# Handling-Shortinstruction for Interface-Cable for S7 V1.9

#### MPI/PPI-Kabel 9350 for Simatic S7-200 up to S7-400

Please connect the cable to the serial port (Com-Port) of your pc and to the MPI- or PPI-Port of your plc.

After, the cable has be started, you can see in the display of the cable how much devices and their address are connected to the bus. In your S7-programming software you should configure following:

[STEP7]

Siemens S7-300/400:

Under options → Set PG/PC Interface... please select the driver "PC-Adapter [MPI]" and configure it like the properties of the mpi-bus. If your software don't have this driver, you should have to install it now. You don't need the software CD, the driver is included in your Siemens software. You should press the button "Add/remove" in this menu.

You can also install the driver called "MPI-Speed" (see link to the homepage) to your system. This driver allows to communicate serial up to 115K2 Baud. The original driver "PC-Adapter [MPI]" only provides baudrates up to 38K4 Baud.

Attention: Siemens don't provide on operatings-systems from Win7 64-bit and newer any serial products. You don't find in the properties of the driver any possibility to select a Comnort!

Siemens S7-200:

[MicroWin]

Under Set PG/PC Interface ... please select the driver PC/PPI-cable. The configured PPI-baudrate of 9K6 or 19K2 will be recognised of the connected MPI/PPI-Kabel. Please note, that the cable will make this only after starting up. If you have a change of the baudrate, please restart the cable! This cable is not able to drive with a MultiMaster - network.

Siemens don't provide on operatings-systems from Win7 64-bit and newer any serial products. You don't find in the properties of the Attention: driver any possibility to select a Com-port!

#### PG-95/2000:

Under option → interface you select the com-port and the baudrate up to 115K2 Baud.

## S7 for Windows:

Under file > properties > interface select the protocol for "MPI Converter (Simatic S7)" and configure the correct com-port and the baudrate up to 115K2.

## MPI-II-Kabel 9352 for Simatic S7-200 up to S7-400

Please connect the cable to the serial port (Com-Port) of your pc and to the MPI- or PPI-Port of your plc.

After, the cable has be started, you can see in the display of the cable how much devices and their address are connected to the bus. In your S7-programming software you should configure following:

#### Siemens S7-300/400:

Under options → Set PG/PC Interface ... please select the driver "PC-Adapter [MPI]" and configure it like the properties of the mpi-bus. If your software don't have this driver, you should have to install it now. You don't need the software CD, the driver is included in your Siemens software. You should press the button "Add/remove" in this menu.

[STEP7]

For the connection to the profibus, please use the driver "PC-Adapter [Profibus]".

Attention: Siemens don't provide on operatings-systems from Win7 64-bit and newer any serial products. You don't find in the properties of the driver any possibility to select a Comport!

#### Siemens S7-200:

[MicroWin] Under Set PG/PC Interface ... please select the driver PC/PPI-cable. The configured PPI-baudrate of

9K6 or 19K2 should be configured in the cable. Please go to the menu item config  $\rightarrow$  mode and select it.

This cable is only able to drive with a MultiMaster - network with serial communication!

Siemens don't provide on operatings-systems from Win7 64-bit and newer any serial products. You don't find in the properties of the Attention: driver any possibility to select a Com-port!

### PG-95/2000:

Under option → interface you select the com-port and the baudrate up to 115K2 Baud.

#### S7 for Windows:

Under file > properties > interface select the protocol for "MPI Converter (Simatic S7)" and configure the correct com-port and the baudrate up to 115K2.

The MPI-II-Kabel can be connected also with USB to the pc. For this, you should use a cable for USB plug  $\Leftrightarrow$  plug and type A  $\Leftrightarrow$  A. If your pc want to start the installation-manager, please stop it and close it. Please install the software-tool "TIC-driver" (see link to the homepage) on this PC. Please look also at "Installation TIC-driver". Please select this driver in the setting PD/PC-interface und your used programming-software will with the MPI-II-cable communicate with USB

You don't have to configure the MPI-II-Kabel for this communication, because, after rebooting the cable recognises the first communication (serial or USB) and uses this port.

The USB driver is installed via the device manager, the zipped driver file is available for download on the product page.





# MPI-USB 9352-USB / S7-USB 9352-S7-USB for Simatic S7-200 up to S7-400 $\,$

The cable/module will be plugged in the USB-port of your pc and the MPI- or PPI- or Profibus-port of your plc. After, the cable has be started, you can see in the display of the cable how much devices and their address are connected to the bus. The S7-USB shows you his state with integratet 2 LEDs, green: Power/mpi-communication, yellow: error with flashing code.

Please install the software-tool "TIC-driver" (see link to the homepage) on this PC. Please look also at "Installation TIC-driver". Please select this driver in the setting PD/PC-interface und your used programming-software will with the MPI-II-cable communicate with USB.

You don't have to configure the MPI-II-Kabel for this communication, because, after rebooting the cable recognises the first communication (serial or USB) and uses this port. The USB driver is installed via the device manager, the zipped driver file is available for download on the product page.

# MPI-LAN 9352-LAN for Simatic S7-200 up to S7-400

The cable will be plugged to the network port of your pc and the MPI- or PPI- or Profibus-port of your plc. Or, you can connect the MPI-LAN with a Crossover-adapter to the wall network port or to a hub/switch with an automatic recognising of the correct pinning. This module use a integrated keyboard, but the comfortable way is using the integrated webserver. For this action, you connect the PC and this module via network and write down in the browser the ip-address of this module <u>http://192.168.1.56</u> (default address). Now, you are possible to change the configuration and the ip-address, also.

Please install the software "TIC-driver" (see link to the homepage) on your PC. Please look at the note "installation TIC".

Now you are able to work with this driver with the same settings like the MPI-II-cable.

The basic-settings of this cable are so defined that you would be able to connect the cable directly to the standard-mpi-port and communicate with this driver.

# S7-LAN 9352-LANCon for Simatic S7-200 up to S7-400

The module will be connected direct to the mpi/profibus-port of the S7-plc. The connection of the RJ-45-port will be the same connecting a PC to the network. This module don't use a integrated keyboard so the configuration will be done with the integrated webserver. For this action, you connect the PC and this module via network and write down in the browser the ip-address of this module <a href="http://192.168.1.56">http://192.168.1.56</a> (default address). Now, you are possible to change the configuration and the ip-address, also.

Please install the software "TIC-driver" (see link to the homepage) on your PC. Please look at the note "installation TIC".

Now you are able to work with this driver with the same settings like the MPI-II-cable.

The basic-settings of this module are so defined that you would be able to connect the module directly to the standard-mpi-port and communicate with this driver.

# S7-BRIDGE 9352-S7-WIFI for Simatic S7-200 up to S7-400

The module will be connected direct to the mpi/profibus-port of the S7-plc. The connection of the RJ-45-port will be the same connecting a PC to the network. This module don't use a integrated keyboard so the configuration will be done with the integrated webserver. For this action, you connect the PC and this module via network and write down in the browser the ip-address of this module <a href="http://192.168.1.56">http://192.168.1.56</a> (default address). Now, you are possible to change the configuration and the ip-address, also.

To use the WLAN section, connect your PC to the "S7-BRIDGE" WLAN network and open the S7-BRIDGE website at <a href="http://192.168.1.55">http://192.168.1.55</a> (address at delivery). Here you can set and apply the parameters regarding WLAN. Of course, the WLAN connection is also available to the PLC interface.

Please install the software "TIC-driver" (see link to the homepage) on your PC. Please look at the note "installation TIC". Now you are able to work with this driver with the same settings like the MPI-II-cable.

The basic-settings of this module are so defined that you would be able to connect the module directly to the standard-mpi-port and communicate with this driver.

# MPI-Modem

The TS-possibility allows the connection of a modem, to make a connection with a 2<sup>nd</sup> Modem and a PC to a S7-300/400. The MPI-Modem must be connected to an analogue telephone line and the PLC.

To work with the MPI-Modem in his TS-function, you must make the following actions: you need the TeleService-software from Siemens in your PC to work with the MPI-Modem. The configuration of the MPI-Modem can be made with the TeleService-software from Siemens or with the "MPI-Kabel Manager". On the PC side you need another modem.

# Installation TIC

Install the TIC-driver on your PC (see attached link to the homepage). The installation-tool guides you to trough the installation for all needed definitions. After a restart of the PC you can find the TIC-driver in the settings of the PD/PC-interface or your online-drivers as "TIC ETH/USB" for MPI, Profibus and PPI.

To connect the product you will have please open the properties of the TIC-driver by opening the settings of the PD/PC-interface. Please search at first for all available devices. When your device was found you can see it in the

table of results the device itself and the included firmware-version of the device and the actual version on your PC. When you want to make a firmware-transfer click the button "update" and the actual version would be send to the device. The transfer runs automatically and at the end you got a response if the update was successfully.

If you will be shure that your device has detected automatically the connected bus, you can use the setting "automatic-mode" in the properties of the TIC-driver. You also can deselect this mode and make the settings by your own. With click on the OK-button this configuration is stored and will be used for communication and you would be able to communicate with the other bus-clients.

Attention: For LAN-devices please check at first if your PC has a own free ip-address. When using a DHCP-server to get an ip-address please check and test if the PC is used without network-connection the ip-address is allway ready. Without ip-address there is no communication possible.











#### USB driver installation and HCVI:

From Win10 Build 1803 there is a kernel isolation called "HCVI". Problems can occur during installation with activated "HCVI". The error message is:

The device driver for this hardware cannot be loaded. The driver may be damaged or missing. (Code 39)

The only remedy is to deactivate "HCVI", call up the registry editor via "Run as administrator" and then navigate to the key:

HKEY LOCAL MACHINE\SYSTEM\CurrentControlSet\Control\DeviceGuard\Scenarios\HypervisorEnforcedCodeIntegrity

There set the DWORD value "Enabled" to 0 (see also:

https://web.archive.org/web/20190420022748/https://docs.microsoft.com/en-us/windows/security/threat-protection/windows-defender-exploitguard/enable-virtualization-based-protection-of-code-integrity).

Then Windows 10 must be restarted. Then "HCVI" should be deactivated and the installation of the USB driver must work.

#### Additional to MPI-II-Kabel, MPI-USB and MPI-LAN:

The cables can be driven in a mode, called "automatic". In this mode, your cable proofs while starting up if it is connected to a MPI- or Profibus-net. For this, you have to configure your cable under *config*  $\rightarrow$  *mpi-bus*  $\rightarrow$  *baudrate* to the position "auto". Now, reset the cable and it will proof in this moment the bus.

After this moment, please plug at first the bus (mpi or profibus) and after this the pc or a external power supply.

This cable uses new faster protocols (V5.1), so a serial communication is only possible with a baudrate up to 38K4. This communication is faster than the older protocol (V5.0) with a baudrate of 115K2. Under *config*  $\Rightarrow$  *protocol* you can change the kind of protocol. A usage of the MPI-SPED-driver with the virtual com-port PLCVcom is able, but you don't get any advantage.

Please note, that the other parameters like (bus-baudrate, HSA, own mpi-address) are correct configured.

More to the interface-cable as well as the current manual or the special manual for MPI-LAN, MPI-USB, S7-USB, S5-LAN and S7-LAN you can download under

https://www.tpa-partner.de

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# **QR-Code Website:**





Please make sure to update your drivers before using our products.

Current S7 panels via WLAN to the S5 controller



Connect each S7-TCP-IP panel to your S5. Now also available via WLAN for mobile workstations. PARALLEL several panels and even simultaneous PG connections possible. Include hard-to-reach places in your ERP system.