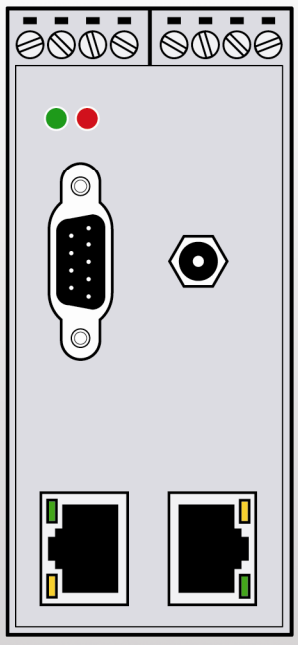
Linux Device Server IGW/922
with DIL/NetPC ADNP/9200

Hardware Reference



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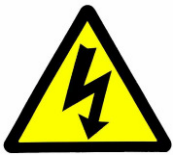
CONTENT

1 INTRODUCTION

This document describes the hardware components and the necessary cable connections of the Linux Device Server IGW/922.

1.1 Safety Guidelines

Please read the following safety guidelines carefully! In case of property or personal damage by not paying attention to this document and/or by incorrect handling, we do not assume liability. In such cases any warranty claim expires.



ATTENTION: Observe precautions for handling – electrostatic sensitive device!

- Discharge yourself before you work with the device, e.g. by touching a heater of metal, to avoid damages.
- Stay grounded while working with the device to avoid damage through electrostatic discharge.

1.2 Conventions

Convention	Usage
bold	Important terms
italic	Filenames, user inputs and command lines
`monospace`	Pathnames, internet addresses and program code

Table 1: Conventions used in this document

1.3 Features and Technical Data

- 1x QIL-128 socket for DIL/NetPC ADNP/9200
- 1x modem socket option for GSM/GPRS/UMTS/HSPA wireless modems
- 2x 10/100 Mbps Ethernet LAN interface with status LEDs
- 1x RS232 serial port (COM1) with handshake lines and 9-pin Sub-D connector
- 1x RS232/485 serial port (COM2) with 3-pin screw terminal and software-selectable mode switch
- 1x semiconductor relay output (30 VDC, 500 mA)
- 1x power LED
- 1x user LED (programmable)
- Supply voltage 11 .. 28 VDC (±10 %)
- Mechanical dimensions: 45 mm x 100 mm x 112 mm
- 0 °C to +70 °C operating temperature
- RoHS conform

1.4 Main Applications

- Remote Access Security Gateway
- GPRS/UMTS Router

2 OVERVIEW

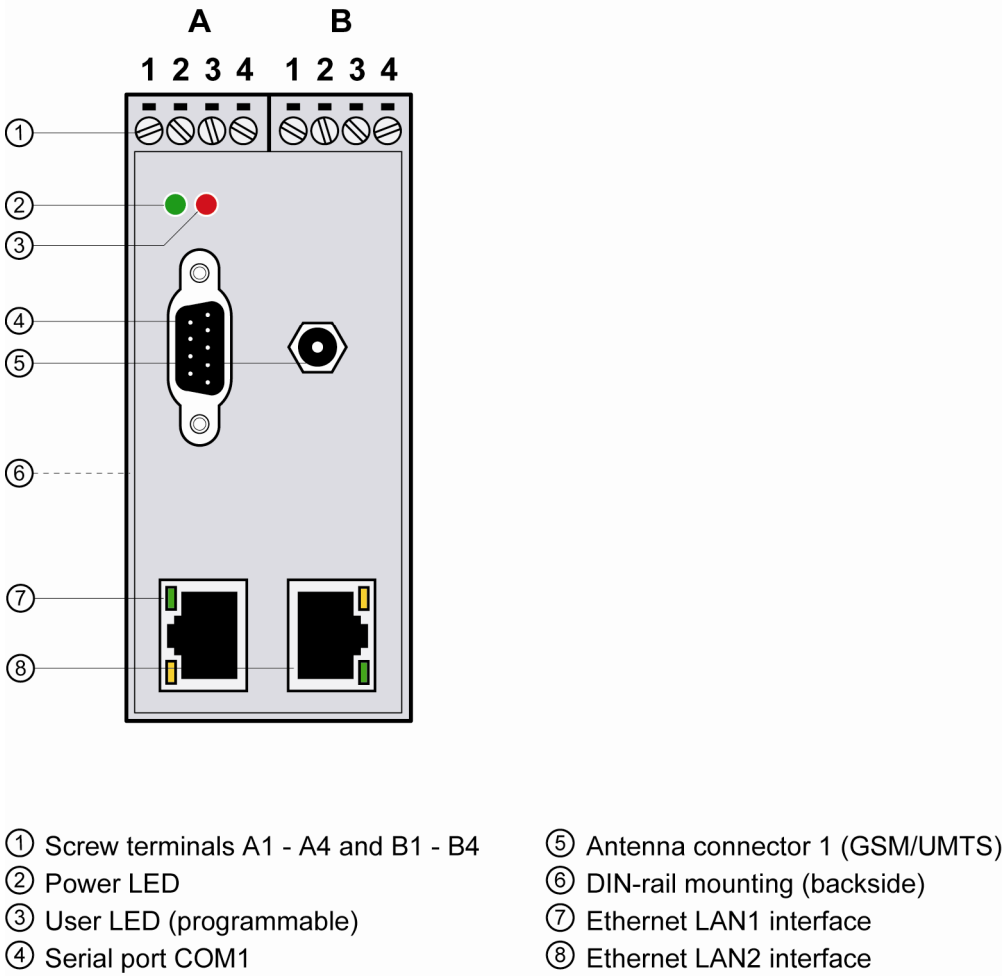


Figure 1: Overview Linux Device Server IGW/922

3 CONNECTIONS

3.1 Ethernet LAN1 and LAN2

The Ethernet LAN1 and LAN2 interfaces are standard RJ45 connectors.

Both have a green LED. It is on when there is a LAN link established and blinks when there is traffic. The yellow LED is not connected.

Pin	Name	Function
1	TX+	10/100 Mbps LAN, TX+ Pin
2	TX-	10/100 Mbps LAN, TX- Pin
3	RX+	10/100 Mbps LAN, RX+ Pin
4	---	Not Connected
5	---	Not Connected
6	RX-	10/100 Mbps LAN, RX- Pin
7	---	Not Connected
8	---	Not Connected

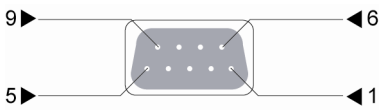
Table 2: Pinout Ethernet interfaces

3.2 Serial Port COM1

The serial port COM1 is a standard Sub-D connector.

Pin	Name	Function
1	DCD	COM1 Serial Port, DCD pin (RS232)
2	RXD	COM1 Serial Port, RXD pin (RS232)
3	TXD	COM1 Serial Port, TXD pin (RS232)
4	DTR	COM1 Serial Port, DTR pin (RS232)
5	GND	Ground
6	DSR	COM1 Serial Port, DSR pin (RS232)
7	RTS	COM1 Serial Port, RTS pin (RS232)
8	CTS	COM1 Serial Port, CTS pin (RS232)
9	DCD	COM1 Serial Port, DCD pin (RS232)

Table 3: Pinout COM1 connector



3.3 Serial Port COM2

To create an RS232 serial link on port COM2 of the Linux Device Server IGW/922 connect the adapter cable and the null-modem cable like shown in the figure below.

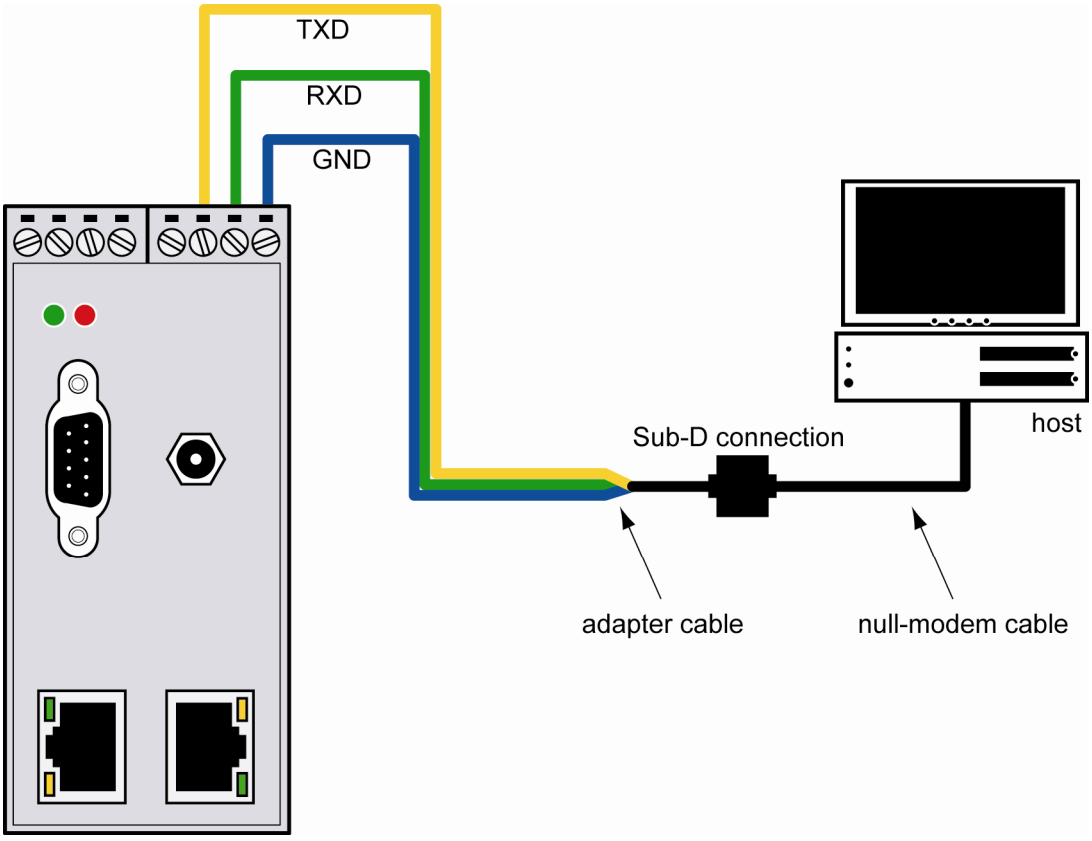


Figure 2: RS232 link on serial port COM2

Terminal	Signal
B2	COM2 Serial Port: TXD (RS232), RX/TX- (RS485)
B3	COM2 Serial Port: RXD (RS232), RX/TX+ (RS485)
B4	Ground

Table 4: Screw terminal COM2

3.4 Power Supply

The Linux Device Server IGW/922 needs a supply voltage of 11 .. 28 VDC to work. Use the power adapter cable to provide the system with the necessary power like shown in the figure below.

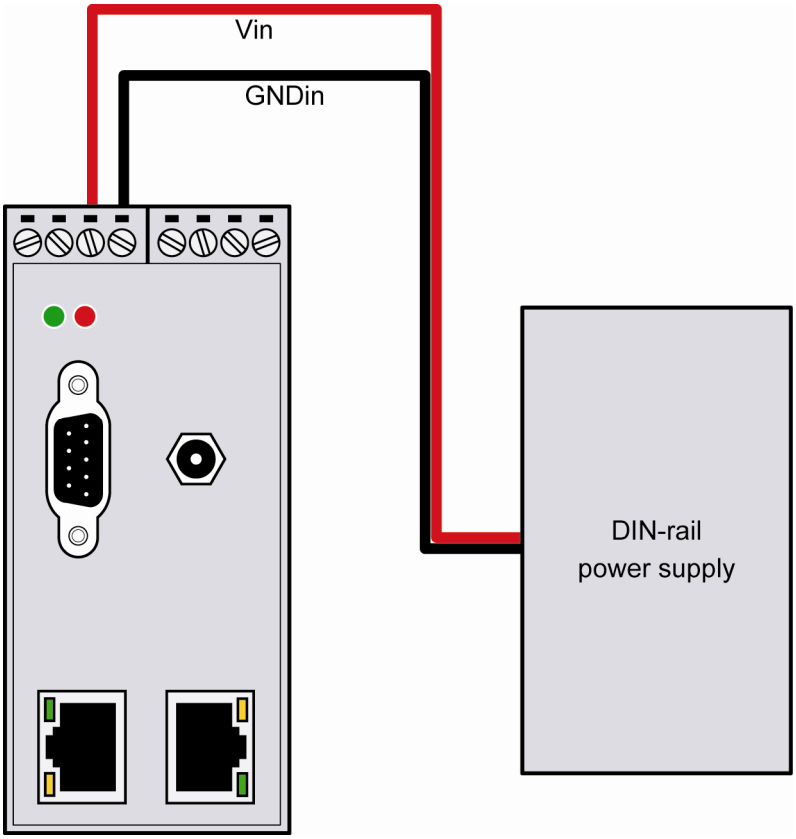
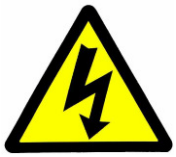


Figure 3: Power supply for the Linux Device Server IGW/922

Terminal	Signal
A3	Vin (11 .. 28 VDC)
A4	GNDin

Table 5: Screw terminal power



CAUTION: Providing the Linux Device Server IGW/922 with a higher voltage than the regular 11 .. 28 VDC ±10 % could cause damaged board components!

3.5 Semiconductor Relay Output

The Linux Device Server IGW/922 offers a semiconductor relay output to switch an external alarm device with up to 30 VDC and 500 mA on and off.

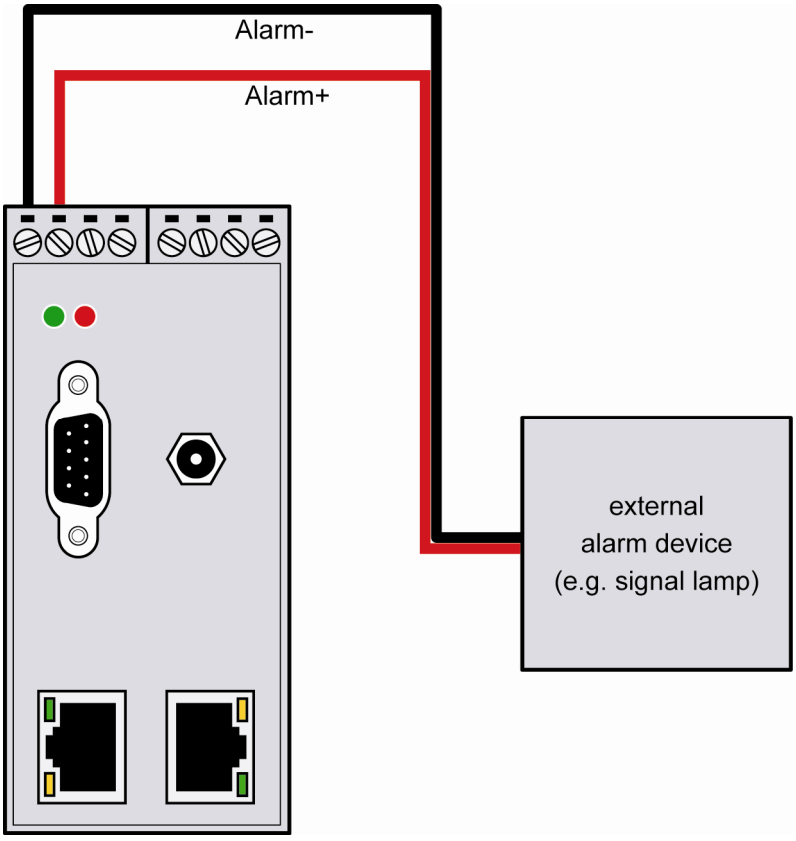


Figure 4: Connecting an external alarm device

Terminal	Signal
A1	Alarm- Semiconductor Relay Output (max. 30 VDC / 500 mA)
A2	Alarm+ Semiconductor Relay Output (max. 30 VDC / 500 mA)

Table 6: Screw terminal semiconductor relay output

CAUTION: Using the alarm output with more than the regular 30 VDC and 500 mA could cause damaged board components!

4 HELPFUL LITERATURE

- DIL/NetPC ADNP/9200 hardware reference

CONTACT

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DOCUMENT HISTORY

Revision	Date	Remarks	Name
1.0	2009-09-18	first version	WBU