

PROFINET: Changeover from ASi gateways type K20 to KE5



Introduction

Changeover from ASi gateways with PROFINET interface type K20 to the new VBG-EP1-KE5-D*

With these instructions, you can easily switch from previously used K20 gateways to the new KE5 gateways. The following advantages result from a change:

- Extensive web server for easy configuration and diagnostics
- Easy commissioning via your mobile device
- REST API interface enabling the implementation of IIoT solutions
- Multiprotocol functionality supports PROFINET and EtherNet/IP
- Quick setup via push button

Switch connections

Ethernet



Change Ethernet

1. Remove the Ethernet connections from the K20 sockets PROFINET 1 and PROFINET 2
2. Insert the Ethernet connectors into the sockets X1 and X2 at the VBG-EP1-KE5-D*.

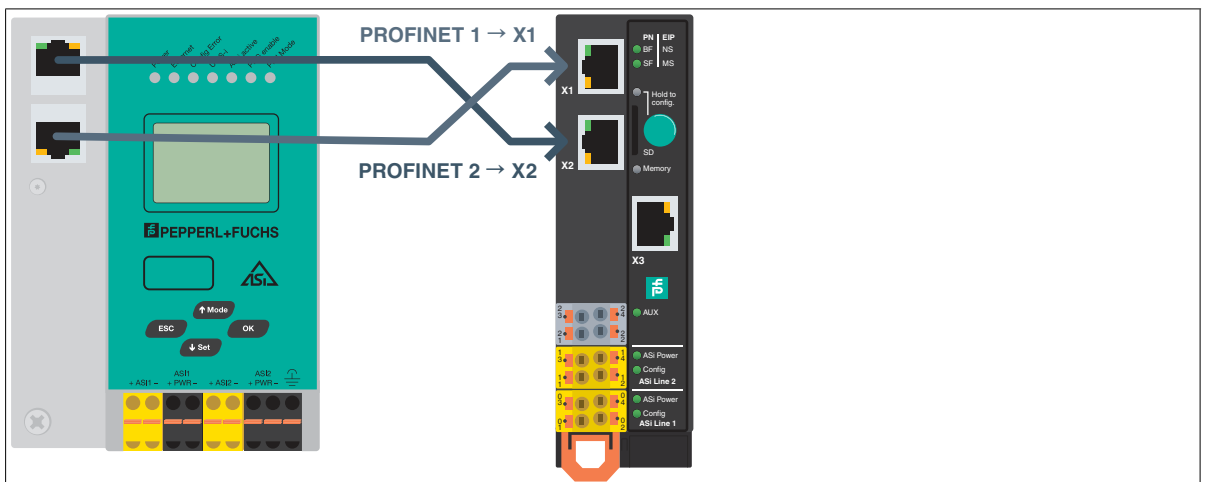


Figure 1

ASi Power Supply



Note

If you are using a K20 gateway with integrated data decoupling so far, you need a special ASi power supply for the supply of the KE5 gateway.



Change power supply to VBG-EP1-KE5-D

1. Take the power supply connections out of the K20 sockets ASi PWR+/-.
2. Plug the connections of the power supply into the sockets 03 and 01 on the VBG-EP1-KE5-D.

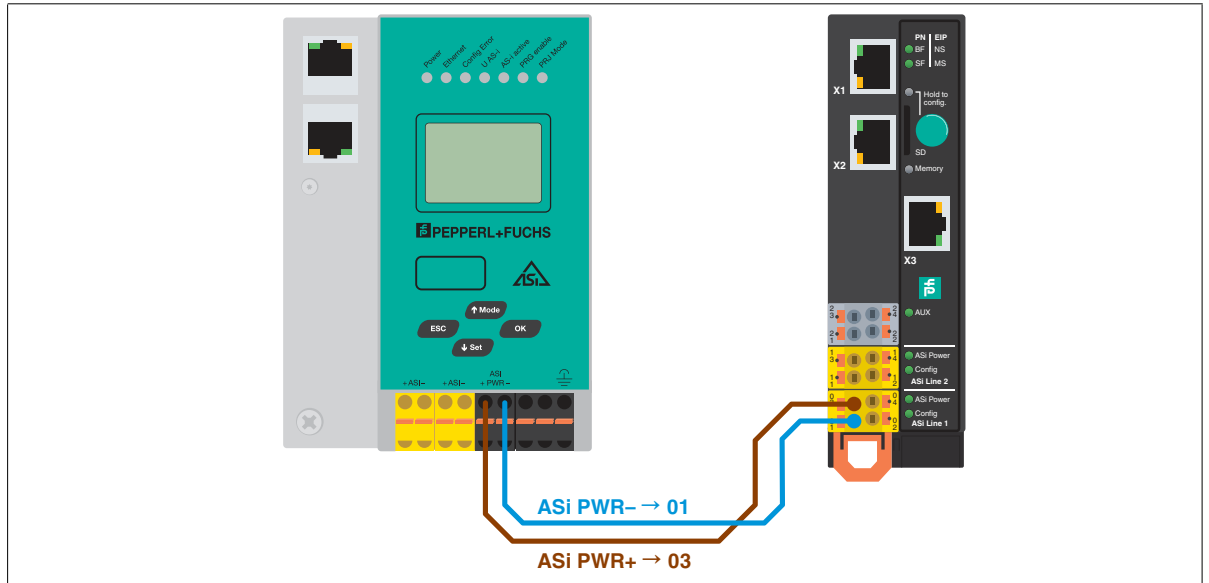


Figure 2



Change power supply to VBG-EP1-KE5-DMD

1. Take the power supply connections out of the K20 sockets ASi1 PWR+/- and ASi2 PWR+/-.
2. Plug the connections of the power supply into the sockets 03 and 01 for ASi network 1 and 13 and 11 for ASi network 2.

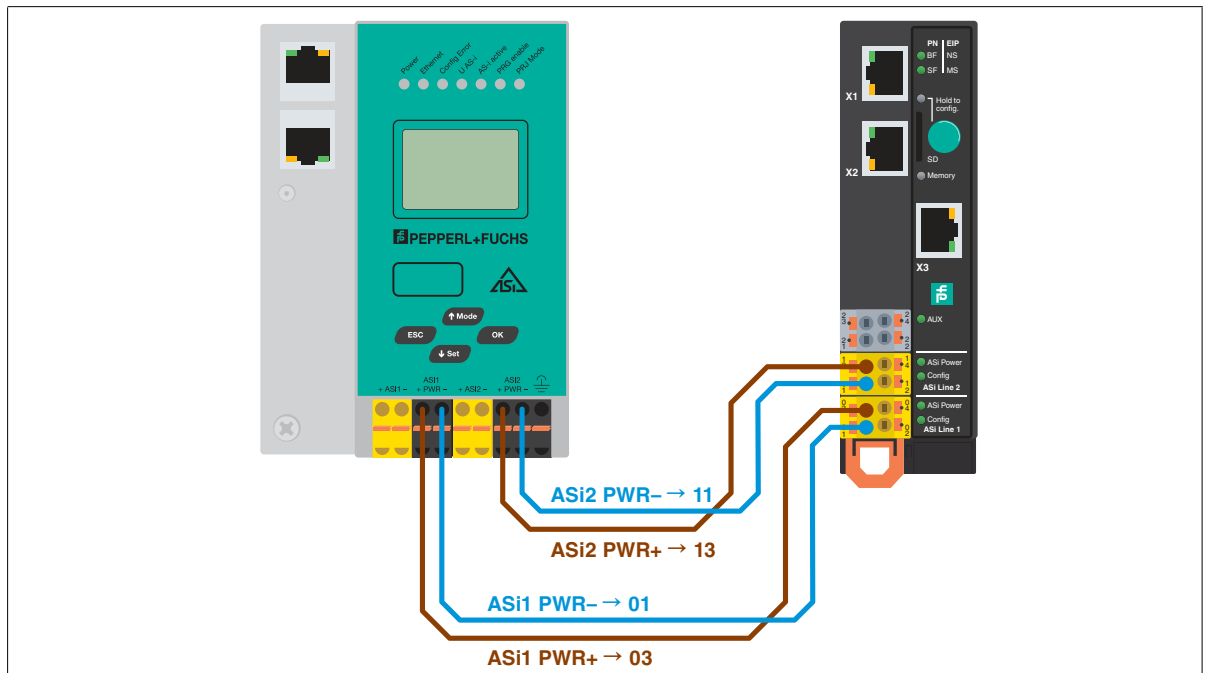


Figure 3

ASi Network



Change ASi network to VBG-EP1-KE5-D

1. Take the connectors of the ASi network out of the K20 sockets ASi +/-.
2. Plug the connectors for the ASi network into the sockets 04 and 02.

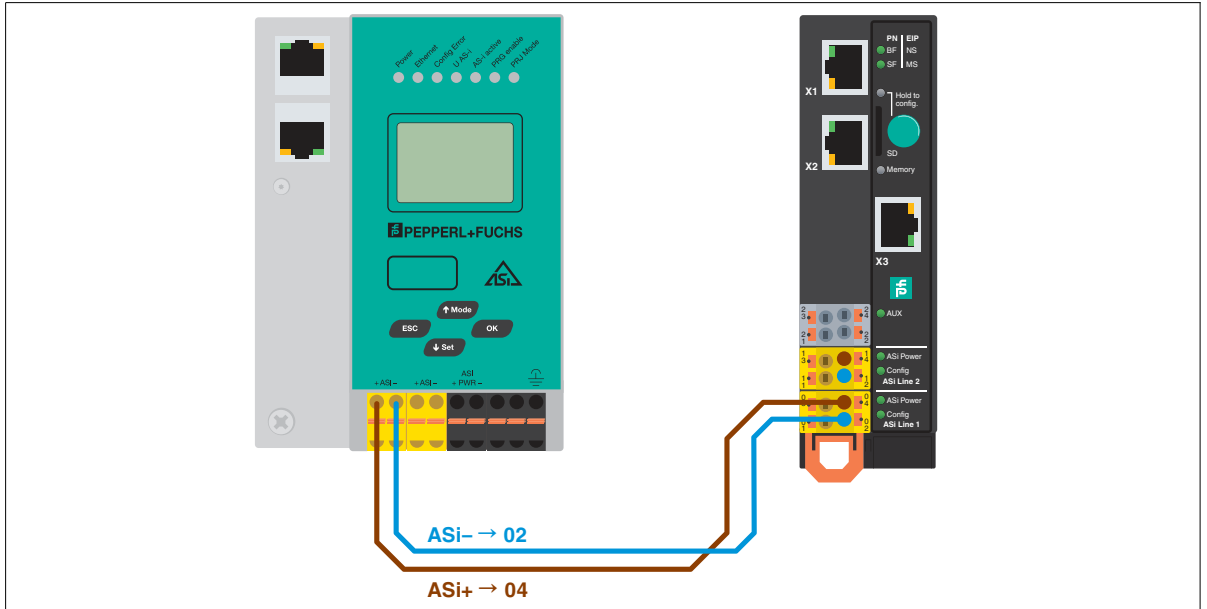


Figure 4



Change ASi network to VBG-EP1-KE5-DMD

1. Take the connectors of the ASi network 1 and 2 out of the K20 sockets ASi1 +/- and ASi2 +/-.
2. Plug the connectors for ASi network 1 into the sockets 04 and 02 for ASi network 2 into the sockets 14 and 12

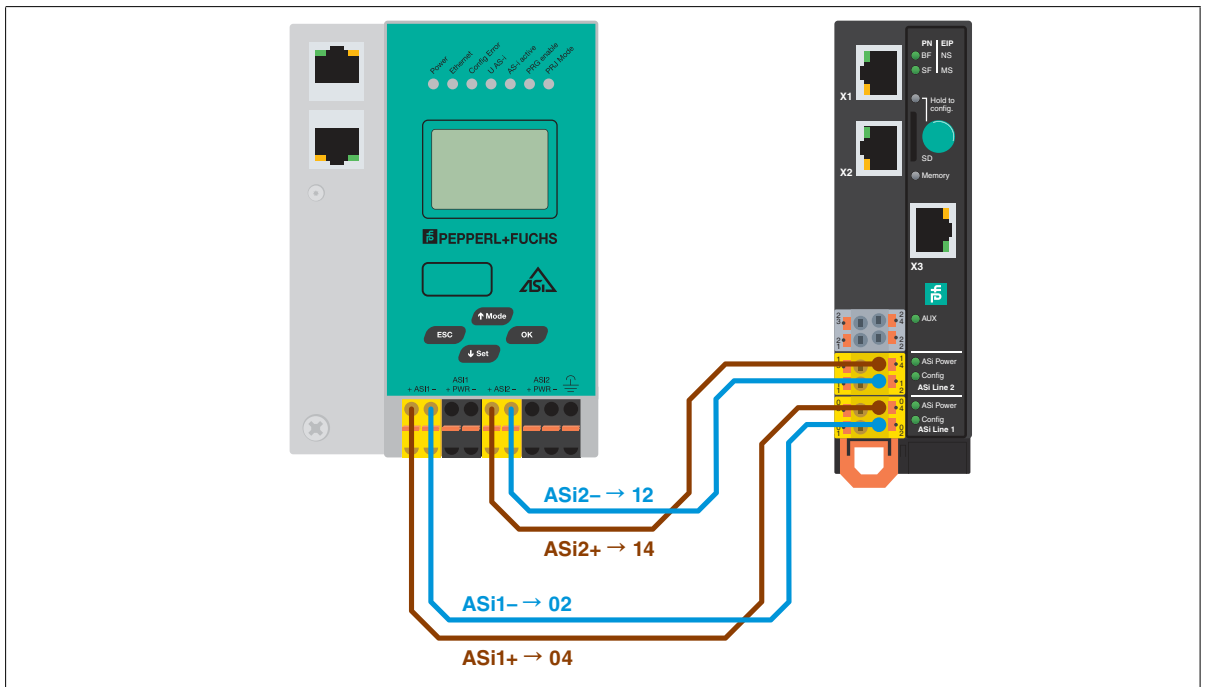


Figure 5

Transfer Configuration



Store ASi configuration on KE5 gateway

1. Connect the VBG-EP1-KE5-D*, see chapter .
2. Press and hold the pushbutton for 5 seconds.
 - ↳ The ASi 1 LEDs flash yellow.
 - ↳ The configuration of the ASi network 1 can be saved.
3. Press and hold the pushbutton for 5 seconds.
 - ↳ The Memory LED flashes green
 - ↳ The configuration of ASi network 1 is stored.



Note

Switching between ASi network 1 and 2 at VBG-EP1-KE5-DMD

4. Press the pushbutton briefly.
 - ↳ The ASi 2 LEDs flash yellow.
 - ↳ The configuration of the ASi network 2 can be saved.
5. Press and hold the pushbutton for 5 seconds.
 - ↳ The Memory LED flashes green
 - ↳ The configuration of ASi network 2 is stored.



Note

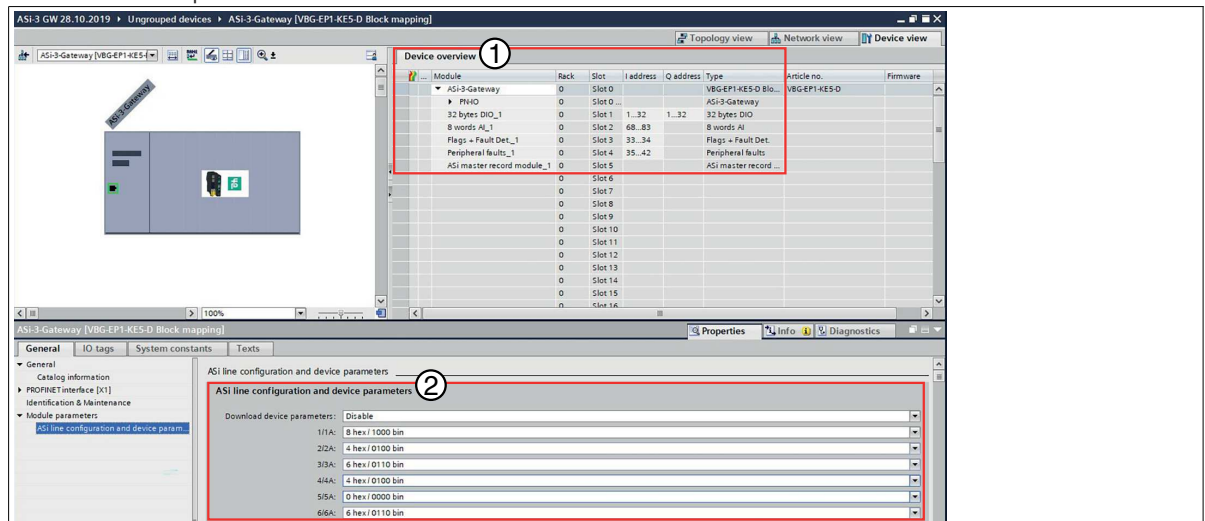
The device reboots automatically after saving the configuration.

PROFINET Integration

Save the configuration of the K20 gateway

Before you add the KE5 gateway to your PROFINET project, save the relevant configurations of the K20 gateway, e.g. by taking a screenshot:

- Station name
- Data image
- Device parameters



1. Data image
2. Device parameters



Import GSD file

1. Download the matching GSD file for your device from our website.
VBG-EP1-KE5-D
VBG-EP1-KE5-DMD
2. Install the GSD file in the TIA Portal via "Options/Manage general station description files (GSD)"

Add VBG-EP1-KE5-D* to the PROFINET controller

1. Remove the K20 gateway from the network.
2. Add the new KE5 gateway to the PROFINET controller.

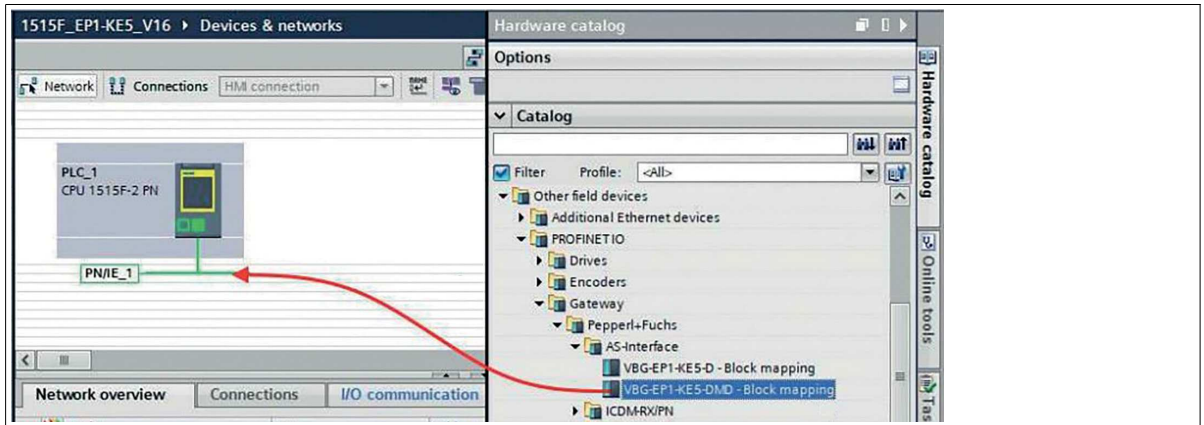


Figure 6

Assign PROFINET station name

1. Assign the station name of the K20 gateway to the VBG-EP1-KE5-D*.

Configuration of the data image and device parameters

1. Enable "Download device parameters" and adjust the ASi device parameters to match those of the previously used K20 gateway.

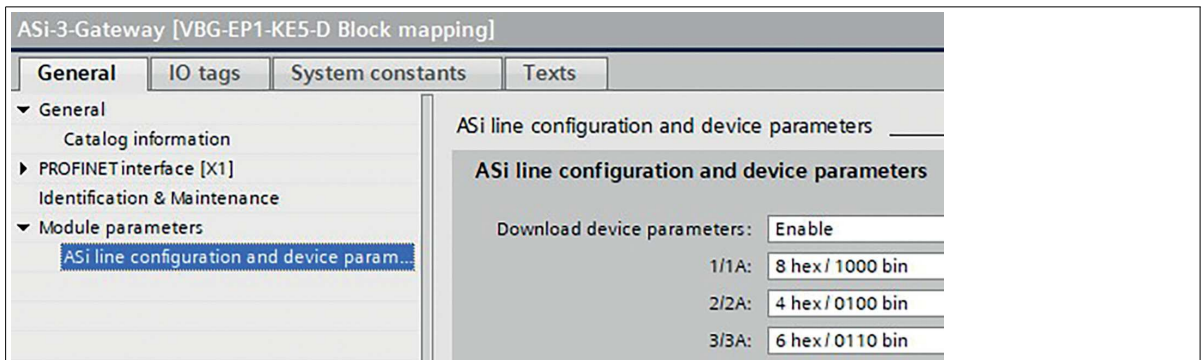


Figure 7

2. Add the data image from the K20 gateway to the new VBG-EP1-KE5-D*.

Module	Rack	Slot	I address	Q address	Type	Article no.	Firmware
ASI-3-Gateway	0	Slot 0			VBG-EP1-KE5-D Blo...	VBG-EP1-KE5-D	
PN-HO	0	Slot 0...			ASI-3-Gateway		
32 bytes DIO_1	0	Slot 1	1...32	1...32	32 bytes DIO		
8 words AI_1	0	Slot 2	68...83		8 words AI		
Flags + Fault Det_1	0	Slot 3	33...34		Flags + Fault Det.		
Peripheral faults_1	0	Slot 4	35...42		Peripheral faults		
ASi master record module_1	0	Slot 5			ASi master record ...		
	0	Slot 6					
	0	Slot 7					

Figure 8

Note

If you want to use analog devices after adding the data image, you need to adjust the device parameters of the respective address to the previously used settings.

Go Online

1. Press "Go Online" in the TIA Portal and you are done.
 ↳ Now you can benefit from all the advantages of the new KE5 ASi gateway.