

**TYKI-11-A-IA-e-2510**



# KERN YKI

Version 1.0 2025-02

## Installation instructions

### Ethernet converter with 2 ports

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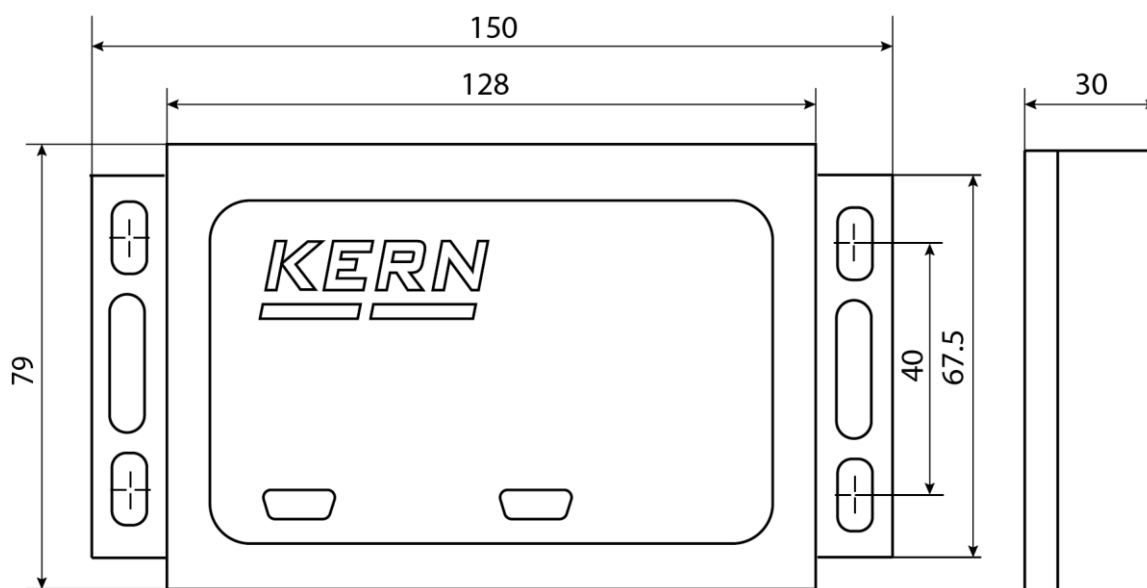
## 1 Scope of delivery

- YKI-11 Ethernet
- Mains adapter (EU)
- Installation instructions (German / English) on paper

If any of the items listed above are missing, contact your dealer immediately.

## 2 Technical data

KERN	YKI-11	
Item number / type	TYKI-11-A	
Hardware parameters	Ethernet	1 x RJ45, 10/100 Mbps
	Interfaces	2 x RS232, DB9 connector,
	Baud rate	600-230400 bps
	Input voltage Device	5-36 V DC
	Input voltage power supply unit	100-240 V AC; 50 / 60 Hz;
	Output voltage power supply unit	12 V; 1 A
	Working temperature	-40-+ 85 °C
	Storage temperature	-40-+ 105 °C
	Humidity during operation	5-95 % (non-condensing)
	Dimensions	150 x 98.8 x 30 mm (L x W x H)
	Work mode	TCP server
Software parameters	Network protocol	TCP / IP
	IP assignment	Static / DHCP
	Internet protocol version	IPv4
	User settings	Web server



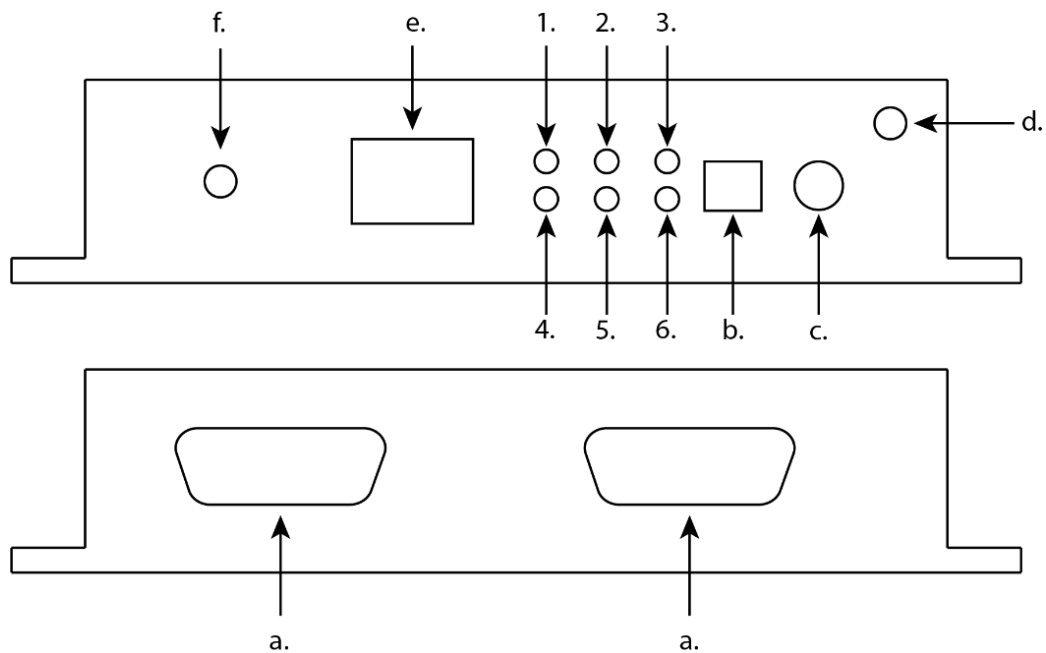
### 3 Default settings

Parameters	Standard setting
Static IP	192.168.0.7
MAC address	See type plate
Username	admin
Password	admin

#### 3.1 Default settings Serial interfaces

Parameters	Standard setting
Mode	RS485
Baud rate	115200
Data bits	8
Parity	None
	1
Flow Control	None
Port 1	Socket Local Port 23
Port 2	Socket Local Port 26

## 4 Product overview



### 4.1 LED overview

Pos.	LED	Status
1.	RX1	Lights up: serial interface 1 receives data Off: serial interface 1 receives no data
2.	RX2	Lights up: serial interface 2 receives data Off: serial interface 2 receives no data
3.	Work	Lights up: Function normal Off: Malfunction
4.	TX1	Lights up: serial interface 1 is sending data Off: serial interface 1 does not send any data
5.	TX2	Lights up: serial interface 2 is sending data Off: serial interface 2 does not send any data
6.	Power	Lights up: Power on Off: Power off Flashing: faulty power supply

## 4.2 Connection overview

Pos.	Connection
a.	RS232 interface
b.	Power supply for top-hat rail mounting
c.	Power supply for power supply unit
d.	Earthing screw
e.	Ethernet
f.	Reload button



Only one of the two supply voltage connections (pos. b. or c.) may be used!

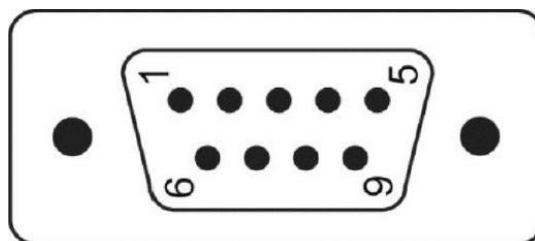
## 4.3 Pin assignment



Pin 7 and pin 8 do not need to be connected

However, they must never be connected directly to the computer, as this can lead to malfunctions

BD9 Pin	RS232
1	
2	RXD
3	TXD
4	
5	Ground
6	
7	RTS
8	CTS
9	



## 5 Installation

### 5.1 Installing the interface on the scales

1. Connect the YKI to the power supply unit and the power socket
2. The Power LED lights up continuously and the Work LED starts to flash.
3. Connect the RS 232 cable of the scale to the YKI
4. Switch on the scales

### 5.2 Connecting and configuring the Ethernet interface



Use a standard Ethernet cable (straight through) to connect to a PC or router

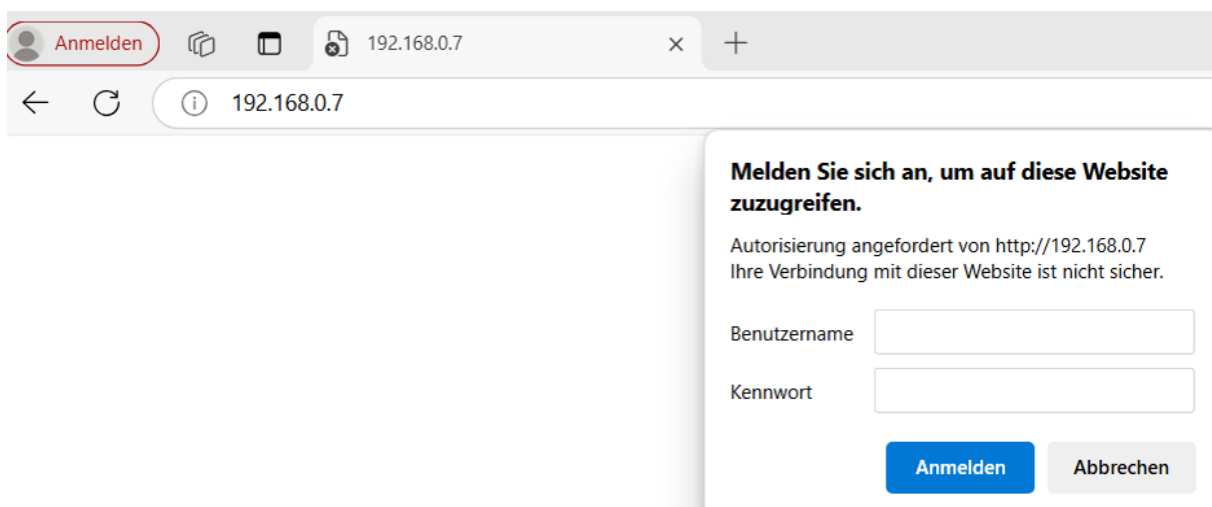
1. Connect YKI to the network/PC with an Ethernet cable
2. Establish TCP connection

### 5.3 Setting the IP address

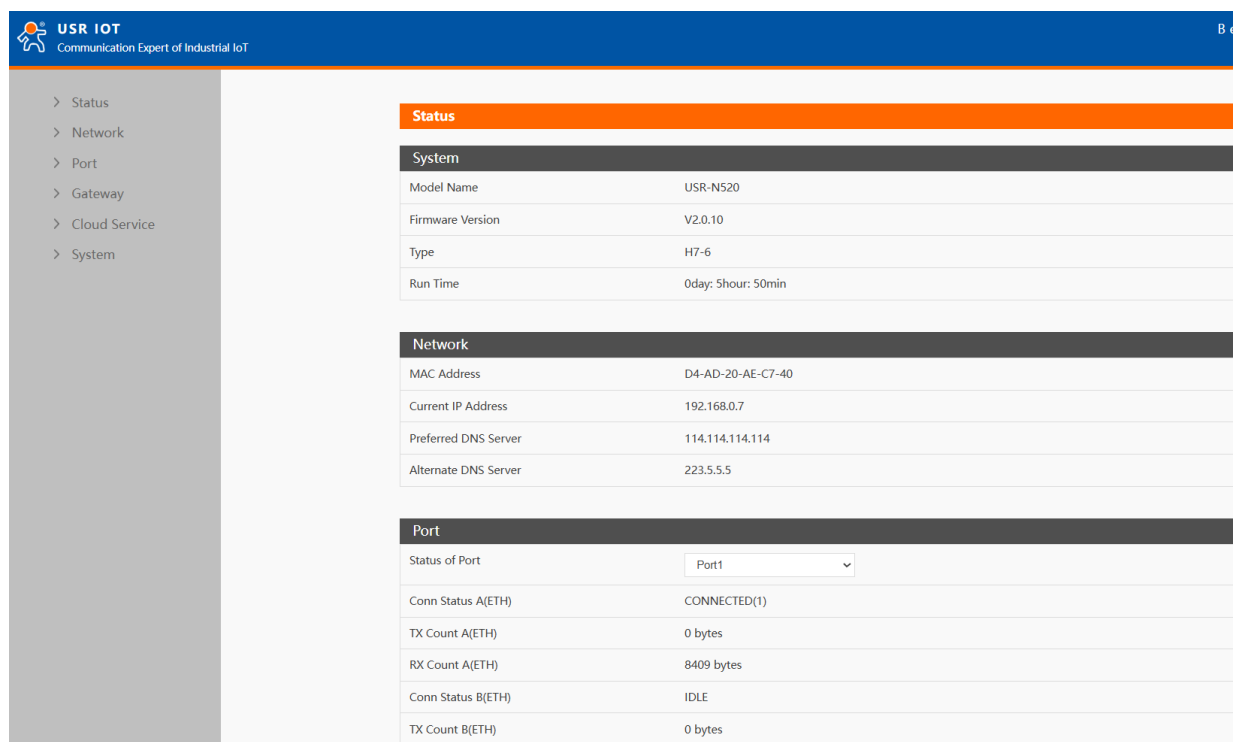
The interface is configured with a fixed IP address by default (see chapter 3). The IP address can be configured as required via the configuration page.

### 5.4 Overview of the configuration page

The configuration page can be called up in the address bar under the IP address of the YKI.



The configuration page interface is structured as follows:



**USR IOT**  
Communication Expert of Industrial IoT

8 e

> Status  
> Network  
> Port  
> Gateway  
> Cloud Service  
> System

**Status**

**System**

Model Name	USR-N520
Firmware Version	V2.0.10
Type	H7-6
Run Time	0day: 5hour: 50min

**Network**

MAC Address	D4-AD-20-AE-C7-40
Current IP Address	192.168.0.7
Preferred DNS Server	114.114.114.114
Alternate DNS Server	223.5.5.5

**Port**

Status of Port	Port1
Conn Status A(ETH)	CONNECTED(1)
TX Count A(ETH)	0 bytes
RX Count A(ETH)	8409 bytes
Conn Status B(ETH)	IDLE
TX Count B(ETH)	0 bytes



The "Apply" button only saves the respective parameter change in the web interface. To make the change valid, the converter must be restarted!



Click "Continue" to make further settings under the other tabs.



After the "Apply" button has been pressed, a new window must be displayed (see illustration below). If this does not happen, the page must be reloaded and the change made again!

**USR**

Restart

Continue



The default settings can be restored using the reset function (see chapter 5.7)



## 5.5 Network settings

The network settings can be selected and adjusted under the menu item "Network" → "IP Config".

The screenshot displays the USR IOT web interface. On the left, a sidebar menu shows 'Status', 'Network' (expanded), 'IP Config' (selected), 'Port', 'Gateway', 'Cloud Service', and 'System'. The main content area is titled 'IP Configuration' and 'IP Configuration of WAN Port'. Under the 'Configuration' section, the following settings are visible:

Parameter	Value
Method of IP Obtaining	Static IP
DNS	Auto
IP Address	192.168.0.7
Subnet mask	255.255.255.0
Gateway	192.168.0.1
Preferred DNS Server	114.114.114.114
Alternate DNS Server	223.5.5.5

A 'Save&Apply' button is located at the bottom right of the configuration area.

Once the changes have been entered, the "Apply" button must be pressed.



The "Apply" button only saves the respective parameter change in the web interface. To make the change valid, the converter must be restarted!



Click "Continue" to make further settings under the other tabs.



After the "Apply" button has been pressed, a new window must be displayed (see chapter 5.4). If this does not happen, the page must be reloaded and the change made again!

## 5.6 Serial RS232 interfaces

**USR IOT**  
Communication Expert of Industrial IoT

- > Status
- > Network
- ▼ **Port**
  - Port1
  - Port2
  - Websocket to Serial
- > Gateway
- > Cloud Service
- > System

### UART TO ETH

Data transmission parameter configuration

#### SETTING

**Port** | Socket

Baud rate: 115200 (600~921600)bps

Data bits: 8 bit

Parity: None

Stop bits: 1

Serial Mode: RS485

Current Serial Mode: RS485

Flow ctrl: NONE

UART Packet Length: 0 (0~1460)bytes

UART Packet Time: 0 (0~255)ms

Sync Baudrate(RFC2217): ON

Enable Uart Heartbeat: ☐

Save&Apply

### SOCKET A

Working Mode: TCP Server | None

Maximum Sockets supported: 8 Exceeding Maximum: KICK

Local Port Number: 23 (1~65535)

PRINT: OFF

Modbus Poll: ☐ Response Timeout: 200 (10~9999)ms

Enable Net Heartbeat: ☐

### SOCKET B

Operating Mode: None

Save&Apply

The default settings for port 1 are shown. The same settings apply to port 2.

The active tab is displayed in orange.

For correct functioning, the interface parameters of the scale must be set in the configuration interface. The default settings can be found in the manual for your scale. If you have changed the interface settings of the scale, call up the current settings on the scale. Information on calling up the menu can also be found in your scale manual.

Communication settings such as "Working Mode" and "Local Port Number" can be set via the "Socket" menu item.



The "Apply" button only saves the respective parameter change in the web interface. To make the change valid, the converter must be restarted!



Click "Continue" to make further settings under the other tabs.



After the "Apply" button has been pressed, a new window must be displayed (see chapter 5.4). If this does not happen, the page must be reloaded and the change made again!

## 5.7 Restore default settings

1. Press and hold the reload button for at least 5 seconds during operation
2. Reload configuration page
  - ➔ Factory settings are restored

## 6 Small breakdown service

### Error

### Remedy

Connection cannot be established

Ensuring the power supply to the YKI and the scales

Ensure that the scales are switched on

Ensure that the correct RS232 cable is used. Refer to the manual for your scale for details.

Ensure use of a standard Ethernet cable

Enter the correct IP address in the target software

Check the configuration of the RS232 interface

No communication possible after changing the IP address.

Check the settings and ensure that they have been saved.

Ensure that the correct port and IP address have been entered in the target software

Settings are not applied

Reload page and make settings again

If the fault cannot be rectified, contact your dealer.