



Annex to the Operation Manual

GMA200-MT/-MW

Configuration Instructions for Fieldbus Gateways

GMA200-MT



GMA200-MW



Ethernet
Gateway



Profibus
Gateway



Profinet
Gateway



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1. General

To connect one or several GMA200 measuring modules (GMA for short) to an **Ethernet network**, a **Profibus** or a **Profinet** network, a Fieldbus Gateway must be used as an interconnecting module between the GMA bus and the Fieldbus (see table below). The gateway's tasks comprise the adjustment of different hardware interfaces and the conversion between Modbus protocol and the corresponding Fieldbus protocol.

Fieldbus	Protocol	Gateway
Ethernet	Modbus TCP	HD67507
Profibus	DPV1	UNIGATE CL-PBDPV1
Profinet	IO	UNIGATE CL-PN

If you need to connect a GMA to an **Ethernet network** and a **Profibus** simultaneously, you will need an Ethernet Gateway (HD67507 in the table above) to serve as a coupling module between the GMA bus and the Ethernet network, as well as an additional Fieldbus gateway which is used to connect the Profibus to the Ethernet network (see table below).

Fieldbuses	Protocols	Gateway
Profibus / Ethernet	Profibus-DPV1 / Modbus-TCP	UNIGATE CX-ModTCP-PBDPV1

The Fieldbus gateways have to be configured in an application-specific way. Use corresponding PC software, connected to the gateway via an RS232 connection, to aid you in the configuration process. The following sections will give step-by-step explanations of the configuration of all gateway types.

2. Ethernet Gateway

The Ethernet gateway can either be configured using the RS232 connection or the Ethernet connection in a network. However, the latter requires an IP address (suitable for the network) and a subnet mask to already be configured for the network.

2.1 PC Connection

You will need the following components for configurations:

- PC (e.g. laptop)
- Ethernet gateway
- Power supply (8 to 35VDC / 4W at 24V)
- RS232 **null modem cable**

The gateway has to be connected to the PC by a cable via the RS232 interface.

For configurations using the Ethernet connection, the gateway and PC must be connected to a common network. In this case, you will require suitable network and patch cables instead of the RS232 null modem cable.

The mains adapter is necessary to enable independent power supply to the gateway.

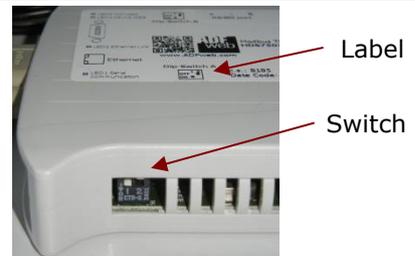


Please note:

The gateway can also be configured if it is already integrated into the target system, i.e. if it is already installed inside a control cabinet and connected to a GMA and Fieldbus (Ethernet). In this case, you may use the available power supply of the control cabinet and configure the gateway either directly via the connected Fieldbus or the additional RS232 cable connection.

2.2 Switching to Configuration Mode

Before you can start configuring the gateway, you will have to set it to configuration mode. Do so by pressing the pair of DIP switches called "Dip-Switch A" on the gateway's side. Both switches, **1** and **2**, must be flipped to the **ON** position using a suitable tool (small screwdriver or similar). You will subsequently have to reset the gateway by briefly interrupting the power supply. The gateway will be in configuration mode after the reset.



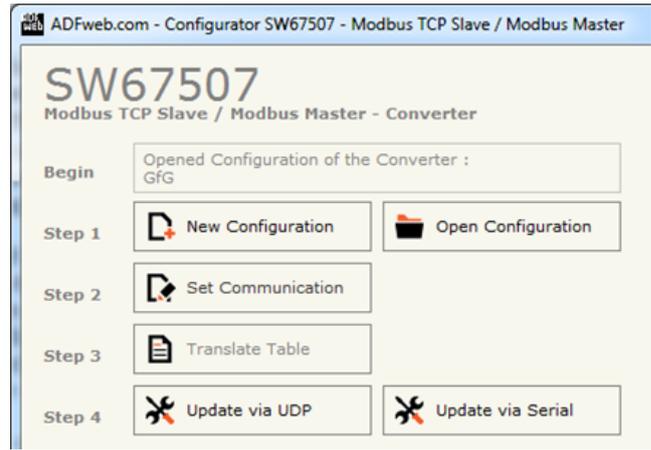
2.3 Configuration

Install the **Compositor SW67507** software on your PC (if you have not already done so) to configure the gateway. This software (on a CD) is included in the scope of delivery of your gateway. It can also be downloaded free of charge on www.adfweb.com. The image to the right shows the software's icon.



When launching the software, you will first see the user interface shown on the right. It will guide you through the configuration process in four steps (main screen):

- Step 1: Either create a new configuration by specifying a configuration name and directory for save files or open an existing configuration.
- Step 2: Determine configuration parameters. Click the button to access the screen on the right. It will allow you to edit the configuration parameters.
- Step 3: Is blocked (grayed out) for the required operation mode of the gateway and must be skipped.
- Step 4: Transmit the configuration to the gateway via the RS232 connection or the Ethernet connection.



The input screen for defining the configuration parameters is shown on the image to the right. It will open in step 2, from the previous screen. The parameters marked in red (*) are customer-specific ethernet network settings. They include a free IP address for the gateway and the local network's subnet mask. These parameters must be provided by the plant operator.

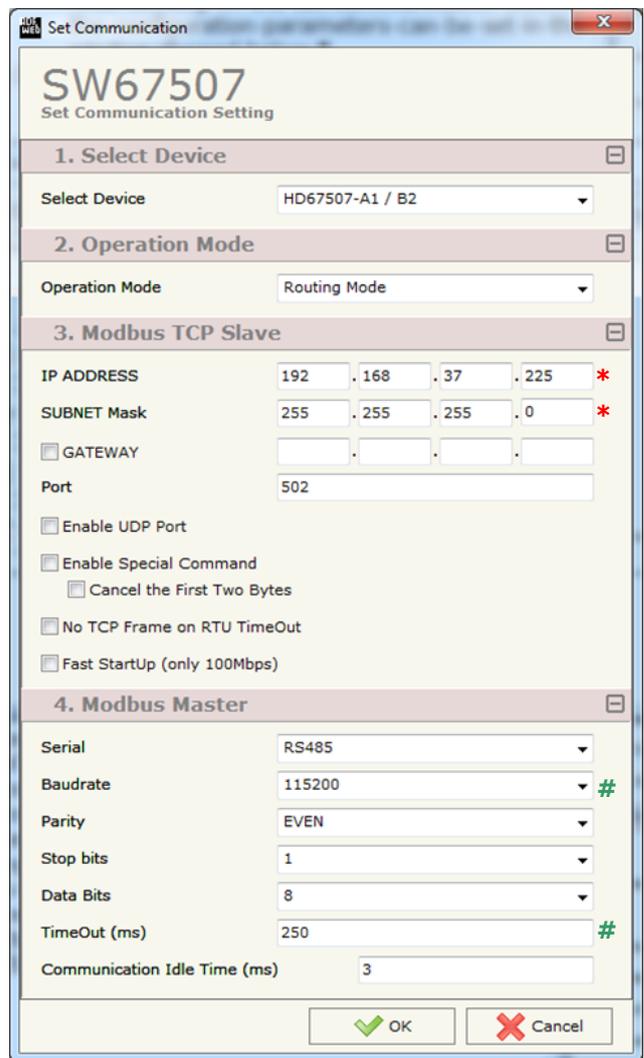
The parameters with green labels (#) are the plant-specific Baud rate and the GMA bus timeout. The Baud rate must match the one set on the GMA. The timeout depends on the Baud rate as specified in the table below.

Baud rate	Timeout (ms)
9600	185
19200	115
38400	75
57600	65
115200	50

All other parameters need to be to the same values for all gateways (see image).

“**Communication Idle time (ms)**” in part “4. Modbus Master” being set to **3 ms** is especially important.

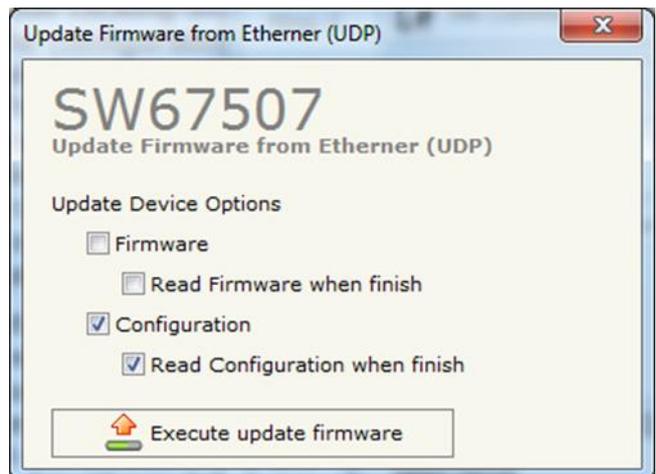
When all settings have been made, confirm them by pressing the **OK** button and transmit the new configuration to the Gateway (Step 4 on the main screen).



To transmit the configuration via the RS232 connection (null modem cable), select the **Update via Serial** button on the main screen (step 4). A window (bottom left) will then open. Use it to select the PC's COM port for establishing a serial connection. You can then use the **Continue** button to go to the next screen (bottom right). Select what you want to transmit (firmware and / or configuration) and start the transmission by clicking the **Execute Update Firmware** button.



To transmit the configuration via the network, select the **Update via Ethernet** button on the main screen (step 4). A window (bottom left) will then open. Use it to check the connection to the gateway. You will have to enter the gateway's IP address and perform a ping command. When the gateway has been found, it is displayed accordingly (see below) and you can continue to the next screen by pressing the **Continue** button (bottom right). Select what you want to transmit (firmware and / or configuration) and start the transmission by clicking the **Execute Update Firmware** button.



2.4 Commissioning

Before starting the commissioning process, you will have to de-energize the gateway and remove the RS232 cable connection from the gateway. The gateway will also have to be switched back into normal operation mode. To do so, switch **2** of the DIP switch pair "**Dip-Switch A**" must be in the **OFF** position (switch **1** needs to stay **ON**).

If you haven't already, you must then integrate the gateway into the target system by connecting it to the measuring module's GMA bus connector on the Modbus side (via RS485 interface) and to the local Ethernet network on the Fieldbus side. The gateway is operational as soon as the power supply is turned on and the GMA can be read out by a Fieldbus master.

3. Profibus and Profinet Gateway

Since the Profibus and Profinet Gateway work identically regarding their connection to a PC, switching to configuration mode and commissioning, the following section summarizes these aspects for both of them simultaneously. The configuration parameters are the only difference between the two gateways and are thus specified separately.

3.1 PC Connection

You will need the following components for configurations:

- PC (e.g. laptop)
- Profibus and Profinet Gateway
- Voltage supply unit (10 to 33VDC / max. 350mA)
- RS232 **1:1 Cable connection** (optional with USB adapter)

The gateway has to be connected to the PC by a cable via the RS232 interface.

Optionally, you can also use an additional USB adapter to connect it to one of the PC's USB interfaces.

Necessary USB drivers are installed automatically upon connection.

The mains adapter is necessary to enable independent power supply to the gateway.



Note:

The gateway can also be configured if it is already integrated into the target system, i.e. if it is already installed inside a control cabinet and connected to a GMA and Fieldbus (Ethernet). In this case, you may use the control cabinet's available power supply. You will then only have to connect the PC to the gateway via the RS232 cable connection.

3.2 Switching to configuration mode

Before you can start configuring the gateway, you will have to set it to configuration mode. Do so using the **rotary switches S4 and S5** on the front of the gateway. After opening the transparent plastic hood (if available) both switches have to be flipped to the "F" position using a suitable tool (small screwdriver or similar). You will subsequently have to reset the gateway by briefly interrupting the power supply. The gateway will be in configuration mode after the reset.



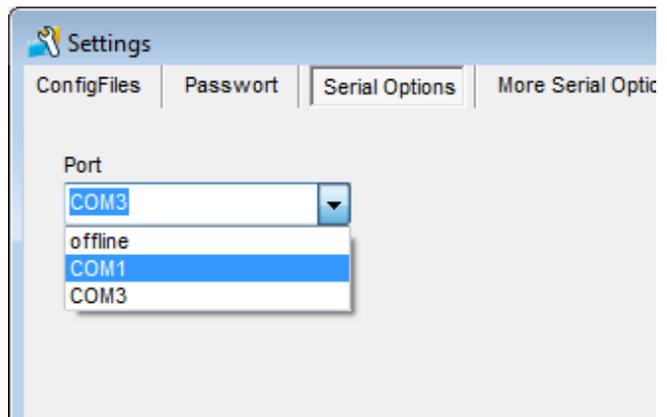
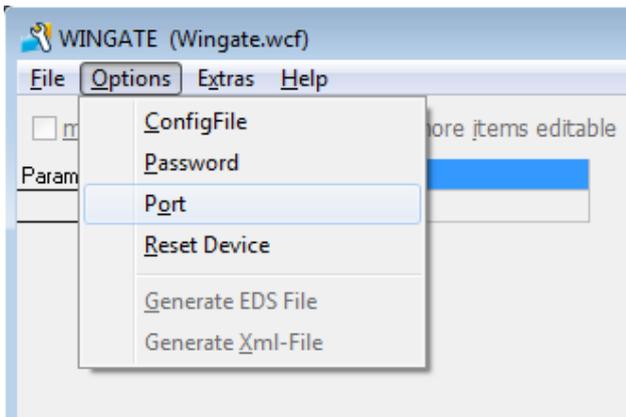
Rotary switches

3.3 Configuration

Install the **Wingate** software on your PC (if you have not already done so) to configure the gateway. This software (on a CD) is included in the scope of delivery of your gateway. It can also be downloaded free of charge on www.deutschmann.com. When the software is started, the software will automatically try to establish a connection with the gateway via a preset COM port. If the selected COM port is incorrect, it can be adjusted by following the instructions in the images below.



Software icon



If the selected port is correct and a connection to the gateway can be established, all configuration parameters are automatically read out and displayed in a table. Different parameters can be shown or hidden by setting two check marks above the table. All parameters highlighted in **bold** can be adjusted (see image in section 3.3.1 and 3.3.2). The parameters can be selected and then edited by simply double-clicking on the previously set value in the right column of the table.

3.3.1 Profibus Gateway

The left image below shows the configuration parameters of the Profibus Gateway. The parameter marked with a red asterisk (*) is the gateway's customer-specific Profibus address. The Profibus address can be adjusted hexadecimally using the **rotary switches High and Low** on the Front of the gateway. If the rotary switches are set to a value between 0 to 125 (0x00 to 0x7D), this value is used as a Profibus address instead of the configured parameters. If the rotary switches are set to a value of 126 (0x7E) however, the configured parameter which is set to a default value of 126 is used. It can be adjusted either using the configuration software or via the Profibus itself using a Profibus master. Address 126 on the Profibus is reserved for this purpose, which means that the gateway cannot exchange data with this address, but can only be configured with a new address.

The parameter with a green label (#) is the plant-specific Baud rate (just like on the Ethernet gateway) which has to match the one set on the GMA. All other parameters need to be the same values for all gateways.

After completing the adjustment of all settings, the new configuration must then be transmitted to the gateway (see bottom right image).

You will also have to convey the gateway's configuration settings to the Profibus master using a GSD file [GSD.D]. This is where, among other things, the length of the transmitted telegram user data (inputs/outputs) is defined (see section 5 "Notes on the fieldbus protocol"). The GSD file is provided alongside the gateway upon delivery.

Parameter	Value
Software revision	V 7.8
Device type	PROFIBUS DP (Script)
Script revision	36
Serial Number	35534905
Script memory	16128
Data memory	8192
-----FIELDBUS-----	
Fieldbus ID	126 *
Data exchange	On Trigger
Fieldbus lengthbyte	inactive
Ident Number (0x2079)	disabled
Ext. Diag Off	disabled
Swap word	disabled
-----APPLICATION-----	
Protocol	Modbus RTU Master
Responsetime (10ms)	25
Start bits	1
Data bits	8
Stop bits	1
Parity	Even
Baudrate	115200 #
232 Interface	485

Parameter	Value
Swap word	disabled
-----APPLICATION-----	
Protocol	Modbus RTU Master
Responsetime (10ms)	25
Start bits	1
Data bits	8
Stop bits	1
Parity	Even
Baudrate	115200
232 Interface	485

3.3.2 Profinet Gateway

Parameter	Value
Software revision	V 2.4
Device type	PROFINET (Script)
Script revision	38
Serial Number	38180602
Script memory	16320
Data memory	8192
-----FIELDBUS-----	
IP address UNIGATE	0.0.0.0
Subnet mask	0.0.0.0
IP address Gateway	0.0.0.0
DHCP	disabled
Data exchange	On Trigger
Fieldbus lengthbyte	inactive
Swap word	disabled
-----APPLICATION-----	
Protocol	Modbus RTU Master
Responsetime (10ms)	25
Start bits	1
Data bits	8
Stop bits	1
Parity	Even
Baudrate	115200 #
232 Interface	485

The image to the left shows the configuration parameters of the Profinet gateway.

Unlike the Ethernet gateway, the customer-specific network settings do not have to be parameterized here, as this is done by the customer himself using a Profinet configuration tool in conjunction with the Profinet master.

The parameter with a green hash sign (#) is the plant-specific Baud rate which has to match the one set on the GMA. All other parameters need to be to the same values for all gateways (see image).

After completing the adjustment of all settings, the new configuration must then be transmitted to the gateway (as specified in section 3.1.1).

You will also have to convey the configuration settings of the gateway (IO device) to the Profinet master (IO controller) using a GSD file [GSD.D]. This is where, similar to the Profibus, the length of the transmitted telegram user data (inputs/outputs) and other information is defined (see section 5 "Notes on the fieldbus protocol"). The GSD file is provided alongside the gateway upon delivery.

3.4 Commissioning

Before you start the commissioning process, de-energize the gateway and remove the RS232 cable connection from the gateway. The gateway will also have to be switched back to normal operation mode. The **rotary switches S4** and **S5** on the front of the device both have to be set to "0".

Please note:

The rotary switches can actually be set to any position except "F" and "E". These two switch positions are reserved for certain operation modes (configuration and test mode). If the switches are in any other position, the gateway will start in normal mode.

If you haven't already, you must then integrate the gateway into the target system by connecting it to the measuring module's GMA bus connector on the Modbus side (via RS485 interface) and to the Profibus or the Profinet network on the Fieldbus side. The gateway is operational as soon as the power supply is turned on and the GMA can be read out by a Fieldbus master.

Important:

If the Modbus lines are connected to terminals 4 and 5 of the Profibus gateway, terminals 4 + 6 and 5 + 7 have to be bridged (according to the connection plan on the gateway). Otherwise, you will not be able to establish communication between the gateway and the GMA.

4. Profibus / Ethernet Gateway

4.1 PC Connection

You will need the following components for configurations:

- PC (e.g. laptop)
- Profibus / Ethernet gateway
- Voltage supply unit (10 to 33VDC / max. 350mA)
- RS232 **1:1 Cable connection (without USB adapter)**

The gateway has to be connected to the PC by a cable via the RS232 interface. There are two RS232 interfaces on the gateway itself, one for configuration of the Ethernet parameters (X1) and the other for Profibus parameters (X2).

When connecting the RS232 cable to the gateway, ensure that the ground cable is connected to the ground connection of the power supply.

You may not use an additional USB adapter for the RS232 connection to a PC.



Note:

The gateway can also be configured if it is already integrated into the target system and connected to a Profibus and Ethernet network as well as a power supply. You will then only have to connect the PC to the gateway via the RS232 cable connection.

4.2 Configuration

The configuration works similarly to the Profibus and Profinet gateway, using the **Wingate** software on a PC (see section 3.3). The gateway does **not** have to be in configuration mode for this.

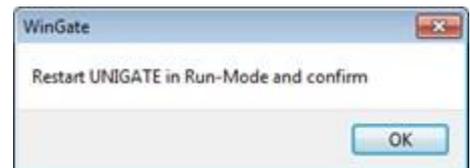
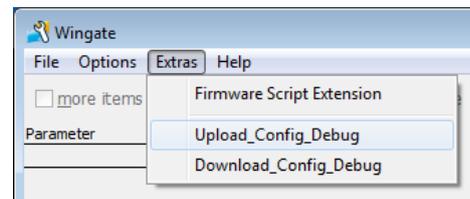
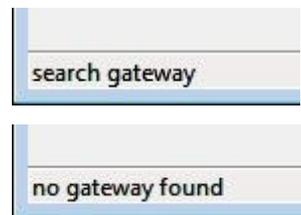
When the software is started, it will automatically try to establish a connection to a connected gateway via a preset COM port. Since the gateway is running in normal operation mode (not in configuration mode), this automatic connection cannot be made. The status in the status bar on the bottom left will change from "Search gateway" to "no gateway found" after a few seconds (see images to the right). Remember to check whether the process has been completed before performing any further steps.

To read out the configuration parameters, select **Upload_Config_Debug** in the **Extras** menu bar.

A notification saying the gateway will have to be restarted will then pop up. To restart the device, briefly interrupt the gateway's power supply if it was turned on before. If it was not, the power supply must now be turned on. You can then confirm and close the notification by pressing the **OK** button. When reading out the Ethernet parameter, there has to be a waiting period of at least 15s between starting the device and closing the notification, since faults may occur otherwise.

Once a connection from the PC to the gateway has been successfully established, the parameters are read out and displayed in a table (see below) and the status in the status bar changes to "Upload finished".

If no connection to the gateway could be established, the status displayed in the status bar will change from "Waiting for device" to "no gateway found" after a few seconds. If the selected COM port is incorrect, it can be adjusted by following the instructions in section 3.3 and repeating the process.



The left image below shows the Ethernet configuration parameters which are read out when the RS232 cable is connected to the gateway's X1 terminal block. The right image below shows the Profibus configuration parameters which are read out when the RS232 cable is connected to the gateway's X2 terminal block.

Different parameters can be shown or hidden by setting two check marks above the table. The parameters in bold can be selected and then edited by double-clicking the previously set value in the right column of the table.

Parameter	Value
Software revision	V 5.4
Device type	Fast Ethernet(Script)
Script revision	39
Serial Number	39460007
Script memory	16128
Data memory	8192
-----FIELDBUS-----	
IP Address UNIGATE	192.168.37.230 *
Subnet-Mask	255.255.255.0 *
IP Address Gateway	192.168.37.13 *
IP Address Target	192.168.37.225 *
Transport protocol	TCP(CLIENT)
Send Port (dec)	502
Receive Port (dec)	502
Blocklength fieldbus input	8
Blocklength fieldbus output	8
Data exchange	On Event
Fieldbus lengthbyte	inactive
Swap word	disabled
-----APPLICATION-----	
Protocol	Universal 232
232 Start character	00
232 Length	No length byte
232 End character	FF
232 RX Timeout (10ms)	1
232 Checksum	No Checksum
Start bits	1
Data bits	8
Stop bits	1
Parity	Even
Baudrate	115200
232 Interface	232

Parameter	Value
Software revision	V 7.8
Device type	Profibus DP (Script)
Script revision	36
Serial Number	39460008
Script memory	16128
Data memory	8192
-----FIELDBUS-----	
Fieldbus ID	126 *
Data exchange	On Trigger
Fieldbus lengthbyte	inactive
Ident Number (0x2079)	disabled
Ext. Diag Off	disabled
Swap word	disabled
-----APPLICATION-----	
Protocol	Universal 232
232 Start character	00
232 Length	No length byte
232 End character	FF
232 RX Timeout (10ms)	1
232 Checksum	No Checksum
Start bits	1
Data bits	8
Stop bits	1
Parity	Even
Baudrate	115200
232 Interface	232

The parameters marked with a red asterisk (*) are customer-specific Ethernet network settings. They include the IP address for the Fieldbus gateway (UNIGATE), the subnet mask of the local network, the IP address of the network gateway (standard gateway) and the IP address of the Ethernet gateway which is connected to the GMA bus. These parameters must be provided by the plant operator. All other parameters always need to be set according to the image.

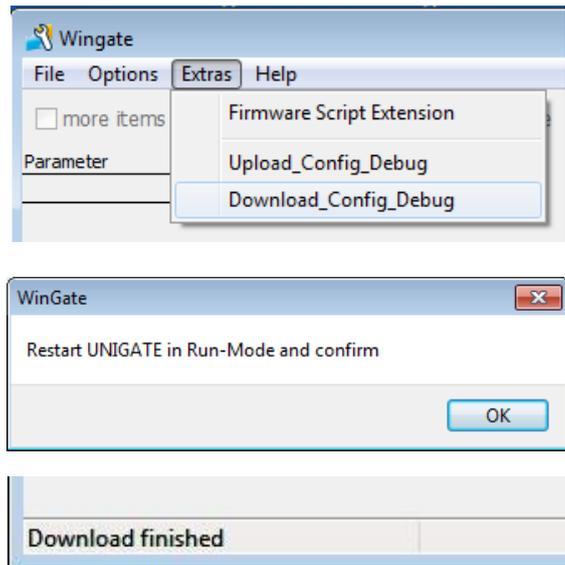
The parameter marked with a red asterisk (*) is the gateway's customer-specific Profibus address. The Profibus address can be adjusted hexadecimally using the **rotary switches High** and **Low** on the Front of the gateway. If the rotary switches are set to a value between 0 to 125 (0x00 to 0x7D), this value is used as a Profibus address instead of the configured parameters. If the rotary switches are set to a value of 126 (0x7E) however, the configured parameter which is set to a default value of 126 is used. It can be adjusted either using the configuration software or via the Profibus itself using a Profibus master. Address 126 on the Profibus is reserved for this purpose. All other parameters always need to be set according to the image.

After the configuration parameters have been changed, they have to be transmitted to the gateway. To do this, select **Download_Config_Debug** in **Extras** on the menu bar.

A notification saying the gateway will have to be restarted will then pop up (like it does for uploading new configurations). To restart the device, briefly interrupt the gateway's power supply. You can then confirm and close the notification by pressing the **OK** button. In this case too, there needs to be a waiting period of at least 15s between starting the device and closing the notification, since faults may occur otherwise.

The configuration parameters are then transmitted to the gateway and the status in the status bar switches to "Download finished".

If any errors occur during the transmission, check the cable connection to the gateway and repeat the process.



4.3 Commissioning

The gateway must be integrated into the target system for commissioning. Do so by connecting it to the Profibus and the Ethernet network via the corresponding Fieldbus connections and to the power supply inputs on terminal blocks X1 or X2. The gateway is operational as soon as the power supply is turned on. If the gateway has already been integrated into the target system, you will only need to reset it (by briefly interrupting the power supply). It is then operational.

5. Notes on the Fieldbus protocol

The Modbus protocol for data flow to the GMA200 via the GMA bus is described in a separate document [OM.MB]. The Modbus telegrams described there are transmitted **without the CRC16 Modbus check sum** in the user data area (Protocol Data Unit) of the Fieldbus protocol (Modbus TCP / Profibus DP / Profinet IO).

The Ethernet, Profibus and Profinet gateway acts as a Slave to the Fieldbus and a Master to the Modbus. In turn, the GMA acts as a slave to the Modbus (see image 5-1 for Profibus). Data transfer is started by a request by the Fieldbus Master. The gateway will then extract the Modbus telegram from the user data area of the received Fieldbus telegram, add the Modbus check sum and send the telegram as a request on Modbus. The GMA's reply is then sent to the Fieldbus Master without the Modbus check sum in the Fieldbus protocol's user data area.

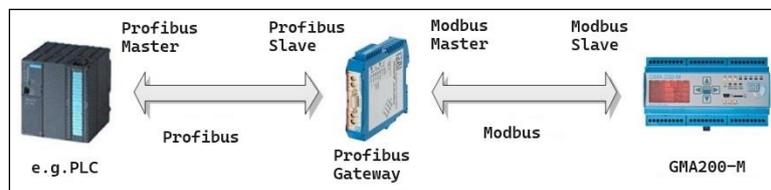


Image 5-1

The Profibus / Ethernet gateway acts as a Slave to the Profibus and as a Master or Client to the Ethernet network (see image below).

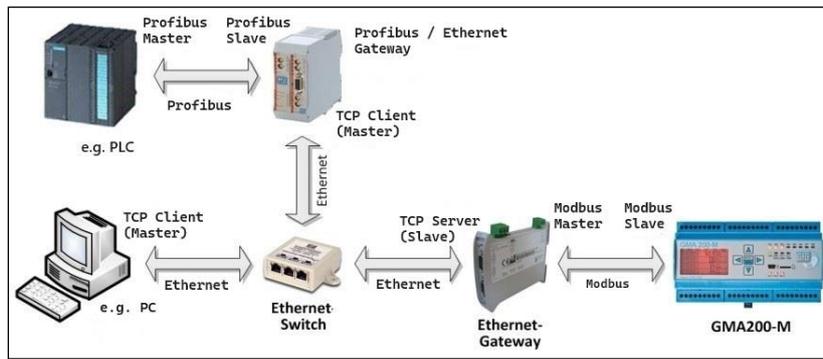


Image 5-2

Data transfer is started by a request by the Profibus Master. It sends the Modbus telegram to the gateway, without the check sum in the user data area of the Profibus telegram. The gateway, in turn, sends the Modbus telegram in the user data area of the TCP telegram to the Ethernet gateway which is connected to the GMA bus. The Ethernet gateway will add the Modbus check sum and send the telegram to the Modbus as a request. The GMA's reply is sent back to the Profibus master in reverse order.

5.1. Ethernet Gateway

Since the user data length is variable on the Modbus TCP protocol, it always records a one-to-one entry of the transmitted Modbus telegram, without the Modbus check sum (see image 5-1).

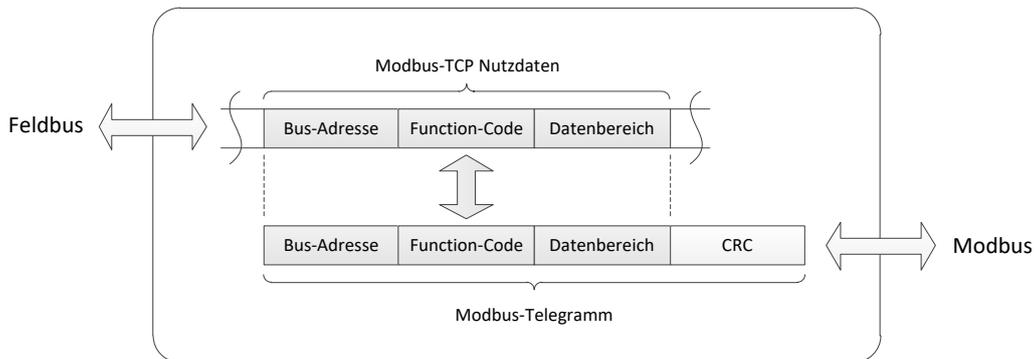


Image 5.1-1

If the GMA does not send a reply within a timeout of 250ms after a Modbus request (from the gateway), the gateway will send a corresponding error telegram to the Fieldbus master (Modbus Exception code 11) and the lower green LED on the front of the gateway - which indicates Modbus connection - will not be lit anymore. A description of the LEDs can be found in the gateway's operation manual [OM.GW]. The timeout can be configured (see parameter "TimeOut" in section 2.3).

5.2. Profibus and Profinet gateway

The user data length for Profibus and Profinet is specified in their respective GSD files ([GSD.D] for Profibus and [GSDX.D] for Profinet). A distinction is made between the user data transmitted from the master to the slave (output data) and the user data transmitted from the slave to the master (input data). The table below shows the configured data lengths.

User data	Direction of data	Length [Bytes]
Output data	Master → Slave	20
Input data	Slave → Master	108

The length of data is limited to a size that allows for the longest Modbus telegrams (according to the description in [OM.MB]) to be transmitted. For smaller Modbus telegrams, the unused bytes have to be filled with arbitrary values in the user data area because of this set data length.

Unlike the Ethernet gateway, the Modbus telegrams are transmitted with an additional trigger byte in the user data area of the Profibus and Profinet protocol (see image 5.2-1).

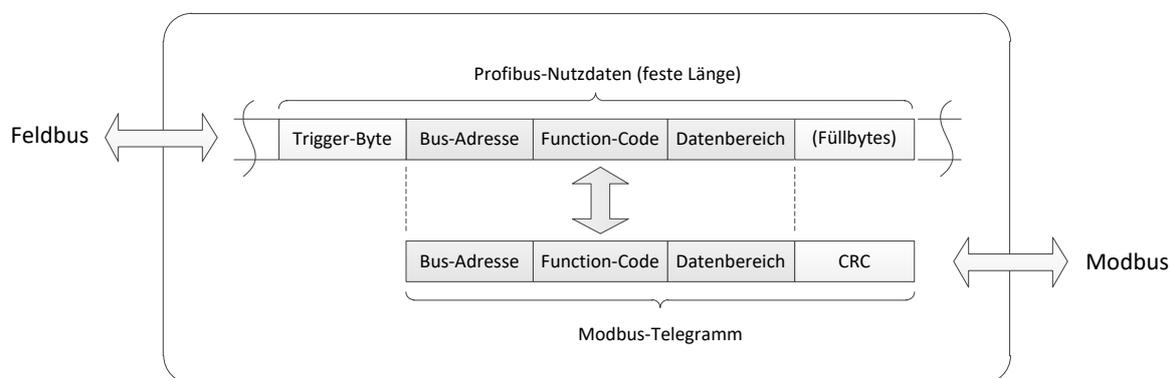


Image 5.2-1

Since Profibus and Profinet data always has to be transmitted cyclically, the gateway has to be informed about new data needing to be transmitted from the Fieldbus master to the Modbus. This is done by changing the trigger byte (e.g. incrementing a counter). The trigger byte has to be greater than zero.

The gateway carries its own internal trigger byte, which is incremented with each telegram received from the Modbus slave and sent back to the fieldbus master in the reply. The value of the trigger byte in the gateway's reply is therefore not equal to the one in the Fieldbus master's request. If the GMA does not send a reply within a timeout of 250ms after a Modbus request (from the gateway), the gateway will report a timeout error, indicated by a corresponding flashing pattern of the LEDs on the front of the gateway. A description of the LED flashing pattern for different special statuses can be found in the operation manual of the gateway [OM.GW]. The timeout can be configured (see parameter "Response time" in sections 3.3.1 and 3.3.2).

5.3. Profibus / Ethernet Gateway

Unlike the Profibus gateway (section 5.2), these Modbus telegrams carry a Modbus TCP header in the in the user data area of the Profibus telegram in addition to the trigger byte (see Figure 5.3-1). As explained in section 5.2, the user data length of the Profibus is fixed [GSD.D]. The length of data is limited to a size that allows for the longest Modbus telegrams (according to the description in [OM.MB]) and their trigger byte and Modbus TCP header to be transmitted. For smaller Modbus telegrams, the unused bytes have to be filled with arbitrary random values in the user data area because of this set data length.

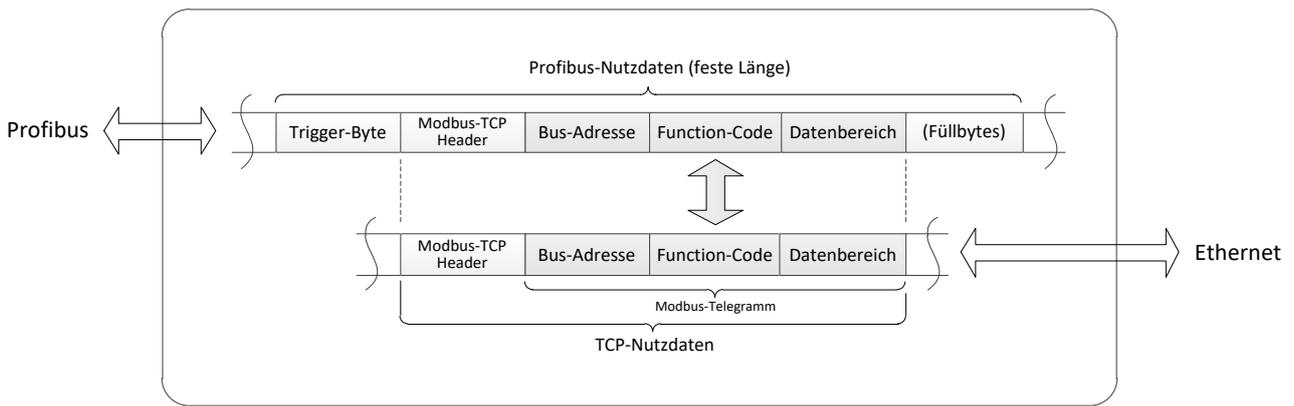


Image 5.3-1

The trigger byte has to be treated exactly like on the Profibus gateway (see section 5.2).

The Modbus TCP Header structured according to the table below.

Byte index	Content	Description
0	0x00	Transaction number. Is not needed and can therefore always be set to zero.
1	0x00	
2	0x00	Fixed protocol flag with zero value.
3	0x00	
4	0x00	Byte length [n] of the Modbus telegram consisting of Bus address, function code and data field (without checksum). See [OM.MB].
5	[n]	

Structure of the Modbus TCP header

The Profibus master has to compile the Modbus telegram without the check sum but with the trigger byte and Modbus TCP header according to image 5.3-1 in the user data area of the telegram (in the output data for PLCs) and send the telegram to the Profibus / Ethernet gateway. The gateway extracts the Modbus telegram and the Modbus TCP header and sends this data to the Ethernet gateway connected to the GMA bus in the user data area of the TCP telegram. The Ethernet gateway, in turn, extracts the Modbus telegram, adds the check sum and sends this telegram to the GMA on the Modbus. The GMA's reply is then sent to the Profibus master in reverse order. On a PLC, the Modbus telegram sent by the GMA (without check sum but with trigger byte and Modbus TCP header) is then located in the input data area.

6. References

- [OM.MB] Annex to the operation manual of the GMA200 – Modbus Implementation
GMA200-Modbus_BA_(DE).pdf
- [HB.GW] Operation manual for Ethernet, Profibus and Profinet gateway
HD67507-ModbusTCP_(DE).pdf
UNIGATE_CL-ProfibusDP_(DE).pdf
UNIGATE_CL-Profinet_2Port_(DE).pdf
UNIGATE_CX_(DE).pdf
- [GSD.D] GSD file for Fieldbus master for configuration of the Profibus gateway
DAGW5GfG.gsd
- [GSDX.D] GSD file (XML) for Fieldbus master for configuration of the Profinet gateway
GSDML-V2.3-Deuschmann-UNIGATE-CL-PN-20141017-155000.xml

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