



Power Supply SNMP Interface
User manual
for SR...**HL** & ...**L** versions

Table of Contents

1. INTRODUCTION	3
1.1 Default IP Address	3
2. LOGIN	4
3. MONITORING & CONTROL	5
3.1 CONTROL	6
3.2 MONITORING	6
3.3 THRESHOLDS	6
4. NETWORK SETTINGS	7
4.1 Disabling DHCP – allocating a static IP address	7
4.2 Enabling DHCP	8
4.3 Changing Static IP from one to another	8
5. PSU CONFIGURATION	9
5.1 Understanding PSU Configuration Terms	9
6.1 Understanding SNMP Configuration Terms:	11
7. SYSLOG CONFIGURATION	12
7.1 Understanding Syslog Configuration Terms:	12
8. FIRMWARE UPGRADE & PASSWORD CHANGE	13
8.1 Change Password	13

1. INTRODUCTION

Innovative Energies **Ethernet** enabled DC power supplies and **No-Break DC** UPS can be accessed via a network connection to provide accurate information for the monitoring of critical power systems.

These models will have the suffix **-LAN+** in the model code. This user manual refers to units using **SNMP** protocol.

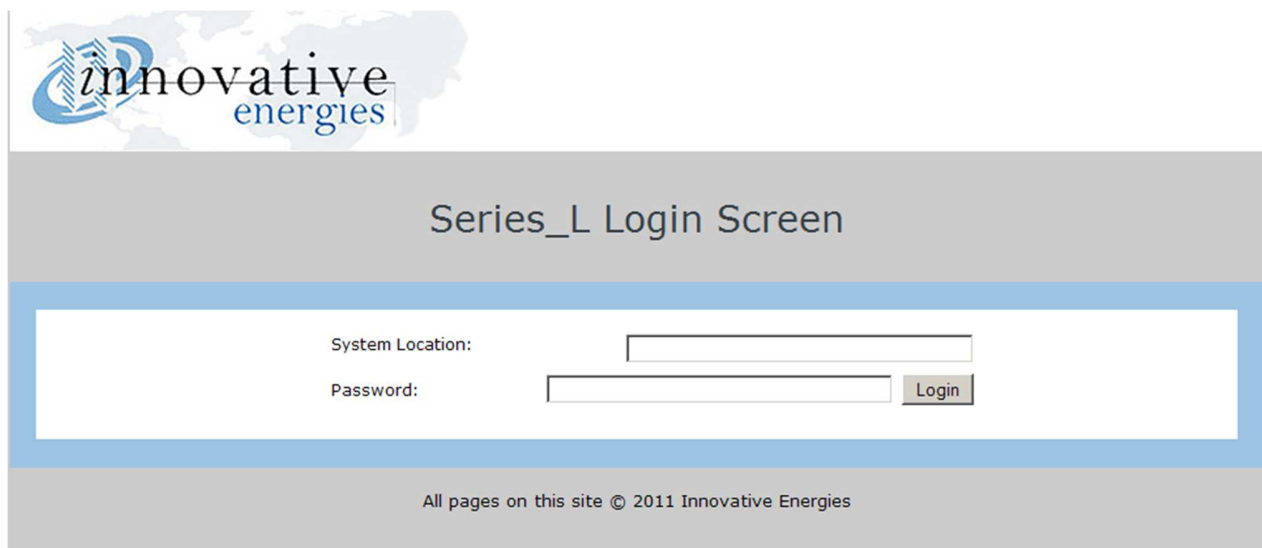
1.1 Default IP Address

Unless specified otherwise at the time of ordering we set a static IP address of 192.168.2.10.

The built in web server may also be set to **DHCP enabled**, in which case the network it is connected to will need to have a DHCP server to allocate an ip address to the unit. Refer to <http://www.snmp.co.nz/> for further information. You will need to use some proprietary software, eg. Radmin <http://www.advanced-ip-scanner.com/> to find the IP address allocated to the device.

Using a web browser, eg. Internet Explorer, Firefox, Chrome, type the IP address into the url address box of the web browser, eg. 192.168.2.10.

The following screen will appear:



The screenshot shows a web browser window displaying the login interface for Innovative Energies. At the top left is the logo for Innovative Energies, which includes a stylized globe and the text 'innovative energies'. The main heading is 'Series_L Login Screen'. Below this is a white rectangular area containing the login form. The form has two input fields: 'System Location:' followed by a text box, and 'Password:' followed by a text box. To the right of the password field is a 'Login' button. At the bottom of the page, there is a footer that reads 'All pages on this site © 2011 Innovative Energies'.

2. LOGIN

The default password is: **iepassW1** (Note that the password is case sensitive)

Insert the default password into the 'Password box.

Note: The 'System Location' field can be changed/personalised on the 'SNMP Configuration' web page (see page 14).

Click on 'Login' with the mouse (Note that in some browsers pushing the 'Enter' key to log-in may not work)

3. MONITORING & CONTROL



Monitoring & Control

SR100L12T

- **Monitoring & Control**
- Network Settings
- PSU Configuration
- SNMP Configuration
- Syslog Configuration
- Firmware Upgrade
- Contact Details

CONTROL

MONITORING

Power Supply Status:	Good
DC / Battery Status:	Normal
Output Voltage:	13.7
PSU Current:	0.0
Temperature:	23
Temperature Log Low:	23
Temperature Log High:	27

THRESHOLDS *(Please note that only integer values are accepted)*

Temperature High Threshold (degC):	<input type="text" value="45"/>
Temperature Low Threshold (degC):	<input type="text" value="-15"/>
Over Voltage Threshold(V):	<input type="text" value="99"/>
Psu Current Threshold(A):	<input type="text" value="99"/>

3.1 CONTROL

Reset Temperature Log: Resets the temperature log.

3.2 MONITORING

Power Supply Status: 'Good' = Input voltage (mains) present
'Mains failure' = No input voltage

DC/Battery Status: 'Normal' = DC output > V low
'Low' = DC voltage at output < Vlow (PSU or battery, if connected)

Output Voltage: DC voltage at output (PSU or battery, if connected)

PSU Current: Current supplied by PSU

Temperature: Temperature reading is taken from the temperature sensor which is normally placed near the batteries. If no temperature sensor is fitted the displayed value is N/A.

Temperature Log Low: Displays the lowest temperature recorded

Temperature Log High: Displays the highest temperature recorded

3.3 THRESHOLDS

Threshold values can be set by the user according to their requirements. SNMP trap (alert) messages will be sent when one of the thresholds are exceeded. The units for the threshold fields are:

Temperature High/Low: degrees C

Over Voltage: Volts

PSU Current: Amps

4. NETWORK SETTINGS

This page enables the user to set a static IP address, eg. 192.168.2.10 or enable DHCP function.

innovative energies

Network Settings

SR100L12T

- Monitoring & Control
- Network Settings**
- PSU Configuration
- SNMP Configuration
- Syslog Configuration
- Firmware Upgrade
- Contact Details

MAC Address:	<input type="text" value="00:20:4a:e0:99:7d"/>
DHCP Client:	<input type="text" value="Enable"/>
IP Address:	<input type="text" value="192.168.101.123 (DHCP)"/>
Network Mask:	<input type="text" value="255.255.255.0 (DHCP)"/>
Gateway:	<input type="text" value="N/A (DHCP)"/>

Note: Remove (DHCP) from ip addresses text box before disabling dhcp

All pages on this site © 2011 Innovative Energies

4.1 Disabling DHCP – allocating a static IP address

To disable DHCP follow the steps below:

- Set DHCP Client to '**Disable**'
- Type in the desired **IP address** eg.192.168.2.10 (this is the ex factory default unless otherwise specified at time of order)
- Remove 'DHCP' and all preceding spaces from the **Network Mask** field.
- Leave the **Gateway** field blank.
- Click on the 'Submit' button

4.2 Enabling DHCP

To enable DHCP if your device has a static IP address:

- (a) Set DHCP Client to **'Enable'**
- (b) Leave all other fields blank
- (c) Click on the 'Submit' button

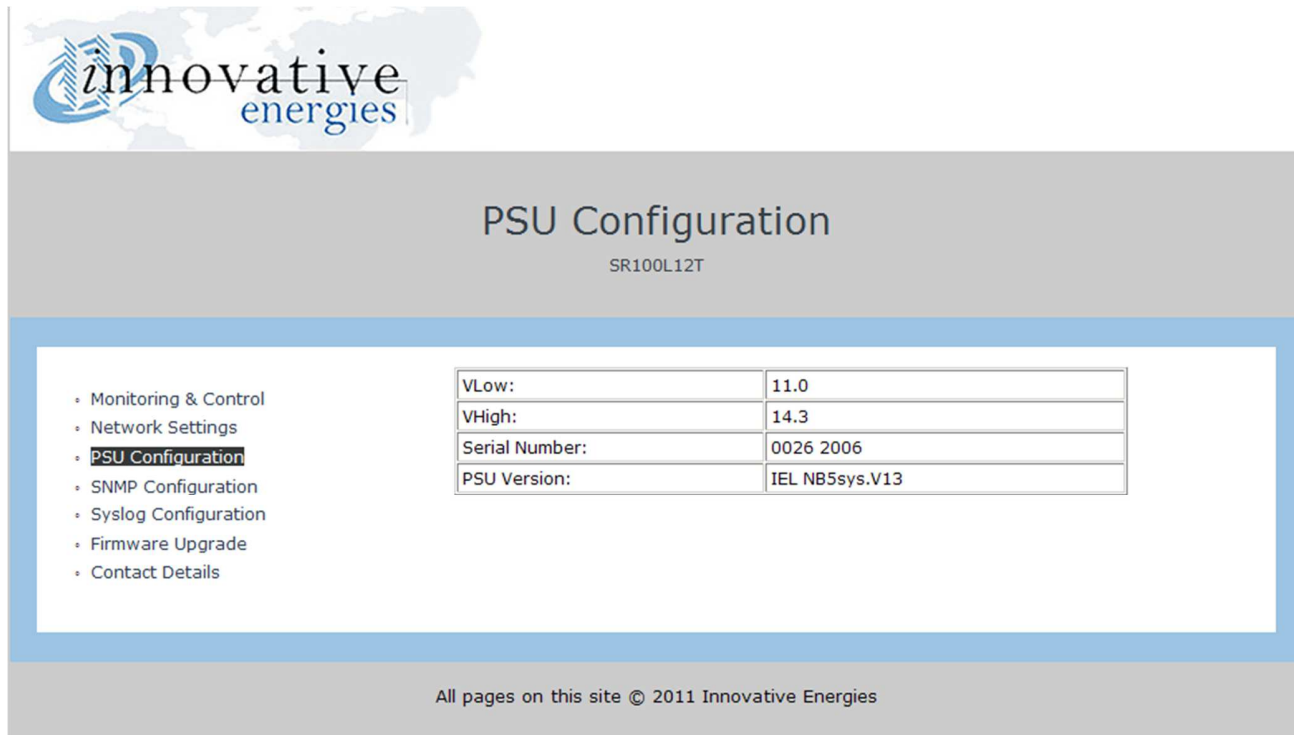
4.3 Changing Static IP from one to another

To change the IP if your device has a static IP address:

- (a) Type in the desired **IP address** eg.192.168.100.53
- (b) Delete the gateway address (255.255.255.255) and leave it blank
- (c) Click on the 'Submit' button

5. PSU CONFIGURATION

This page displays the parameters programmed into the firmware of the power supply. These parameters are programmed in the factory and are not able to be changed by the user.



The screenshot displays the 'PSU Configuration' page for model SR100L12T. It features the Innovative Energies logo at the top left. A navigation menu on the left includes: Monitoring & Control, Network Settings, **PSU Configuration**, SNMP Configuration, Syslog Configuration, Firmware Upgrade, and Contact Details. The main content area contains a table with the following parameters:

VLow:	11.0
VHigh:	14.3
Serial Number:	0026 2006
PSU Version:	IEL NB5sys.V13

At the bottom of the page, a footer states: 'All pages on this site © 2011 Innovative Energies'.

5.1 Understanding PSU Configuration Terms

VLow: Voltage at which a 'DC Low' alarm signal and SNMP trap are generated

VHigh: Voltage at which a 'DC High' alarm signal and SNMP trap are generated

Serial Number: Serial Number of the power supply

PSU version: Power supply revision version number

6. SNMP CONFIGURATION

All fields are customisable and may be specified by the user to suit their specific applications.

SNMP traps (alerts) can be monitored using a SNMP manager of the user's choice.

The user may select which traps are set by changing the 'alarm trap mask code' which is accessed by using a MIB Browser such as 'iReasoning MIB Browser'.

The default code for the 'alarm trap mask' is set at 1048187. A new code may be calculated by using the excel spreadsheet available at <http://www.innovative.co.nz/service/SNMP>, by clicking on 'ALARM MASK CALCULATOR'. Simply insert '1' into the required yellow column to enable a trap or insert '0' into the required yellow column to disable a trap.

MIB files are available by going to www.innovative.co.nz and clicking on 'Communication Enabled DC' on the side menu bar.

Alarm traps may be resent if a fault continues to persist. The 'resent time' can be set by modifying the SNMP variable 'TrapPeriodicResendTimeinMinutes'. The 'resent time' range for resending traps is between 30minutes and 10079 minutes (7 days). If the user sets the range outside of these parameters, it will default to 1440 (24hours) which is also the factory default for a new device.

Note: The new settings only take effect after performing a 'software' reboot of the power supply web server.

SNMP Configuration
SR100L12T

- Monitoring & Control
- Network Settings
- PSU Configuration
- SNMP Configuration**
- Syslog Configuration
- Firmware Upgrade
- Contact Details

SNMP Trap:

Read/Write Community:

System Contact:

System Name:

System Description:

System Location:

Trap Destination IP:

SNMP Trap Port:

SNMP Agent Port:

6.1 *Understanding SNMP Configuration Terms:*

SNMP Trap:	An alert message that the user can enable or disable.
Read/Write Community:	Identifies groups and their set permission rights. The default setting for this is 'iepublic'
System Contact:	This is user specified and able to display names, phone numbers or email addresses
System Name:	This area is user specified
System Description:	This area is user specified
System Location:	This area is user specified
Trap Destination IP:	Identifies where the alert message is to be sent. The user specifies the IP Address of the PC they want the SNMP traps (alerts) sent to
SNMP Trap Port:	Displays the port number of the SNMP trap (default is 162)
SNMP Agent Port:	Displays the port number of the SNMP agent (default is 161)

7. SYSLOG CONFIGURATION

The Syslog is used for recording SNMP syslog messages.

SYSLOG Configuration
SR100L12T

- Monitoring & Control
- Network Settings
- PSU Configuration
- SNMP Configuration
- **Syslog Configuration**
- Firmware Upgrade
- Contact Details

SYSLOG:

SYSLOG Server IP:

SYSLOG Port:

7.1 Understanding Syslog Configuration Terms:

- Syslog:** The syslog can be enabled or disabled
- Syslog Server IP:** This displays the user specified IP address that is used for monitoring the Syslog data
- Syslog Port:** This displays the port number of the PC setup to monitor the Syslog (default is 514)
- SYSLOG Update:** This function refreshes all of the user specified data above

8. FIRMWARE UPGRADE & PASSWORD CHANGE

Firmware Upgrade
SR250L24T

- Monitoring & Control
- Network Settings
- PSU Configuration
- SNMP Configuration
- Syslog Configuration
- Firmware Upgrade**
- Contact Details

Current LAN firmware version: ie_x2p_02r_a12

Enter LAN firmware filename:
firmware.img
Upgrade and Reboot

Change Password
New Password:
New Password: (Confirm)
Save Password

This page is used to update the software to the latest version. This is done by using a standard FTP programme such as the Filezilla Client available at: www.filezilla-project.org.

For detailed instructions on how to do this using Filezilla go to:

<http://innovative.co.nz/uploads/Filezilla%20instructions.pdf>

Default settings are: **User Name:** root **Password:** iepassW1

The upgrade file is always named '**firmware.img**' and needs to be transferred to the **/mnt/flash** folder in the web server built into the power supply.

Notes:

- After completing the firmware upgrade the power supply will automatically reboot and you will need to log-in again.
- As at 22 July 2015, the current firmware version is '02r_a12'.

8.1 Change Password

The default password is **iepassW1** and may be updated by the user. Please note that there is no facility to reset a lost or forgotten password (as this would defeat the purpose of a password) and the unit will have to be returned to the factory for reprogramming.







**Helios Power Solutions
Australia**

Unit 6, 2-8 South St, Rydalmere
Meadowbank, Sydney,
NSW, Australia, 2116

P: +61 2 7200 9200

Sales: sales@heliosps.com.au

Service: service@heliosps.com.au

**Helios Power Solutions
New Zealand**

3 Heremai Street,
Henderson, Auckland,
New Zealand, 0612

P: +64 9 835 0700

Sales: sales@heliosps.co.nz

Service: service@heliosps.co.nz

**Helios Power Solutions
Middle East & Asia**

168 Robinson Road,
#12-01 Capital Tower
Singapore 068912

P: +65 6871 4140

Sales: sales@heliosps.asia

Service: service@heliosps.asia