IoT Box

Technical manual

CE

Waage 1			Steuerung & Vernetzung mit weiteren SPS-Teilnehmern
Waage ...	IoT-Box	PROFINET	Steuerung der Waagen
		SPS	Visualisierung der Messdaten
			Einbindung in ERP- & CRM-Systemen
Waage 16			Und viele weitere Möglichkeiten...

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Declaration of Conformity

Declaration of Conformity

Manufacturer: **EHP-Wägetechnik GmbH**

Address: **Dieselstrasse 8**

D-77815 Bühl (Baden)

hereby declares that the product: Data Receiver Type IoT Box

with all options complies with the following harmonized standards:

EN 61000-4-2, EN 61000-4-3, EN 61000-4-4, EN 61000-4-5, EN 61000-4-6, EN 61000-4-11 according to directive 2004/108/EC (electromagnetic compatibility)

EN 61010-031 Part 1/ Safety requirements for electrical equipment for measurement, control and laboratory use

EN 62368-1 Communication equipment - Part 1: Safety requirements

EN 60950-1:2006 in accordance with Directive 2006/95/EC (Low Voltage Directive).

DIN VDE 0100

The product is marked with the CE mark.

Bühl, November 2021   Markus Ebel / Technical manager

This declaration has been prepared in accordance with DIN EN ISO/IEC 17050-1.

Notes on the manual

In this technical manual you will find the necessary information for installation & operation of the **IoT box.**

► Read this manual before operating the product. This will protect you and prevent damage to your device.

► Always keep this manual in a place where employees, service personnel, etc. can view it. Present this manual to the inspector or the contracted specialist company at each recurring inspection.

Design features of this guide

Various elements of this guide have specified design features. This way you can easily distinguish the following elements:

Normal text

● Enumerations

► Action steps

Table titles and *figures* are in bold.

ⓘ Tips contain additional information.

Figure design features

If elements of a figure are referred to in a legend or in the running text, they are assigned a number (1). The numbers in the running text always refer to the figure shown.

Figure 1 -Explanation design features

Safety instructions

TO NOTE
● **Device may only be opened by a specialist!**   ● **Device must be protected from heat and moisture!**

⚠   IMPORTANT SAFETY INSTRUCTIONS   ⚠
To avoid exposing yourself to the risk of electric shock, do not remove the housing cover. There are no user-repairable parts inside the unit. Leave repairs to the qualified EHP customer service. There is a risk of contact with non-insulated parts inside the device, which can lead to electric shocks.   **Operating environment**   Avoid installing this device in an insufficiently ventilated, humid or hot place.   **Warning:**   To disconnect the device completely from the mains, the power connection must be disconnected.

Warranty

The warranty is void in the event of:

- Non-intended use of the manufacturer's specifications in this operating manual
- mechanical damage, damage due to heat, moisture and liquids.
- Wear and tear

Scope of delivery

- IoT box

Figure 2- IoT box

The following accessories are included as standard:

- Connector for power connection - Neutrik Powercon NAC3FCA

- Connector for network connection - Neutrik Ethercon NE8MX
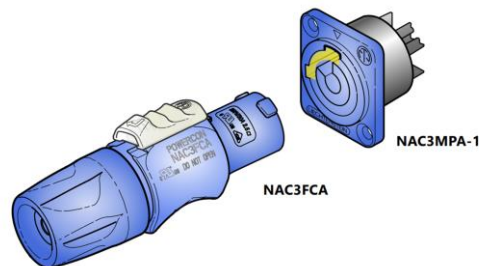
- Angle antenna

- EHP software & driver CD

Commissioning

Site

The IoT box has a radio range of up to 500m in the open field. Obstacles between the scales and the IoT box, such as walls, can impair the range accordingly. Therefore, if possible, select a location with a clear view of the connected scales.
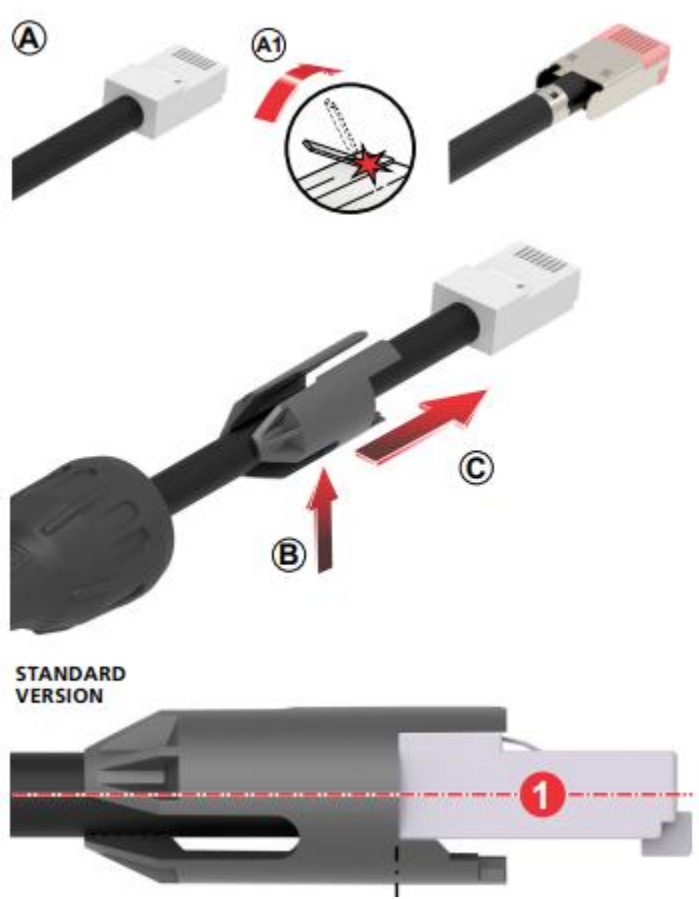
Power & Network Connection

Depending on the installation location of the IoT box, different cable lengths are required. Therefore, only the connector for the power connection - Neutrik Powercon NAC3FCA - and the connector for the network connection - Neutrik Ethercon NE8MX - are included in the scope of delivery.

NAC3MPA-1

NAC3FCA

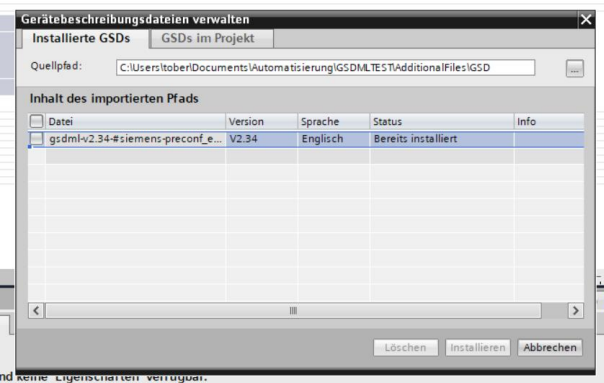| | **Connection power plug**

(A)
Slide the clamping sleeve (1) and the collet (2) over the cable.

(B)
Prepare the power cable according to the dimensions in the illustration.

(C)
Insert the cable into the provided clamps and fasten it (max. torque 0.5Nm).

Finally, screw the connector housing and clamping sleeve together. |

	Connector plug Ethernet
	Preparation: Slide the clamping sleeve over the cable.
	(A) Mount the RJ45 connector on the cable. Remove the release tab of the RJ45 plug.
	(B) Insert collet chuck, aligning the opening on the contact side of the RJ45 connector
STANDARD VERSION	**(C)** Slide clamping sleeve over RJ45 connector.

Connect the power cable and establish the Ethernet connection between the IoT box and your PLC system. This completes the commissioning on the hardware side.

Integration of the IoT box into the TIA Portal

Using the predefined GSDML & UDT files you can integrate the IoT box into your PLC network in just a few steps. The files can be found on the supplied EHP Software & Driver CD.
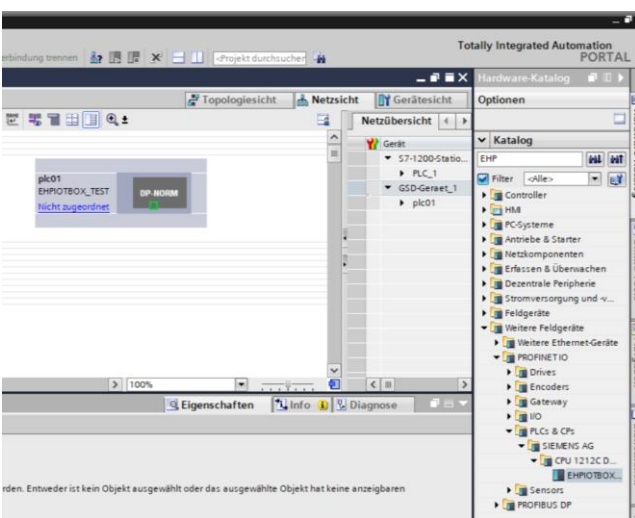

Include GSDML file

(A)
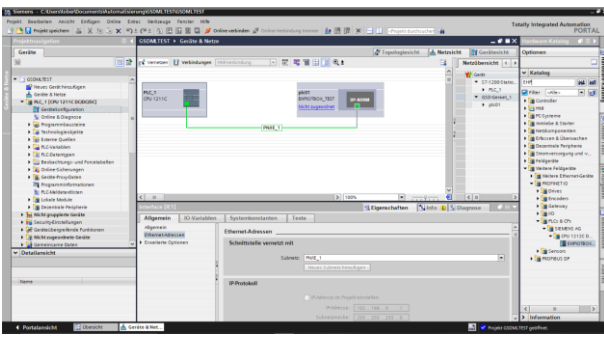Under the "Extras" menu tab, select "Manage device description file (GSD)".

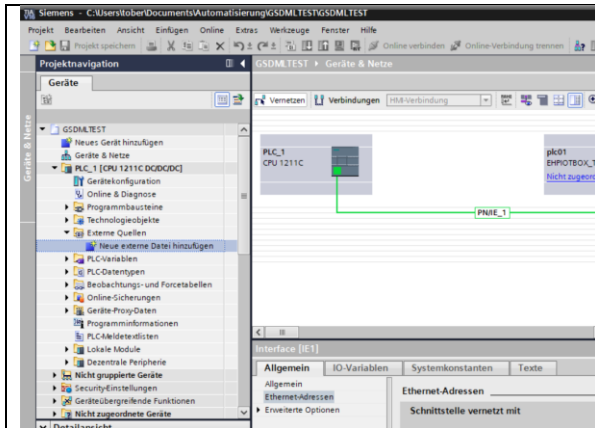Select the source path under which the GSDML file of the IoT box can be found on your computer.

Highlight the file and click Install.

(B)
Search for "EHP" in the "Hardware Catalog", select "EHP_IoT_Box" and drag it to your network view.

(C)
Finally, you only need to establish the connection between your PLC and the IoT box.

Include UDT file

Select "Add new external file" in the "Project navigation" under "External sources".

Select the appropriate path and the file "EHP_IoT_Box.udt

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NOTES

EHP service hotline

Do you need our support in the fastest way?

No problem - just call us free of charge.

Hotline: +49 7223 9366-0

You can reach us Monday through Thursday between 8:00 am and 4:00 pm and Friday between 8:00 am and 12:00 pm.

EHP Weighing Technology GmbH

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