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 TCPIP 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



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

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File Edit View Device Tools Help							
Search Assign IP							
The second secon	Туре	Name	Group	IP Address	Hardware Address	Status	
✓ Eantonix Devices - 1 device(s) ✓ Yerel Ağ Bağlantıs (10.0.0.7) ✓ Image: Constraint of the second	Type Set XPort 03	Name	Group	IP Address 10.0.0.101	Hardware Address 00-20-4A-93-1B-38	Status Online	
Ready							

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

	Lantronix DeviceInstaller 4.1.0.9	
Device Tools Help		
evice(s) Device Details Web Configurati	on Telnet Configuration	
(10.0.0.7)		
mware v6.1.0.0	Viela	
01	Value	
Name		
Companie		
Device Family	VDart	
Tupe	XPorb/13	
ID ID	X5	
Hardware Address	00-20-4A-93-1B-38	
Firmware Version	6.10	
Extended Firmware Version	6.1.0.0	
Online Status	Online	
Telnet Enabled	True	
Teinet Port	9999	
Web Enabled	True	
Web Port	80	
Maximum Baud Hate Supported	921600	
Firmware Upgradable	1000101	
IF Address Number of COR partitions surger	10.0.101	
Supporte Dupamia IP	b Turn	
DHCP	True	
BOOTE	True	
BABP	False	
Auto IP	True	
Subnet Mask	255.0.0.0	
Gateway	0.0.0.0	
Number of Ports	1	
TCP Keepalive	45	
Supports Configurable Pins	True	
Supports Email Triggers	True	
Supports AES Data Stream	Faise Faise	
Supports 465 Supports 920K Paud Pate	Ture	
Supports HTTP Server	True	
Supports HTTP Setup	The	
Supports 230K Baud Bate	True	
Supports GPI0	True	

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 showned at device installer program window.

S	Lantronix DeviceInstaller 4.1.0.9		
ile Edit View Device Tools Help			
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earch Assign IP Upgrade			
 Lantronix Devices - 1 device(s) 	Device Details VVeb Configuration	on Telnet Configuration	
gig Yerel Ag Badjanter (10111) /	24		
will VPort-03 - firmware v6 1 0.0	~		
	Property	Value	
	Name		
	Group		
	Device Family	XPort	
	Type	XPot-03	
	ID	X5	
	Hardware Address	00-20-4A-93-1B-38	
	Firmware Version	610	
	Online Status	Opine	
	Telnet Enabled	True	
	Telnet Port	9999	
	Web Enabled	True	
	Web Port Maximum Paul Pata Compated	80	
	Firmware Llogradable	521500	
	IP Address	10.0.0.185	
	Number of COB partitions suppo	6	
	Supports Dynamic IP	False	
	Subnet Mask	255.0.0	
	Number of Ports	1	
	TCP Keepalive	45	
	Supports Configurable Pins	True	
	Supports Email Triggers	True	
	Supports AES Data Stream	False	
	Supports 485 Supports 920K Baud Bate	Faise True	
	Supports HTTP Server	True	
	Supports HTTP Setup	True	
	Supports 230K Baud Rate	True	
	Supports GP10	True	

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* bu	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).



1P 220/050 Hz

1P 220/050 Hz

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Input

Output Battery

Situatio

Monitor pages example.

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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		

