



KERN & Sohn GmbH

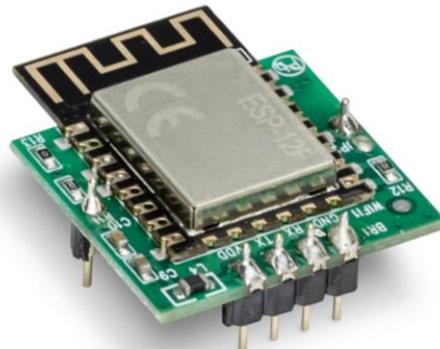
Ziegelei 1
72336 Balingen-Frommern
Germany

+0049-[0]7433-9933-0
FAX +0049-[0]7433-9933-149
@ info@kern-sohn.com

Installation Instructions WiFi-Module

KERN KUM-05

Type TYKUM-05-A
Version 1.1
2023-06
GB



The current version of these instructions can also be found online under:
<https://www.kern-sohn.com/shop/de/DOWNLOADS/>
under the rubric Instruction manuals

TYKUM-05-A-IA-e-2311



WiFi-Module
Version 1.1 2023-06
Installation Instructions

Contents

1	Scope of delivery	3
2	General and safety information	3
3	Installation	4
3.1	Opening the terminal	4
3.2	Overview of the circuit board	5
3.3	Installing the module	6
3.4	Closing the terminal	7
3.5	Setting up the interface	7

1 Scope of delivery

- WiFi-Module

2 General and safety information

⚠ DANGER



The electrical shock caused by touching live components

An electrical shock results in serious injury or death.

- ⇒ Before opening the device, disconnect it from the power source.
- ⇒ Only perform installation work on devices that are disconnected from the power source.

NOTICE



Electrostatically endangered structural components

Electrostatic Discharge (ESD) can cause damage to electronic components. A damaged component may not always malfunction immediately but may take some time to do so.

Make sure to take precautions for ESD protection before removing hazardous components from their packaging and working in the electronic area:

- ⇒ Ground yourself before touching electronic components (ESD clothing, wristband, shoes, etc.).
- ⇒ Only work on electronic components at suitable ESD workplaces (EPA) with suitable ESD tools (antistatic mat, conductive screwdrivers, etc.).
- ⇒ When transporting electronic components outside the EPA, only use suitable ESD packaging.
- ⇒ Do not remove electronic components from their packaging when they are outside the EPA.

3 Installation

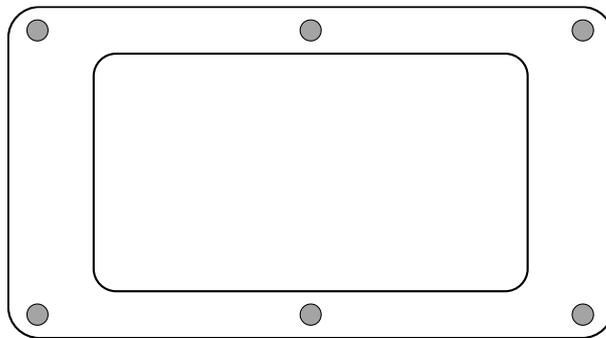
INFORMATION



- It is important to follow the instructions in this manual before starting work.
- The illustrations shown are examples which may differ from the actual product (e.g. positions of the components).

3.1 Opening the terminal

1. Disconnect the device from the power source.
2. Loosen the screws on the back of the terminal.



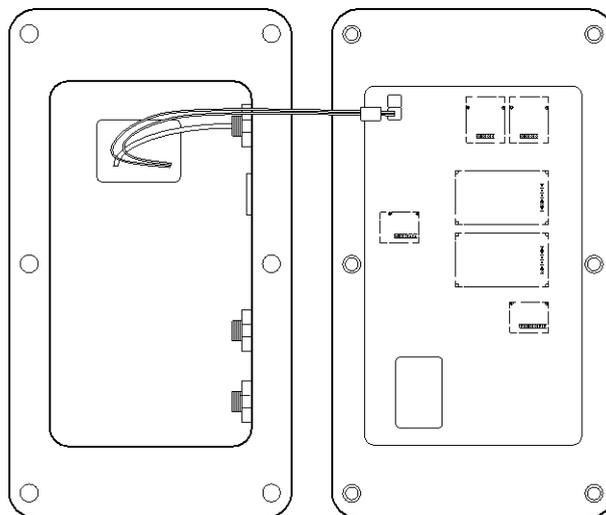
3.

NOTICE



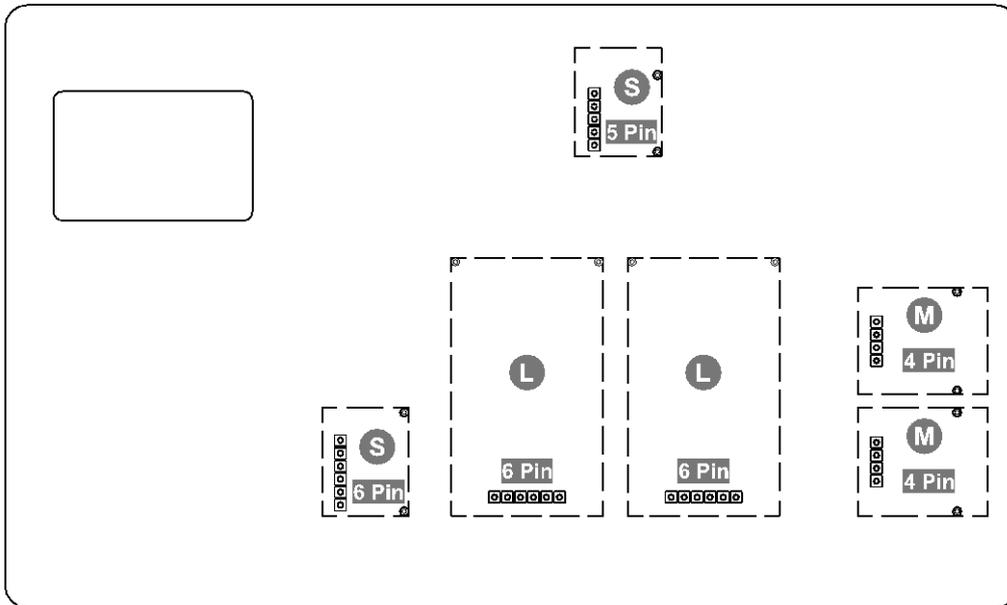
- ⇒ Make sure that you do not damage any cables (e.g. by tearing them off or pinching them).

Carefully open both halves of the terminal.



3.2 Overview of the circuit board

The circuit board of certain display devices offers several slots for KERN accessories, which allow you to extend the range of functions of your device if necessary. Information on this can be found on our homepage: www.kern-sohn.com



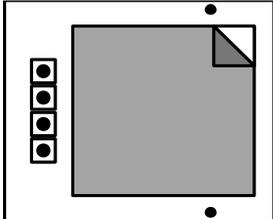
The illustration above shows examples of the various slots. There are three slot sizes for optional modules: S, M, L. These have a certain number of pins.

The correct position for your module is determined by the size and number of pins (e.g. size L, 6 pins), which is described in the respective installation steps.

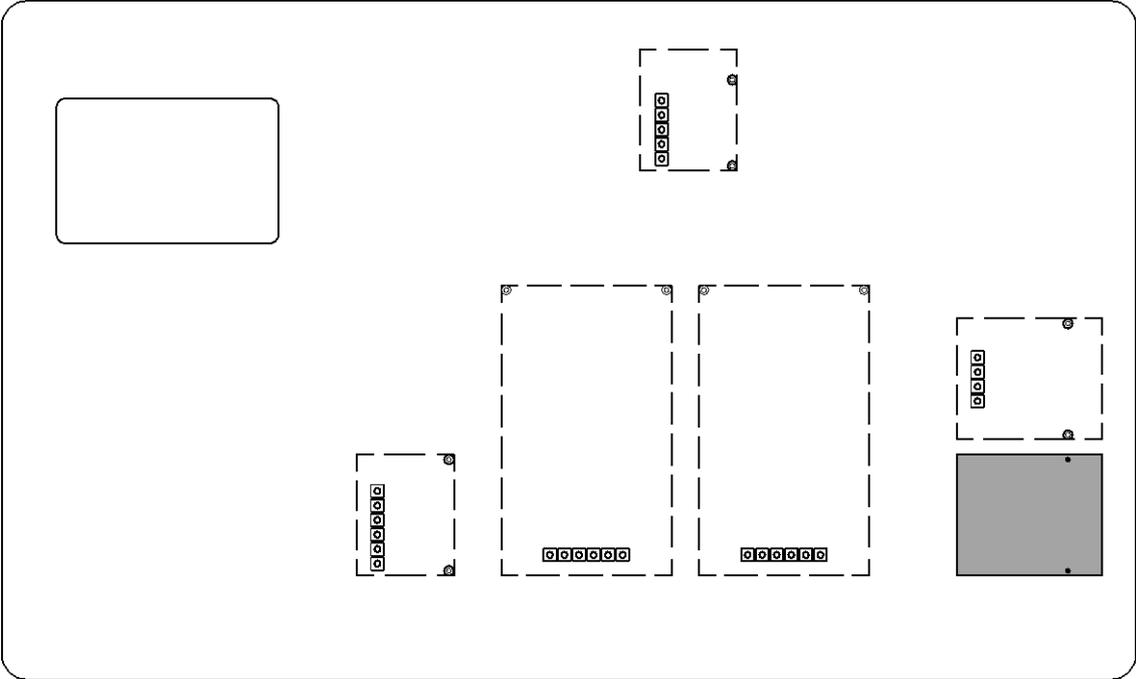
If you have several identical slots on the board, it does not matter which slot you select from these. The device automatically recognizes which module it is.

3.3 Installing the module

- 1. Open the terminal (see chapter 3.1).
- 2. Remove the module from the packaging.
- 3. Remove the protective foil from the sticky pad on the bottom of the module.



- 4. Plug the module into a **size M, 4 pin** slot.



- 5. The module has been installed.

3.4 Closing the terminal

1. Check the module for a tight fit.

2.



NOTICE

- ⇒ Make sure that you do not damage any cables (e.g. by tearing them off or pinching them).
- ⇒ Make sure that any existing seals are in their intended place.

Carefully close both halves of the terminal.

3. Close the terminal by screwing it together.

3.5 Setting up the interface

Interface: Wi-Fi	
WLAN norm	IEEE 802.11 b/g/n (Wi-Fi)
Network log	TCP/IP with DHCP
Supported encryption methods	WPA, WPA2
Transmission frequency	2412 - 2472 MHz
Maximum transmission performance	< 20 dBm
Application log	KCP (KERN Communications Protocol):

Establish the WiFi connection:

1. The balance creates a WIFI access point as soon as it has started up (WLAN symbol in the balance display appears).

Use your computer to connect to this access point. The SSID (name of the balance's access point) is „AI_THINKER_XXXXXX“

2. Using a web browser visit the website <http://192.168.4.1/> .

In the website:

A. Set the mode „Mode“ to “apsta”

B. Enter information about the network which you want to integrate the balance into (network „AP Name“ and password „AP Password“)

C. Save the settings „Save“ and update the site

ESP8266 WebConfig Restore Reboot

Serial Setting	SoftAP	Station
Baud: 115200	SSID: AI-THINKER_872B77	Mode: apsta
Databits: 8	Passwd:	AP Name: YKV_Net
Parity: NONE	Auth Mode: OPEN	AP Password: YKV123456
Stopbits: 1	IP addr: 192.168.4.1	IP address: 0.0.0.0
	Subnet mask: 255.255.255.0	Subnet mask: 0.0.0.0
	Gateway: 192.168.4.1	Gateway: 0.0.0.0
	Mac: be:dd:c2:87:2b:77	Mac: bc:dd:c2:87:2b:77
Save	Save	Save

A

B

C

3. Separate the access point from the computer
4. Cut the power supply to the balance for a short moment
5. Connect the computer again to the access point of the balance and update the website
 - D. Now the IP-address „IP address“ is displayed

ESP8266 WebConfig Restore Reboot

Serial Setting	SoftAP	Station
Baud: 115200	SSID: AI-THINKER_872B77	Mode: apsta
Databits: 8	Passwd:	AP Name: YKV_Net
Parity: NONE	Auth Mode: OPEN	AP Password: YKV123456
Stopbits: 1	IP addr: 192.168.4.1	IP address: 192.168.132.32
	Subnet mask: 255.255.255.0	Subnet mask: 255.255.255.0
	Gateway: 192.168.4.1	Gateway: 192.168.132.1
	Mac: be:dd:c2:87:2b:77	Mac: bc:dd:c2:87:2b:77
Save	Save	Save

D

6. Close the website
7. Connect the computer to the selected network
8. Enter the IP / Port into the target software: 23

General Bus IP port properties

TCP/UDP / IP settings:

Connection type: TCP - client - connecting

Local IP address: Port:

Target host/IP addr.: 192.168.132.32 G Port: 23

Keep-Alive:

Abbrechen Apply