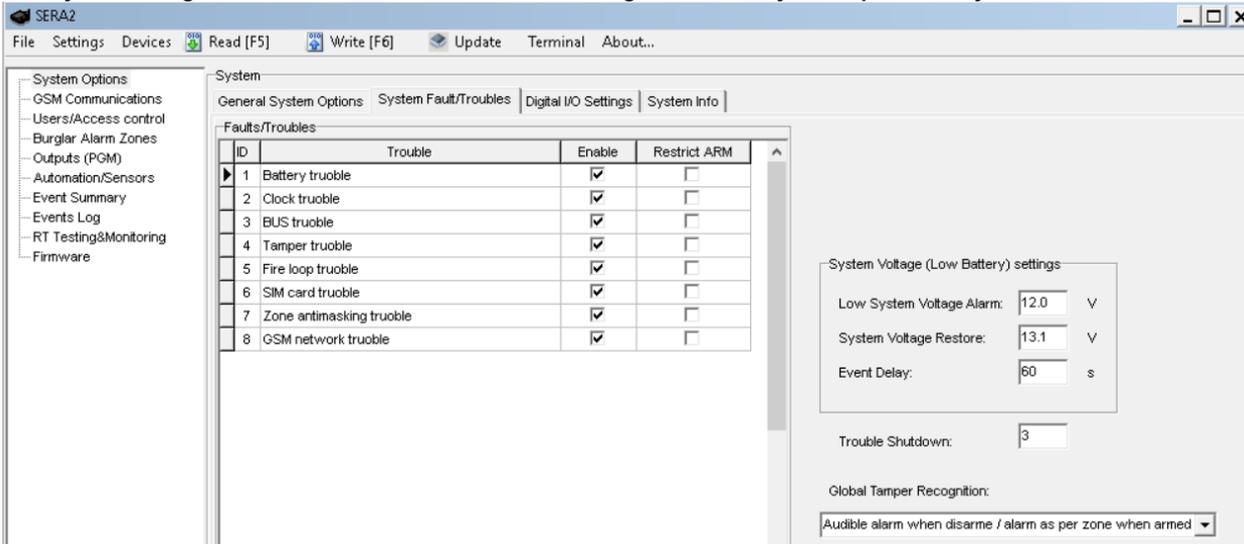
Go to "Burglar Alarm Zones" window in the Sera2 software. Double click on zone row and enter the required parameters. Press "save" icon.

The text, related with AC Failure could be editable in these windows

- Set "Zone Name" text to "AC Power" in the window "Burglar alarm zones".
- Set Alarm and Restore text. E.g. "Loss" and "Restore"
- Select "Zone definition" to AC power loss
- Wiring type NC
- CID code is assigned (CID 301)
- To eliminate short AC Grid disturbance. Set "Zone Speed" time minimum 6000ms. It Means if AC loss time is more than 1min. AC loss event will be detected.
- To avoid repeatable AC loss event generation, Max alarm count can be set to 1 and "Event Repeat Timeout" can be set to 600s , it means only one AC loss event will be generated within 10 minutes.



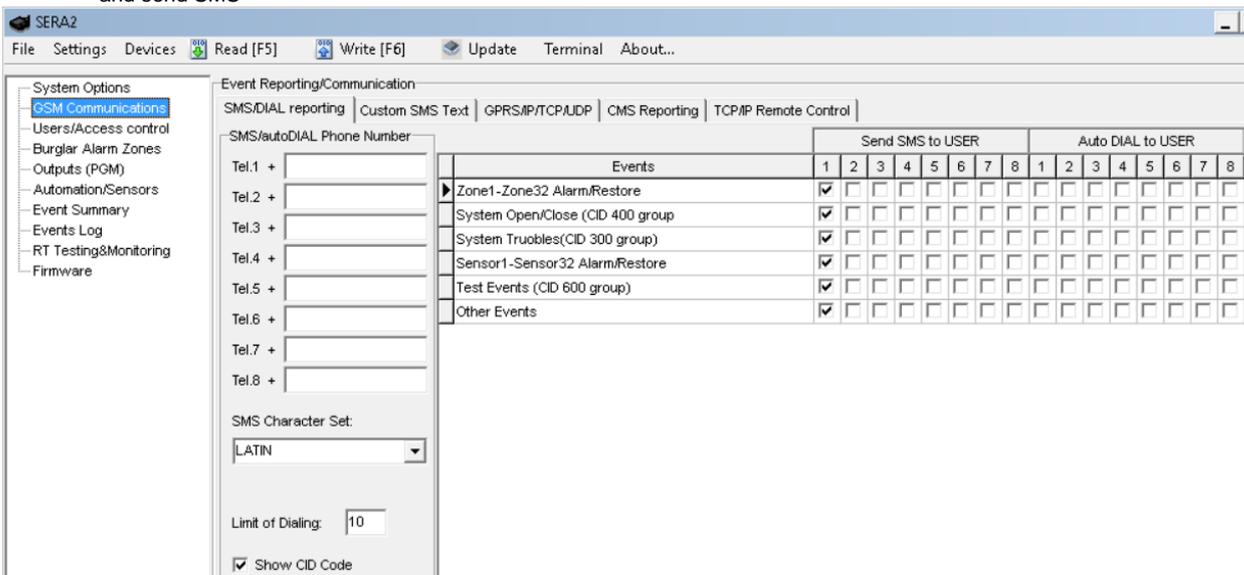
Low system voltage alarm and restore levels should be configured in the “System Options” > System Fault/ Troubles” window.



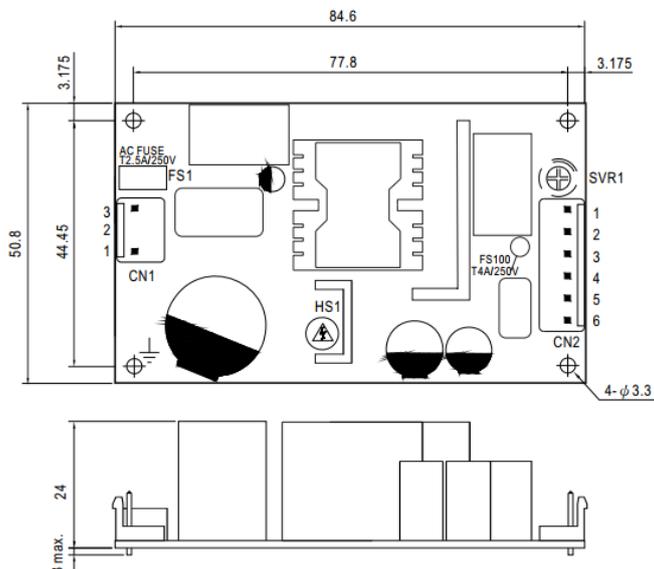
- If the box near “Battery trouble” line will be marked, when low battery level will be reached, the system will send alarm message.
- Low system voltage alarm and restore levels should be defined.
- Setting of the allowable number of the same trouble event should be defined in the “Trouble Shutdown” field.

SMS & Dialing (Call) to the user in case of low system voltage alarm

- Go to “GSM communication” > “SMS/DIAL reporting” window.
- Enter User’s phone numbers
- In communications Events filter Row “System Troubles (CID 300 group)” check the checkboxes to which the telephone number you want to call and send SMS



MECHANICAL SPECIFICATION



DC Output Connector	
1	Bat Low
2	AC OK
3	Battery -
4	Battery +
5	+V
6	-V

AC Input Connector	
1	AC/N
2	No Pin
3	AC/L