

KR-04

RS232 - Ethernet converter

USER MANUAL

ITKU-92-01-07-16-EN



JULY 2016

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1. INTENDED USE

KR-04 converter has been designed to be used with scales or terminals that are not equipped with Ethernet interface. It enables connection of scales with RS232 interface to LAN network.

2. TECHNICAL SPECIFICATIONS

	KR-04-1	KR-04-2	KR-04-3
Housing	plastic	stainless steel	stainless steel
Ethernet feed	RJ-45	through cable gland	through hermetic socket
Power supply	power supplier 100-240VAC / 12VDC	230VAC 50Hz	230VAC 50Hz
Communication interface	RS232		
RS232 baud rate	50 bps – 115,2 bps		
Ethernet Standard	10/100 Mbps		
ESD protection	1,5 kV		
Protocols	ICMP, ARP, IP, TCP, UDP, DHCP, Telnet, HTTP, SNMP		
Operating modes	TCP Server, TCP Client, UDP,		
Operating temperature	0 ÷ 40°C		

3. DESIGN

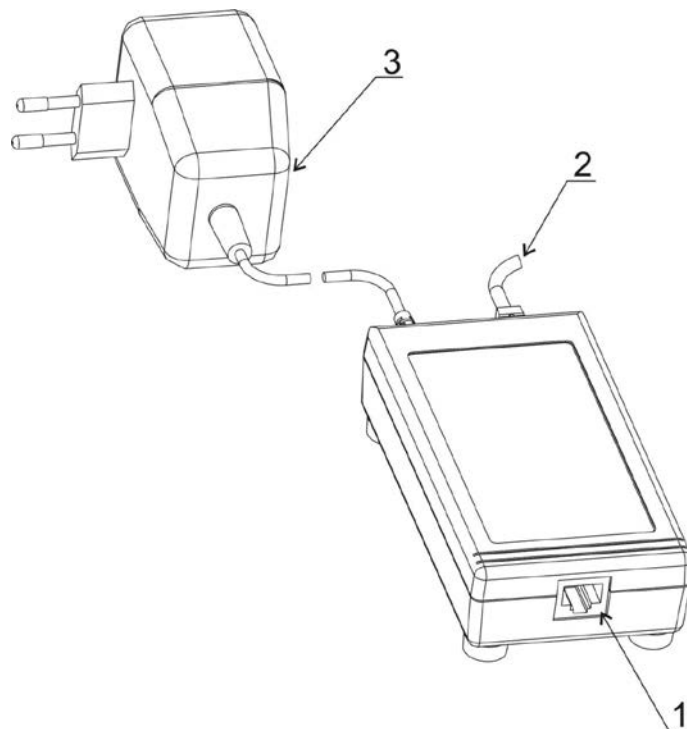
Converter types:

KR-04-1: plastic housing, RS232 cable with DB9/F connector. Intended for scales equipped with PUE C31 (plastic housing), laboratory balances and other devices featuring RS232 interface with DB9/M connector. KR-04-1 converter is equipped with Ethernet interface of RJ45 type.

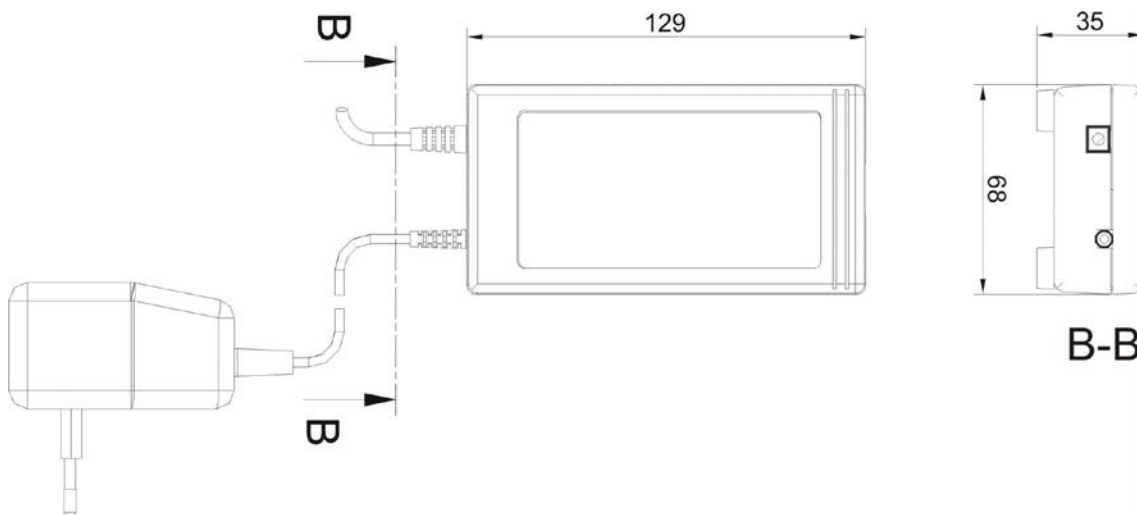
KR-04-2: stainless steel housing, RS232 cable with hermetic M12 connector. Intended for scales equipped with the following terminals: PUE C/31H, PUE 4/7. KR-04-2 converter features Ethernet cable fed through cable gland.

KR-04-3: stainless steel housing, RS232 cable with hermetic M12 connector. Intended for scales equipped with the following terminals: PUE C/31H, PUE 4/7. KR-04-3 converter features hermetic Ethernet M12 connector.

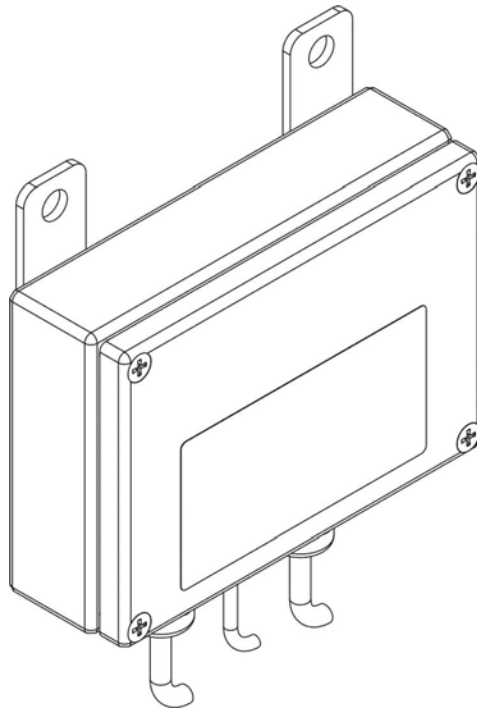
3.1. External view



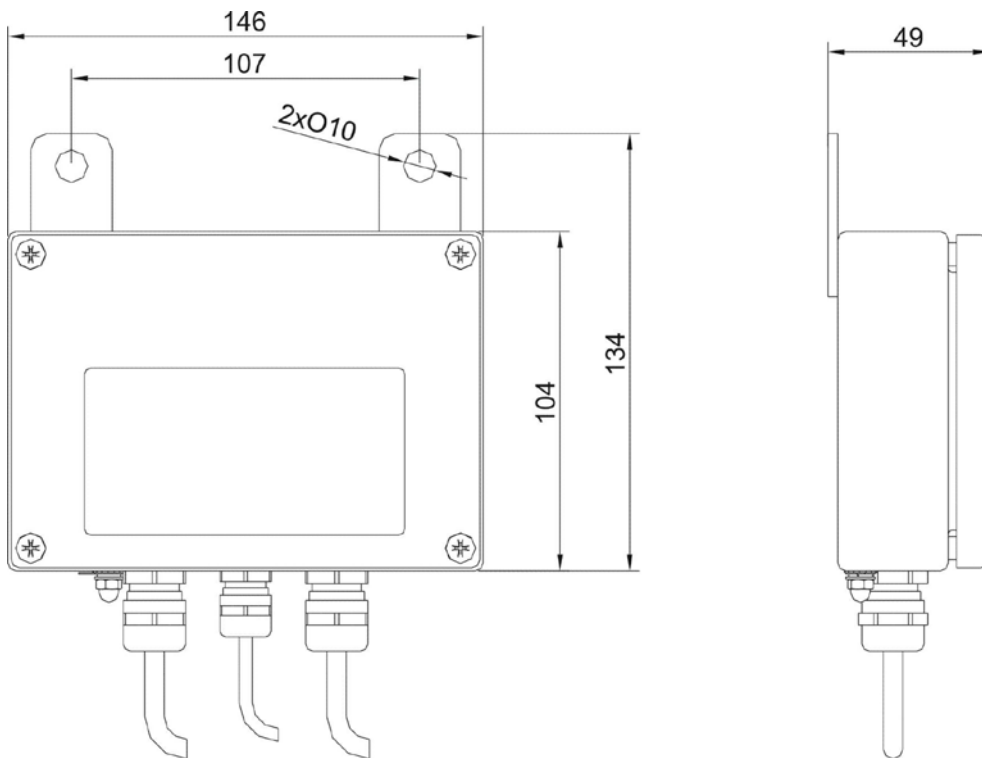
KR-04-1 converter
1 – Ethernet RJ45 port
2 – RS232 cable with DB9/F connector
3 – power supplier



Dimensions of KR-04-1 converter (plastic housing)

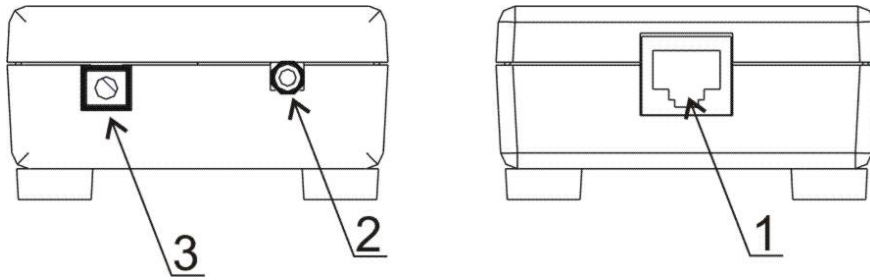


KR-04-2, KR-04-3 converter

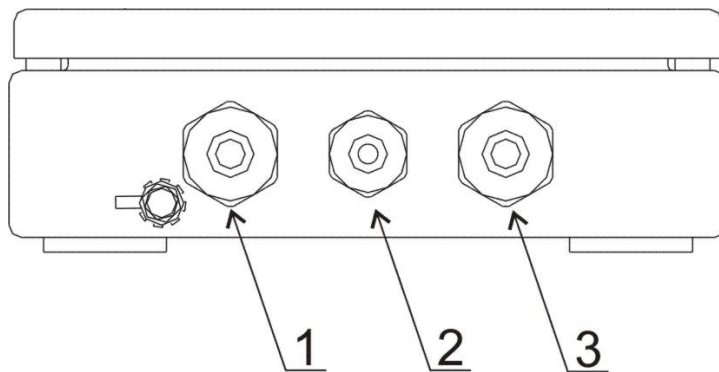


Dimensions of KR-04-2, KR-04-3 converter (stainless steel housing)

3.2. Connectors



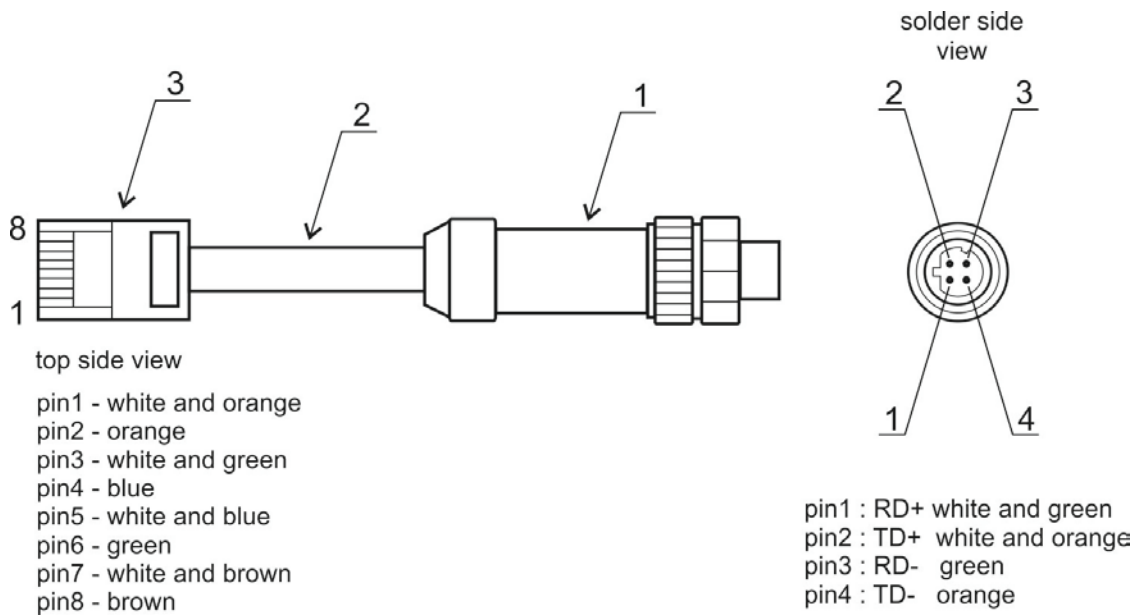
KR-04-1 interfaces
 1 – Ethernet RJ45 port
 2 – cable bush: power supplier
 3 – cable bush: RS232 cable (cable with RJ45 connector)



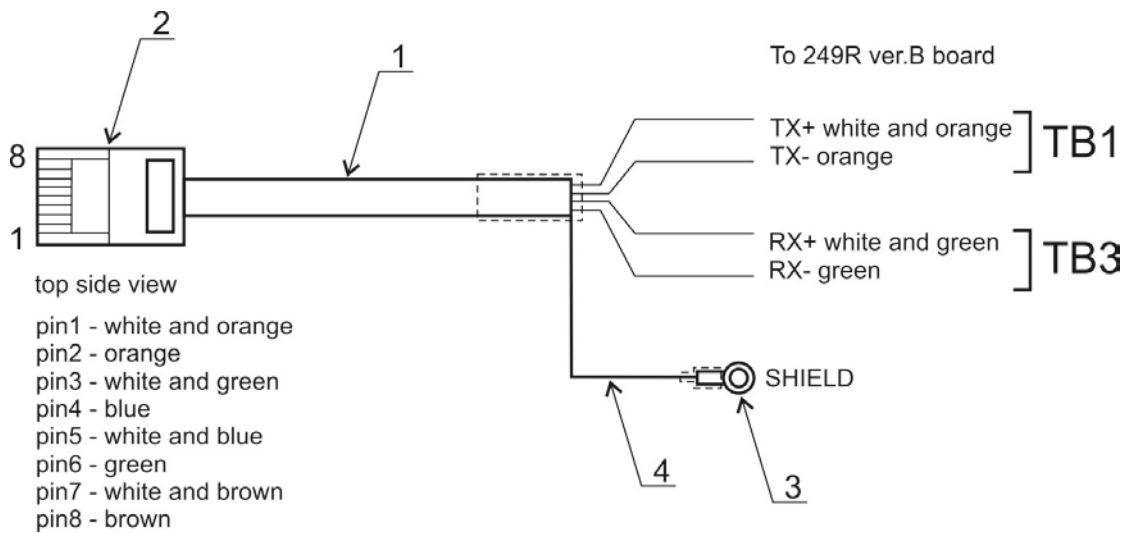
KR-04-2, KR-04-3 interfaces
 1 – power cord cable gland
 2 – RS232 cable gland (cable with a hermetic connector)
 3 – Ethernet cable gland - KR-04-2, Ethernet hermetic socket - KR-04-3

Ethernet connector pin description	<p>The diagram shows a circular Ethernet connector with four pins labeled 1, 2, 3, and 4. Pin 1 is at the bottom right, pin 2 is at the top right, pin 3 is at the top left, and pin 4 is at the bottom left.</p>	Pin1 – RD+ Pin2 – TD+ Pin3 – RD- Pin4 – TD-
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Ethernet connector, KR-04-3



- P0198 cable, KR-04-3**
- 1- Ethernet hermetic connector
 - 2- shielded twisted-pair wire 4x2xAWG26
 - 3- RJ45 connector



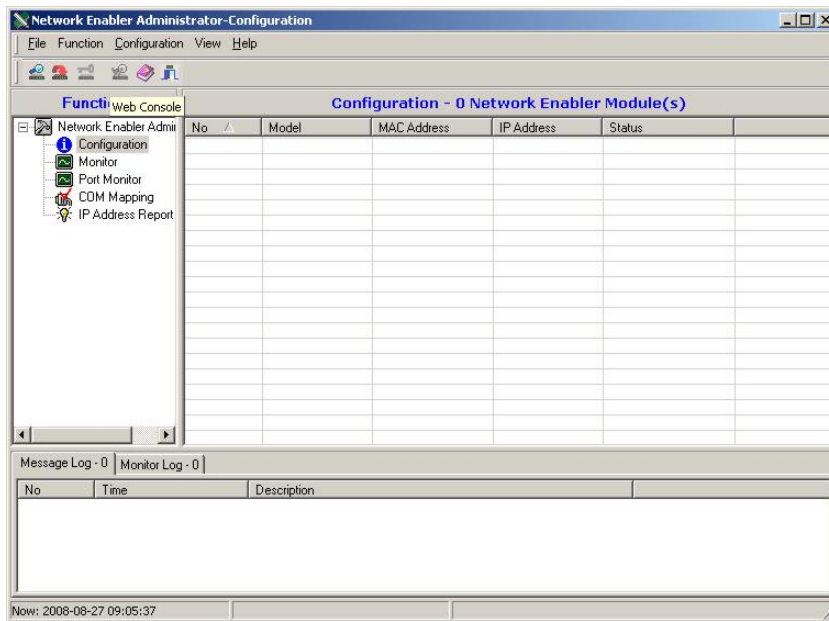
- Ethernet cable, KR-04-2**
- 1- shielded twisted-pair wire 4x2xAWG26
 - 2- RJ45 connector
 - 3- ring terminal
 - 4- cable LgY 300/500V 0.35mm²

4. SETUP

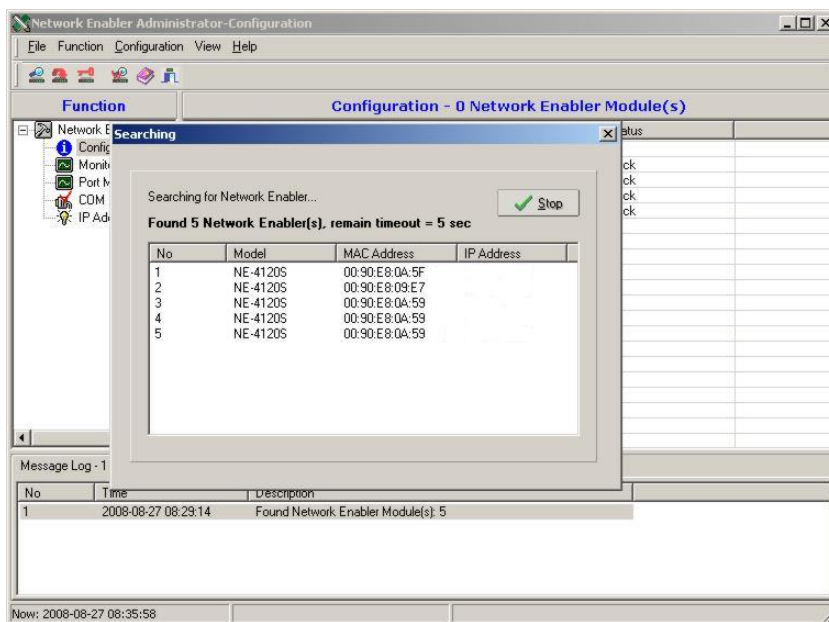
KR-04 converter setup is carried out using *Network Enabler Administrator* PC software (installed on a computer). The computer and the converter communicate via Ethernet.

Procedure:

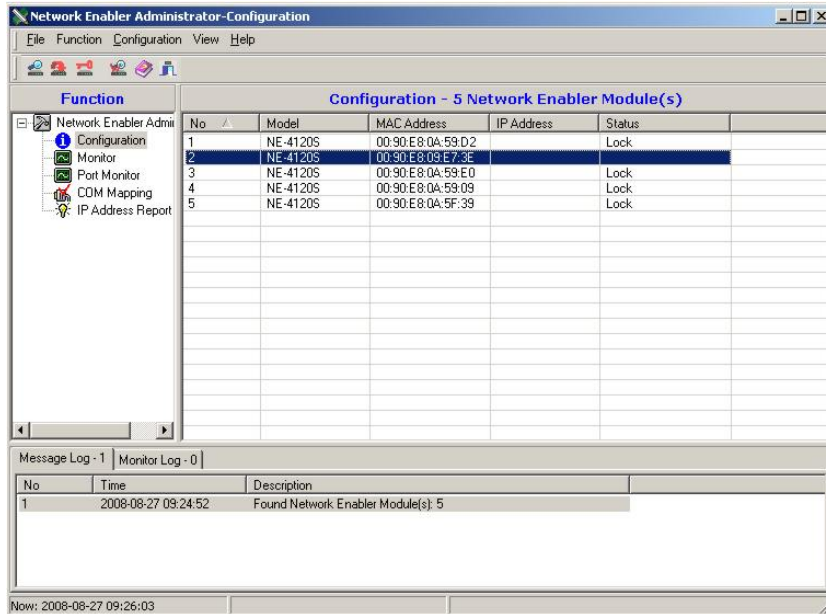
1. Install *Network Enabler Administrator* PC software.
2. Establish communication between the computer and the converter via LAN, use crossed cable terminated with RJ45 connectors on both sides. For KR-04-3 converter use RADWAG-manufactured **P0198** cable and a switch.
3. Connect the converter to the mains.
4. Run *Network Enabler Administrator* PC software.



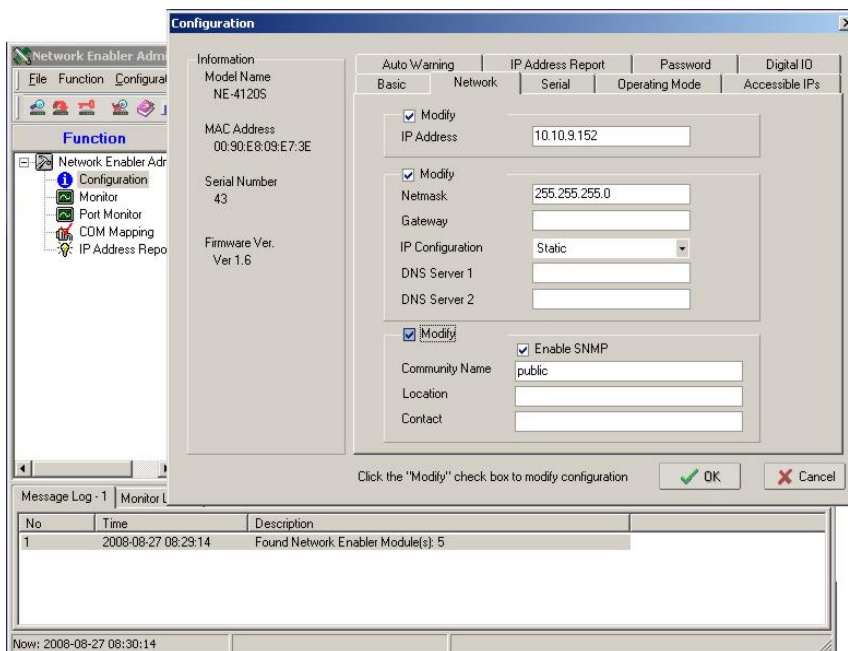
5. Click „Zoom” icon, the software will search for network-connected converters.



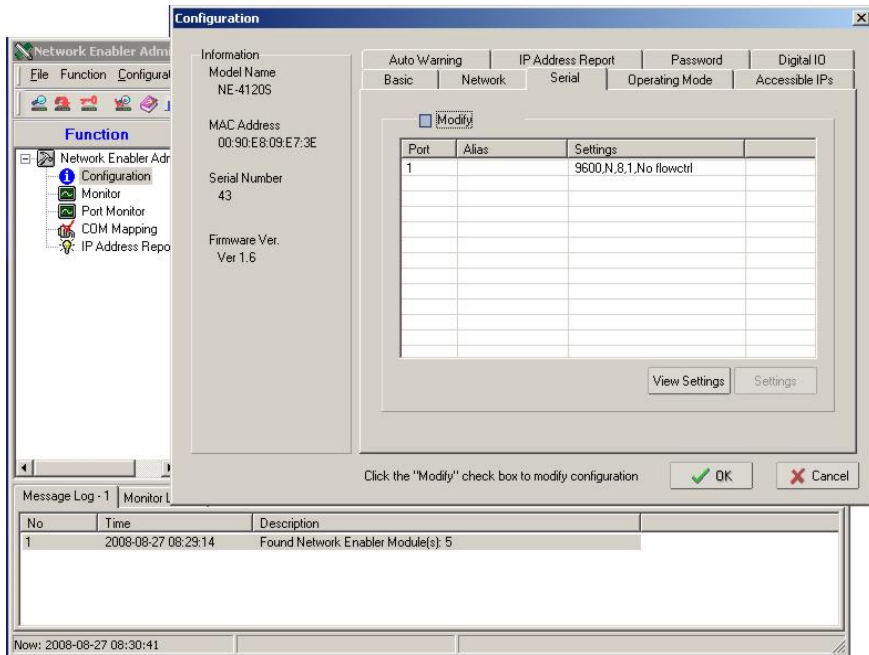
6. List of converters operating in LAN network is displayed.
7. Select the respective converter (double click using left mouse button).



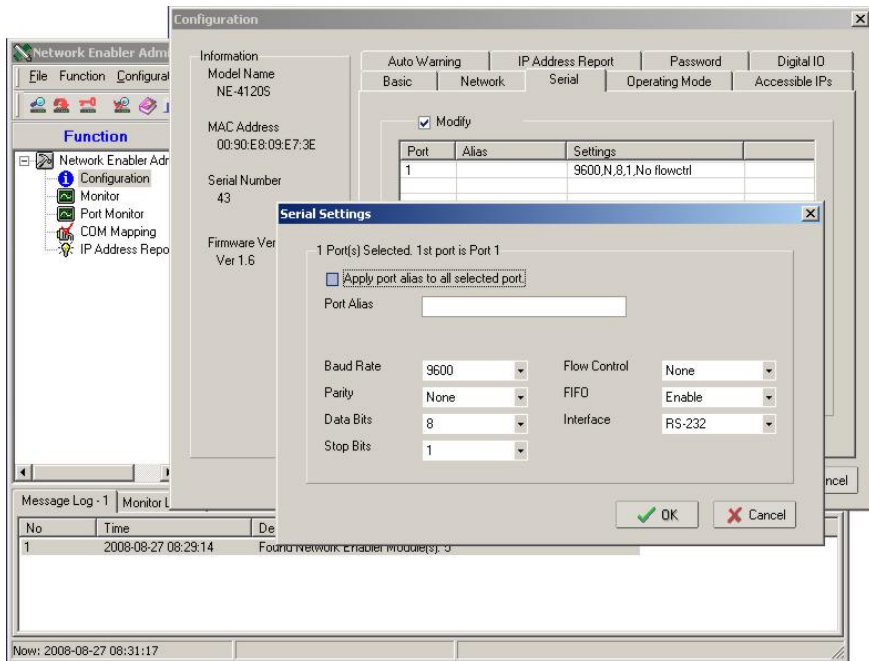
8. Go to „Configuration” window, select „Network” tab.



9. Tick „Modify” box by field that is to be changed.
10. Enter all necessary data.
11. Select „Serial” tab – RS232 setup.



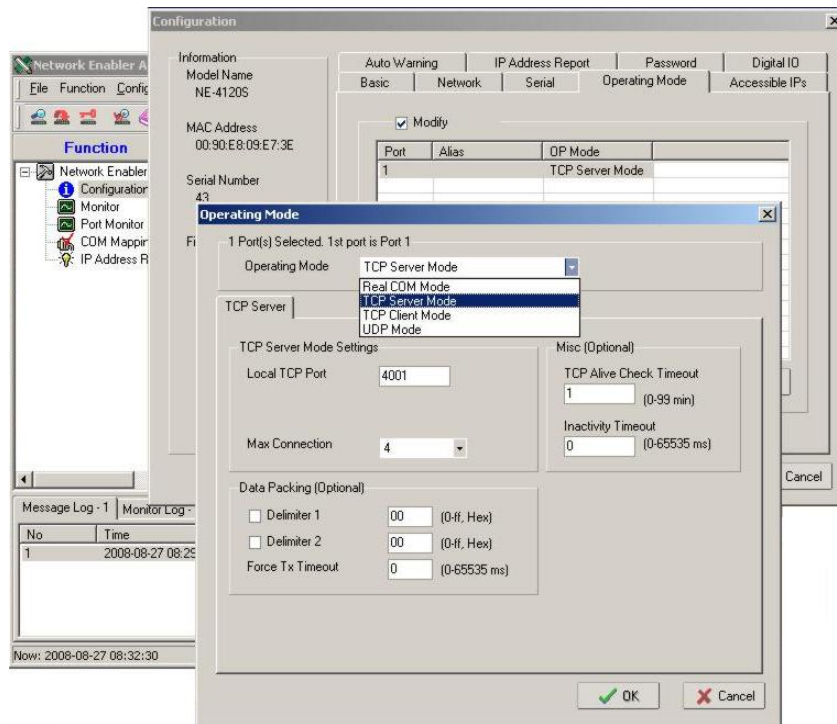
12. Tick „Modify” box and select Port that is to be modified (double click using left mouse button).



Default settings:

Flow Control	NONE
FIFO	Enable
Interface	RS232
Baud rate	9600
Parity	NONE
Data bits	8
Stop Bits	1

13. Select „Operating Mode” tab.



By default „Operating mode” is set to „TCP Server Mode”.
By default „Local TCP Port” is set to 4001.

14. Press „OK” button to confirm changes.

15. Exit *Network Enabler Administrator* PC software.

Setup parameters may vary depending on individual needs.

Network Enabler Administrator PC software is to be downloaded from www.radwag.com.



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