

***i-com* SERIES EXTERNAL
RS232 to TCP/IP
COMMUNICATION ADAPTER
(RS-NET)**



INSTALLATION AND USER MANUAL

Thank you for selecting our product to protect your electrical equipment.

The Modbus adaptor has been designed with the utmost care. We recommend that you take the time to read this manual to take full advantage of the many features of your new equipment.

Environment

Our staff pays great attention to the environmental impact of its products during the design and manufacture stages, through to the end of its life cycle.

- This product complies with the most strict regulations.
- It does not contain CFCs or HCFCs

Recycling of packing materials

Packing materials were selected to facilitate recycling. Please make sure they are correctly recycled in compliance with all applicable regulations.

Special precautions

- If the adaptor must be stored prior to installation, storage must be in a dry place
- The admissible storage temperature range is -10 C to +70 C.

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1. Introduction

1.1 Unpacking and Checking Contents

EXTERNAL RS-NET ADAPTOR
5 volts DC power supply
RS232 UPS-ADAPTOR cable (CC05)
Installation and user manual

1.2 Overview



1.3 Functions

The RS232 to TCP/IP communication adaptor provides UPS (Uninterruptible Power supply) data (states and measures) to be sent a computer system.

The system provides a communication channel between ethernet(PC side) and RS232(UPS side) interface.

1.4 Technical Specifications

Function	Parameter	Value
RS232	Baud rate	2400 bauds
RS232	Parity	No parity
RS232	Stop bit	1 stop bit
RS232	UPS Connection	RX,TX,Gnd (3 wire)
Ethernet	Interface	10Base-T or 100Base-TX (Auto-Sensing)
Ethernet	Connector	RJ45
Ethernet	Protocols	TCP/IP, UDP/IP,ARP, ICMP,SNMP,TFTP,Telnet,DHCP, BOOTP, HTTP,AutoIP

2. Installation

2.1 RS232 Connection to UPS

Connect CC05 RS232 cable from serial port connector of the MODBUS adapter to the serial port of the UPS.

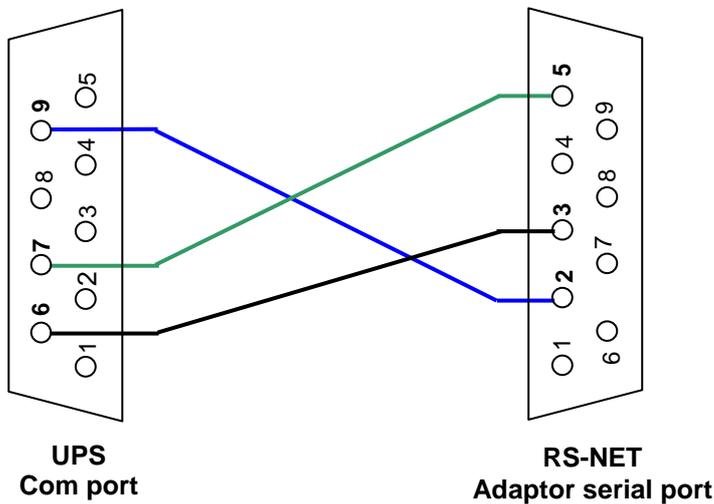
CC05 RS232 Data Cable

Max. Length = 25 meters.

parts	pcs
9 pins D type connector (male)	1
9 pins D type connector(female)	1
3 wired shielded cable	Max 25 meters

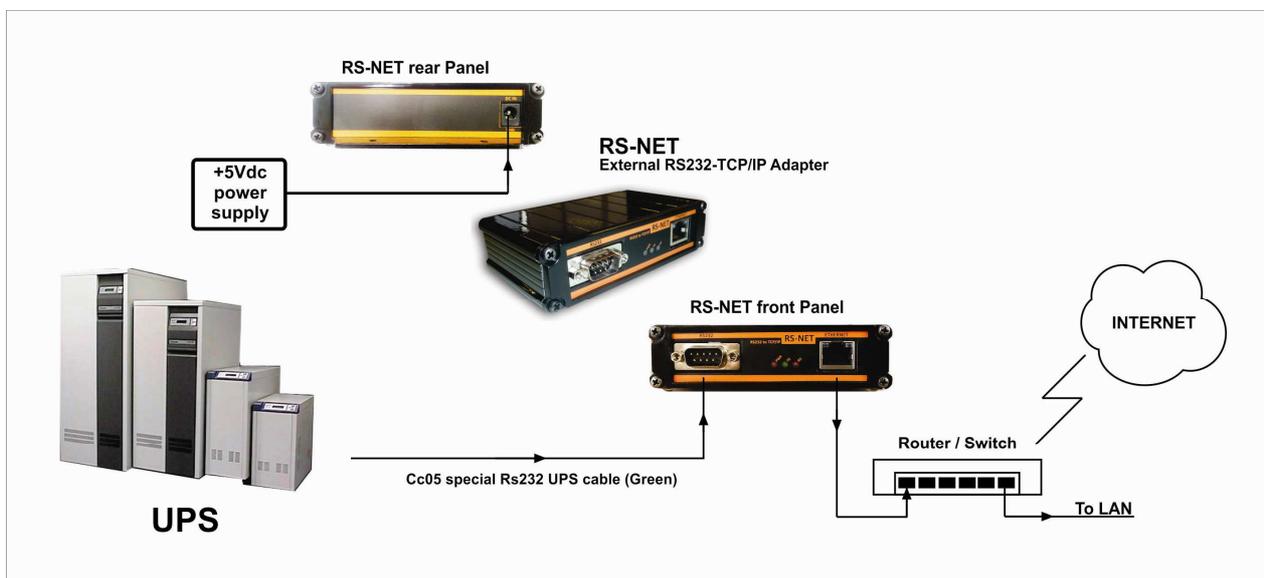
9 pins D type male

9 pins D type female



UPS connector Pin Nr	PC port Pin Nr
6	3
7	5
9	2

2.2 RS-NET Network connection



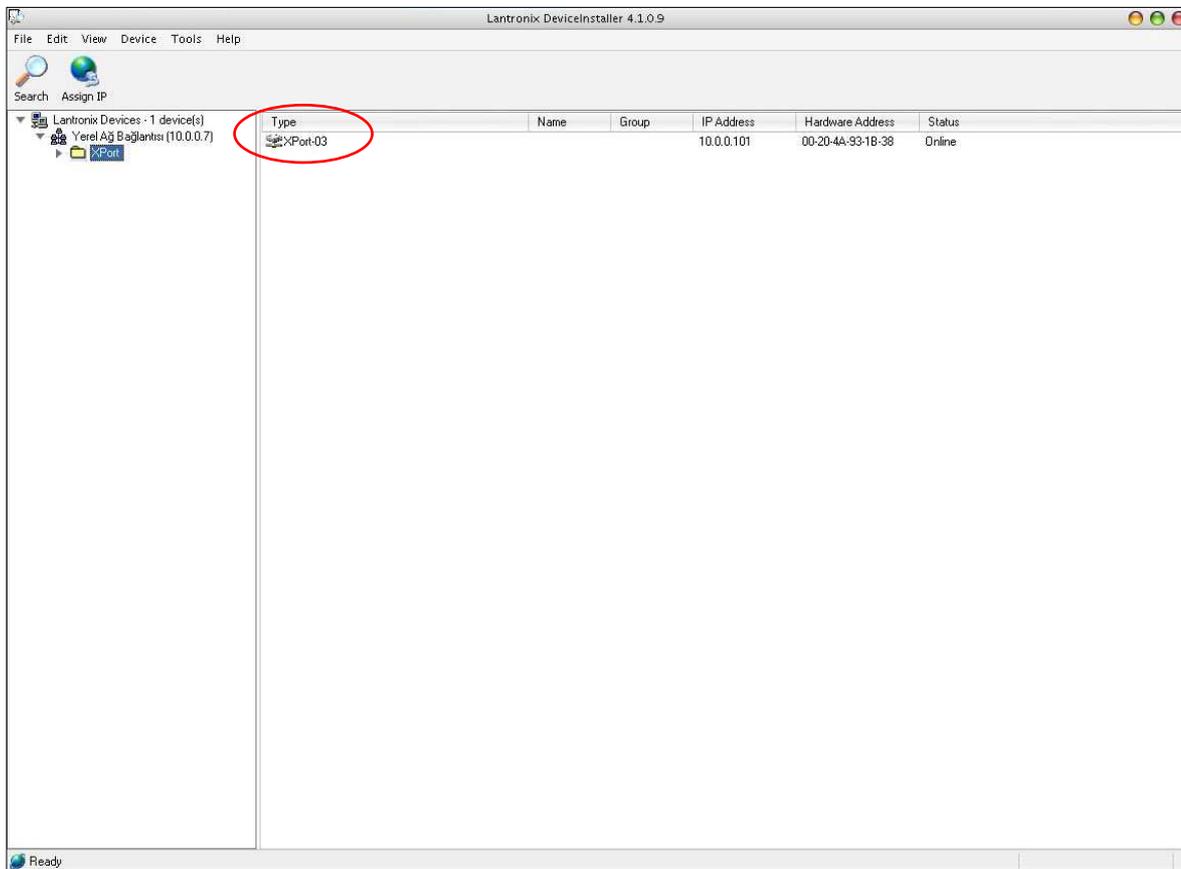
2.3 Installation

Check RS232 UPS connection ,check ethernet connection if connections are OKAY
Connect the power cord of the RS-NET adapter to mains power (The power of the adapter must be supplied from UPS output otherwise during line failure the power of the RS-NET adapter shutdown)

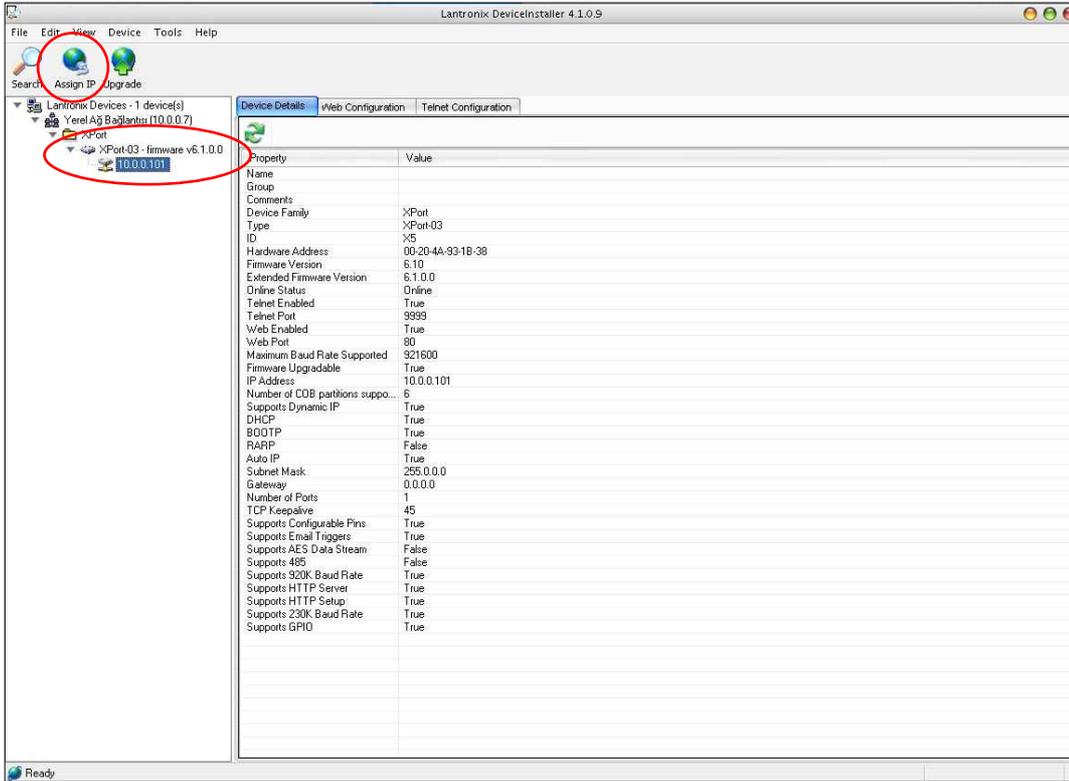
2.4 RS-NET Configuration using Device Installer

Run device installer software. (Start-Programs-Lantronix Device Installer)
This utility program finds all network connected RS-NET adaptor devices.
If it fails please change your network settings (IP address and subnet mask) as static IP to the following values
It is only for adjustment purpose after you adjust adaptor you can return to your old network settings.

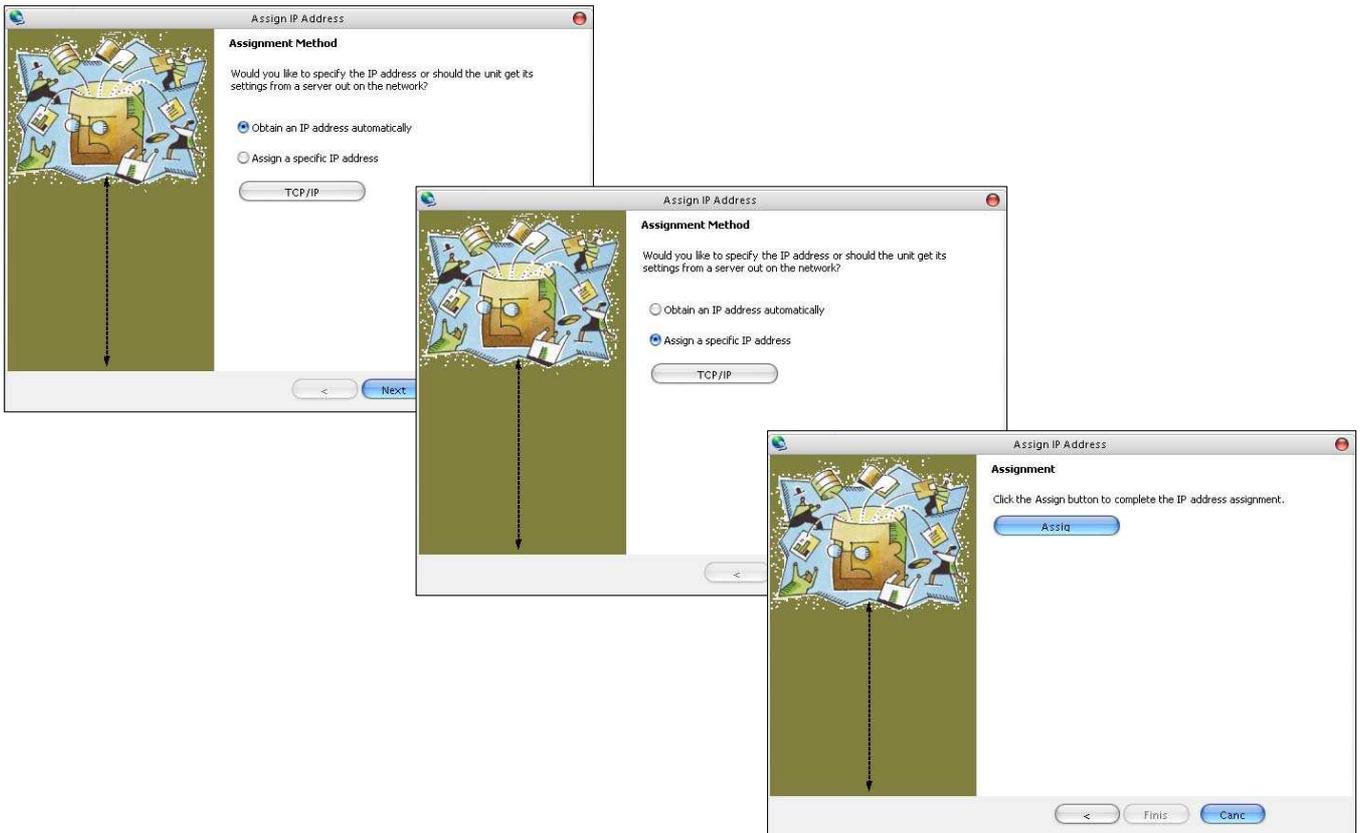
X-Port factory settings:
IP: 10.0.0.xxx
Subnet Mask: 255.0.0.0
Gateway : 0.0.0.0



If the RS-NET adaptor device is shown on the list double click on it and device details will be shown at the window. Select the related MD-NET device and click on *Assign IP* button for adjusting the adaptor to your network settings.

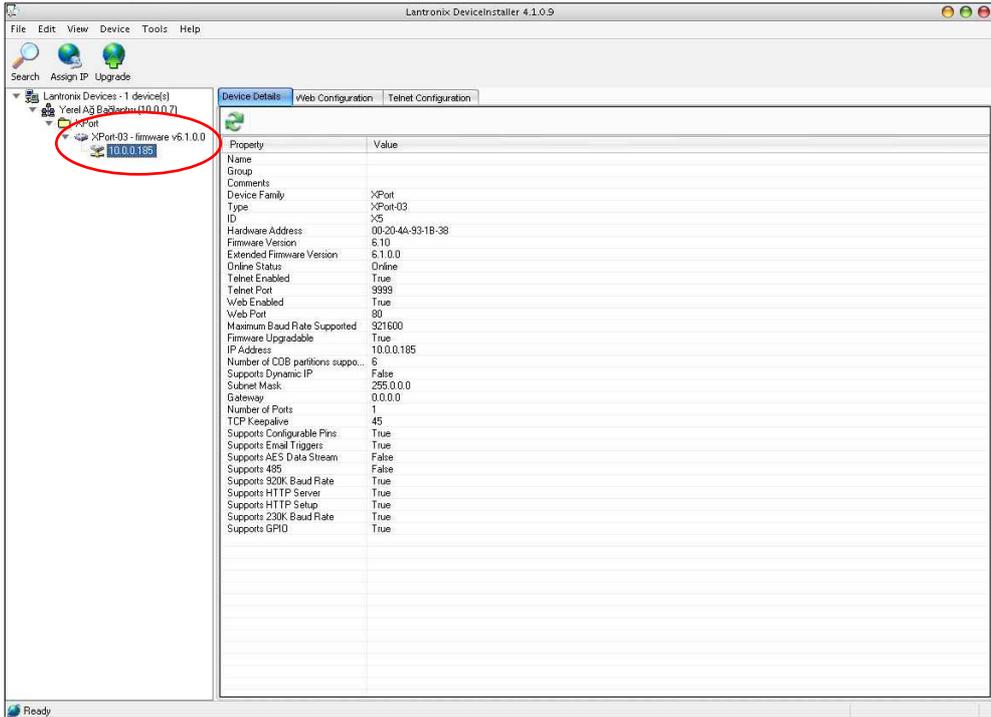


At "Assign IP" window select *Static IP* option from configuration window and click on *NEXT* button.

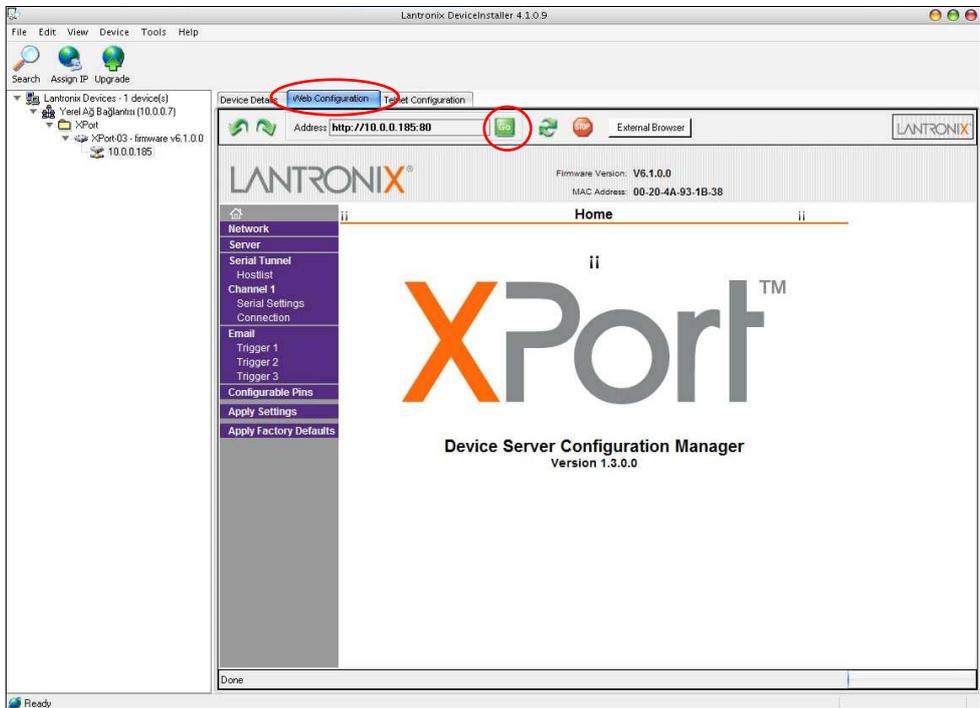


NOTE : The new IP address is different from 10.0.0.xxx or subnet mask is different from 255.0.0.0 value the adaptor connection may be lost in this case please re adjust your PC network settings to these network values.

After adjust RS-NET IP addresses the new assigned IP address will be showed at device installer program window.

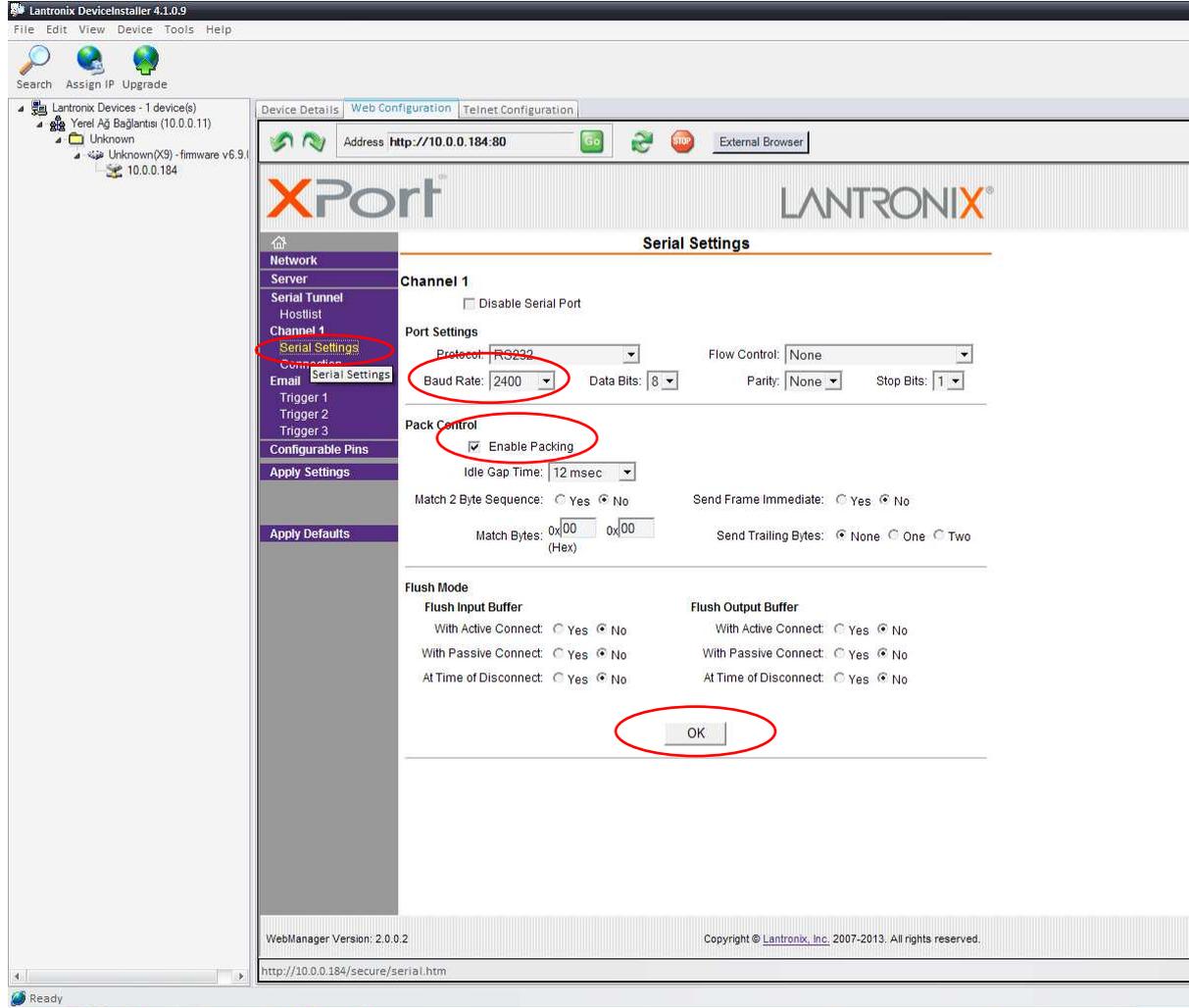


For detailed configuration we must connect to adaptor as WEB page to do this from device installer program click on WEB configuration. Than click on *GO* button and device main WEB PAGE comes to screen. Ignore username and password values for the first time.



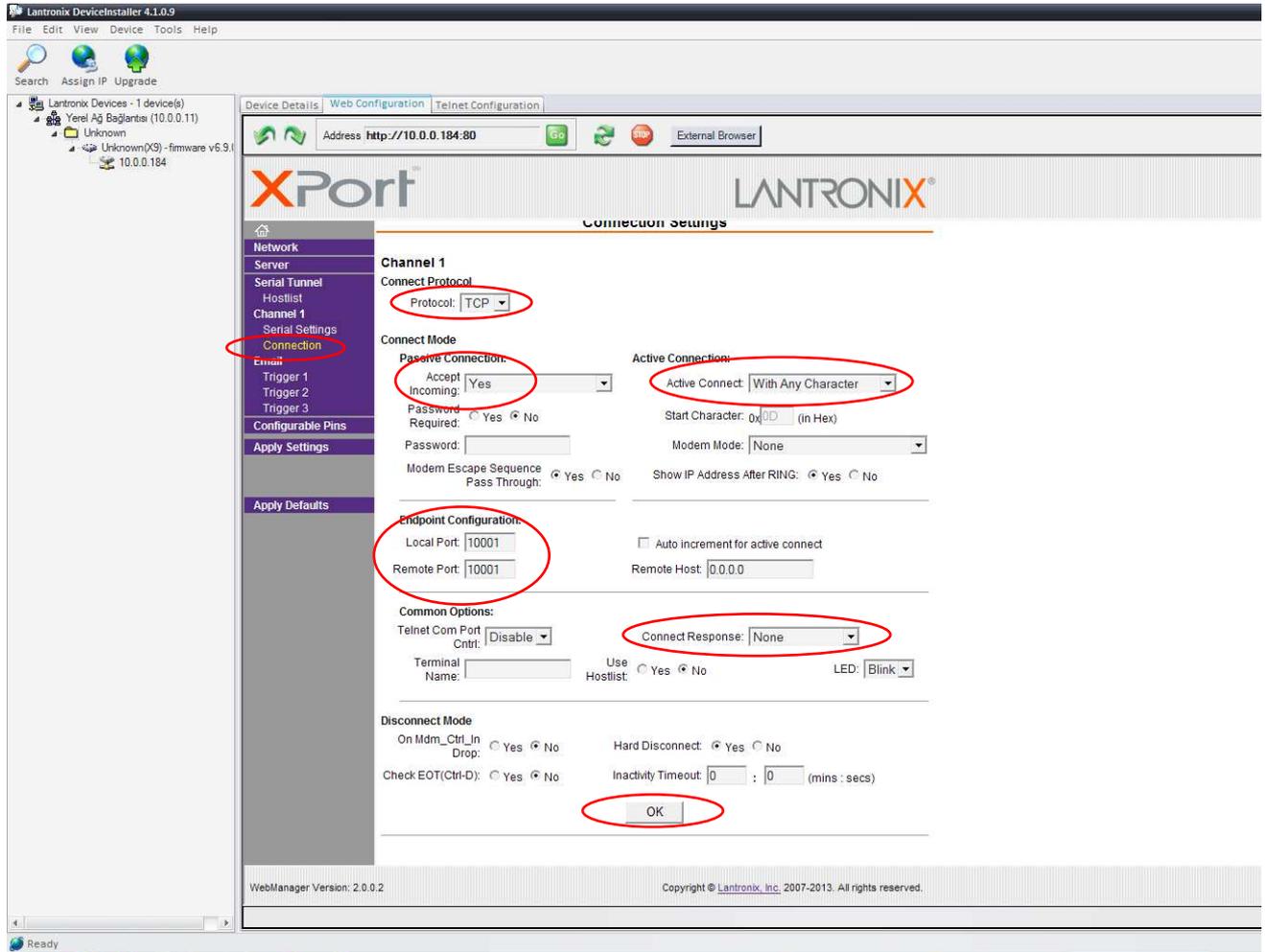
For RS-NET serial port configuration at the left side menu click on *Serial settings* serial configuration page comes to screen.

Parameter	value
Baud rate	2400
Enable packing	checked
Click on *OK* button for update settings at the end of page	



For RS-NET Ethernet configuration from the left side menu click on *Connection* related configuration page comes to screen.

Connect Mode	Accept Incoming	YES
	Active Connect	With any character
	Connect Response	None
	Local port	10001
	Remote port	10001
Click on *OK* button for update settings at the end of page		



3. Operation

Turn on the UPS. During power up the RS-NET adaptor will check the UPS communication version if it supports the version it will run. The RS-NET adaptor supports TX100, TX300 and TX301 UPS communication protocols.

- TX100 : 1 phase input / 1 phase output ups's
- TX300 & TX301 : 3 phase input / 1 phase output or 3 phase input / 3 phase output ups's

4. Monitoring by Smart Phone

To monitor the UPS data on smart phones ;

- **Monitoring over internet** : Make port forwarding (NAT) on the Router of the network that connected to the internet for IP address of RS-NET device.
- **Monitoring over LAN** : Assign an IP address to RS-NET device.

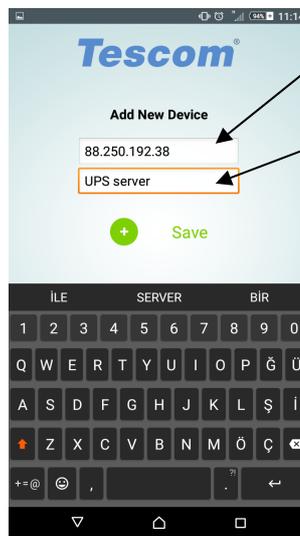
Follow the below steps after download the “Tescom” application from **Apple store (for iphone), Windows store (for windows mobile phone) or Google play store (for Android)**.



Select language for application.

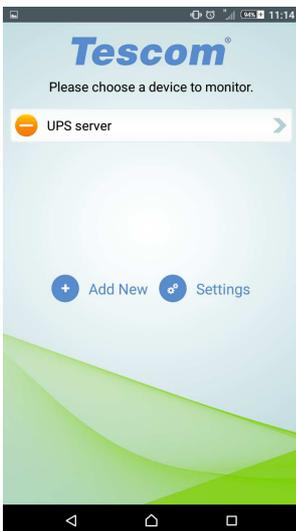


Click “Add New” button and go to device settings for monitoring.

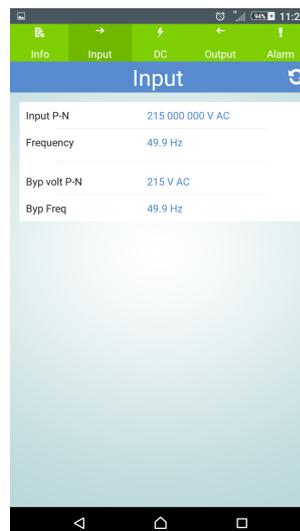
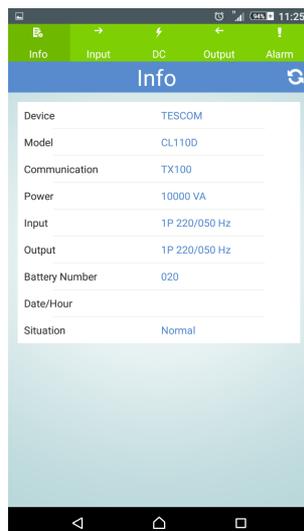


Assign an IP address to RS-NET device.

Give a name to device



Click “Device Name” button and go to monitoring.
Click hold  this button for erasing device.



Monitor pages example.

5. Indicator Lamp



The indicator lamps on the RS-NET adaptor shows the status of communication.

Indicator lamp functions	
Lamp status	Description
PWR led (red) Always on	Adaptor power on
TX and RX led Regular Blink	Adaptor is communicating with UPS
TX and RX led Irregular blinking	Adaptor do not support some UPS commands
TX or RX led Always off	Adaptor is not communicate with UPS

