POWERMASTER-NPS2400

Configuration and diagnostic tool

User Manual



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1 Introduction

POWERMASTER-NPS2400 is a software tool used to configure and monitor the operation of NPS2400.

Reader of this document should be familiar with the mentioned product, at this purpose reading of the NPS2400 user manual is recommended.

With **POWERMASTER-NPS2400** the user can:

- Monitor the device status.
- Update the firmware.
- Read and write the device configuration.
- Read and write the configuration from/to a file.
- Read the logs.
- Read and write the logs from/to a file.

2 Installation

Simply run "SETUP-POWERMASTER-NPS2400-XX.exe" (where XX is replaced with the release number) and follow the instructions on the screen until the end of the installation process.

POWERMASTER-NPS2400 application can be installed on any PC running windows XP, windows 7 (32 and 64bits) or window 8 (32 and 64bits).

USB driver are bundled with **POWERMASTER-NPS2400** application. Install the application before connecting the device to the PC with USB.

3 Functional description

User can operate the application in two ways:

- Offline: This mode is active when the device is disconnected from the PC. The user can perform a limited number of activities, all activities that require the device connected are disabled.
- Online: This mode is active when the device is connected to the PC. The user can benefit of all the functionalities.

To connect the NPS2400 to the PC the CommBox (Communication Box) is mandatory. The CommBox must be inserted into the dedicated slot on the NPS2400 (see Figure 1) and plugged to the PC using the provided USB cable. Connect the main supply input to power on the device.



In case only single phase is available, it is possible to connect neutral and phase between L1 and L2 to power on the device. The DC output will not work and the under voltage alarm will be shown on the screen, but it will be possible to communicate with the device.

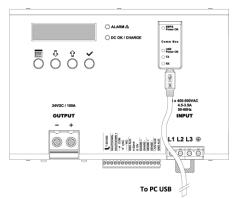


Figure 1: CommBox connection

There are 4 different activities that can be performed, each one related to a tab, as shown on Figure 2 and described later.

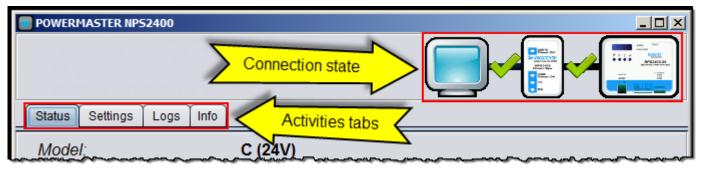


Figure 2: NPS2400 activities and connection state

The top of the page shows the connection state. Depending on the connection state the image changes as shown on the table below.

PC – CommBox disconnected, CommBox – NPS2400 disconnected
PC – CommBox connected, CommBox – NPS2400 disconnected

		PC – CommBox connected, CommBox – NPS2400 connected
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Table 1: NPS2400 connection state

3.1 Status

To view the connected device status select the "**Status**" tab as shown on Figure 3.

If the device is connected to the PC the fields are automatically read and updated once per second, otherwise the string "**Not connected**" is displayed.

Statu	IS :	Settings	Logs	Info				
Мо	del:				C (24V)			
De	vice	name:			NPS2400			
De	vice	S/N:			1182400030			
Ave	ərag	e output	t power		25W			
Ave	ərag	e outpu	t currei	nt:	1A			
Ave	ərag	e tempe	erature.		50.5C			
Po	ver c	on cycle	S .'		70cycles			
Ope	erati	ing time			7d 22h 28m 10s			
Far	1 ор	erating t	ime:		6d 13h 26m 19s			
Far	n spe	eed (0-3) :		1			
Inp	ut vo	oltage:			393V	320V		560V
Out	put	voltage:			24.02V	11V		29V
Out	put	current:			0.0A	0A		100A
Out	put	power:			1W	ow		2400W
Inte	ernal	l temper	ature:		49.8°C / 121.7°F	0°C / 32°F		115°C / 239
Em	viron	nmental	tempe	rature	19.8°C / 67.7°F	0°C / 32°F		100°C / 212

Figure 3: NPS2400 status

3.2 Settings

This tab contains all the device settings, 4 buttons are available to the user:

- Read from device: Used to read the settings from the connected device. This button is enabled only if a device is connected.
- Write to device: Used to write the displayed settings to the connected device. This button is enabled only if a device is connected.
- Read from file: Used to read settings from previously saved file.
- Write to file: Used to write the displayed settings to a file. The file type is .xml.
- Read on connection: Select to automatically read settings on device connection.

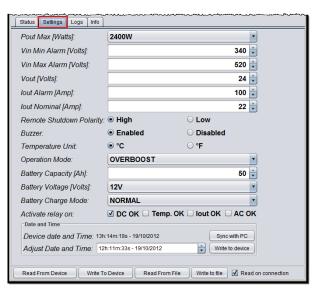


Figure 4: NPS2400 settings

3.3 Logs

The log panel shows the logs present on the device, 4 buttons are available to the user:

- Read from device: Used to read the logs from the connected device. This button is enabled only if a device is connected.
- **Read from file**: Used to read logs from a previously saved file.
- Write to file: Click to write the logs to a file. The file type is .xml.
- Export to excel: Click to export the logs in excel format.
- Read on connection: Select to automatically read logs on device connection.

Description	Value	Time
EVENT: POWER ON		Fri, 19 Oct 2012 @ 10h54m19s
EVENT: POWER ON		Thu, 18 Oct 2012 @ 11h53m37s
EVENT: POWER ON		Mon, 01 Oct 2012 @ 09h48m19s
EVENT: POWER ON		Wed, 26 Sep 2012 @ 12h15m31s
EVENT: POWER ON		Mon, 24 Sep 2012 @ 14h57m40s
EVENT: POWER ON		Mon, 24 Sep 2012 @ 13h50m44s
EVENT: POWER ON		Mon, 24 Sep 2012 @ 13h49m12s
ALARM: OVER LOAD END	13A	Fri, 21 Sep 2012 @ 14h49m17s
ALARM: OVER LOAD START	10A	Fri, 21 Sep 2012 @ 14h48m53s
EVENT: POWER ON		Fri, 21 Sep 2012 @ 14h47m01s
EVENT: POWER ON		Tue, 18 Sep 2012 @ 10h11m51s
EVENT: POWER ON		Mon, 17 Sep 2012 @ 13h51m12s
EVENT: POWER ON		Thu, 13 Sep 2012 @ 10h43m02s
EVENT: POWER ON		Thu, 13 Sep 2012 @ 08h07m06s
ALARM: OVER LOAD END	15A	Wed, 12 Sep 2012 @ 16h17m08s
ALARM: OVER LOAD START	11A	Wed, 12 Sep 2012 @ 16h16m57s
EVENT: POWER ON		Wed, 12 Sep 2012 @ 16h11m37s
ALARM: PHASE LOSS END		Wed, 12 Sep 2012 @ 16h07m35s
ALARM: PHASE LOSS START		Wed, 12 Sep 2012 @ 16h07m31s
ALARM: OVER LOAD END	153A	Wed, 12 Sep 2012 @ 16h03m29s
ERROR: SHORT CIRCUIT		Wed, 12 Sep 2012 @ 16h03m25s
Read from device Read		AD DOG 0040 O 40500 mode

Figure 5: NPS2400 logs

3.4 Info

From the info panel user can view the firmware version, name and serial of the connected NPS2400. The "**Update**" button is used to update the device with a new firmware.

User can change the name of the device from this panel.

Status Settings	
	RMASTER S2400
FW version:	v1.13 (latest available v1.18) Update
Name:	NPS2400C Change
Serial number	121282400098
Service mode	Disabled Enable

Figure 6: NPS2400 info





The firmware is bundled with the executable. The application will automatically choose the latest firmware version and download it to the device.



If the update procedure fails the device will not work and the LCD screen stays off, but even from this status the device can be recovered. In this case please check the connection between the PC and the device. Ensure that the CommBox is well inserted into the NPS2400 slot and then launch the update procedure again.