

# Modbus Gateway – Network connection of Modbus RTU fieldbus components



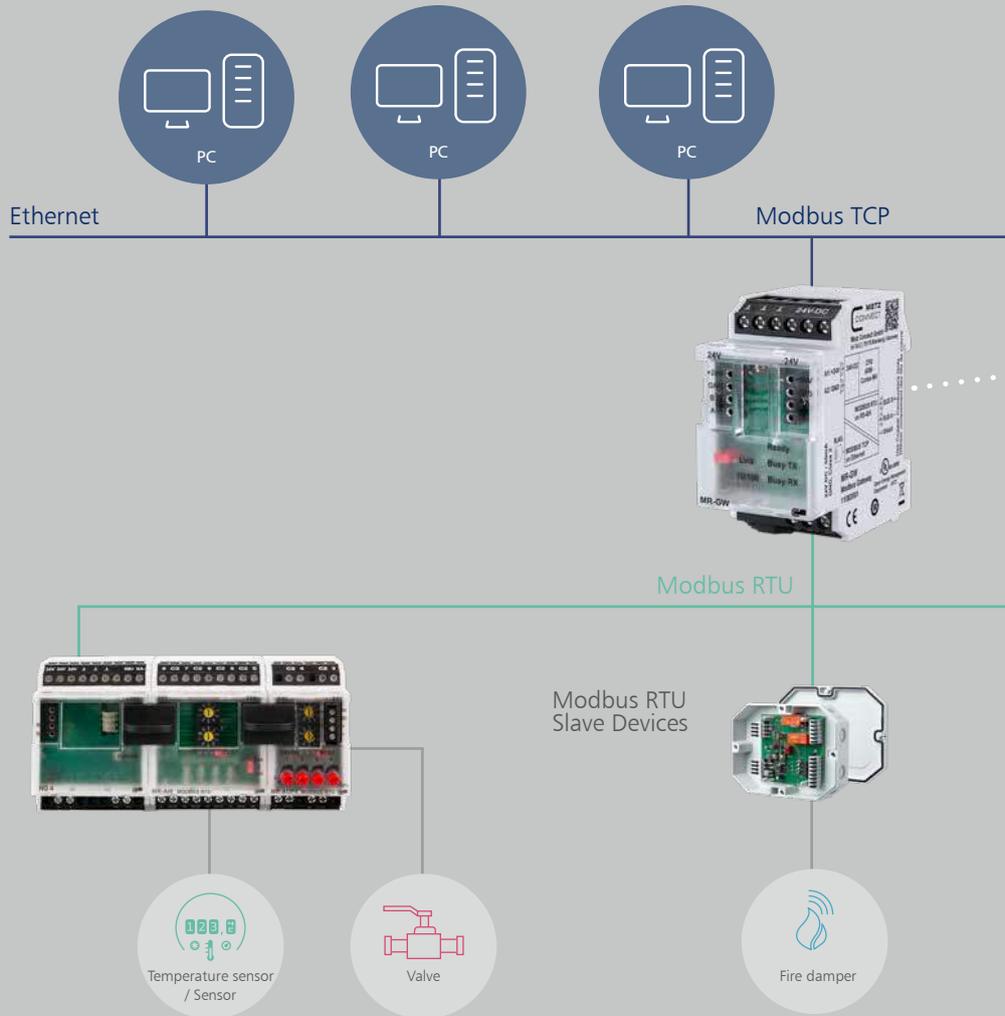
# Modbus Gateway

With the METZ CONNECT Modbus Gateway MR-GW, Modbus RTU devices are connected to a Modbus TCP network. Up to 32 Modbus RTU Slaves can be connected to the gateway so that Modbus TCP clients can communicate with one or more Modbus RTU Slaves via this gateway.

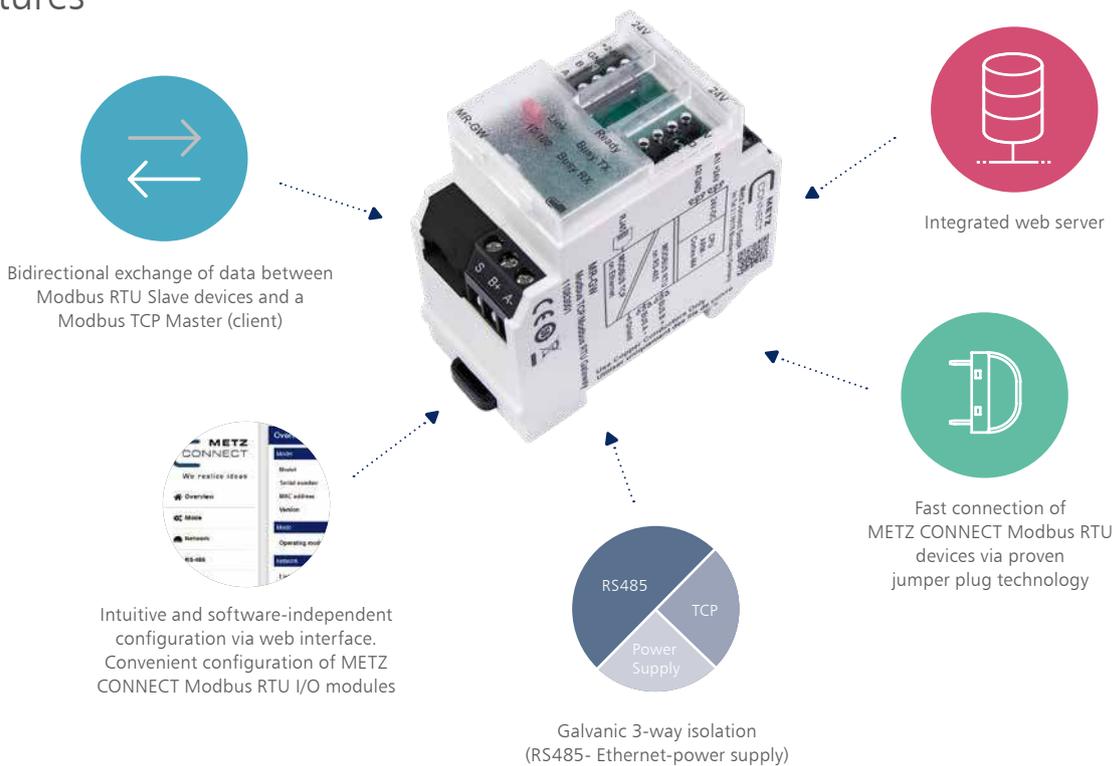
The gateway enables a bidirectional exchange of data between Modbus RTU fieldbus devices and a Modbus TCP master (client). The MR-GW can be operated in two modes. Either as a transparent gateway in Modbus RTU over TCP operating mode or as a protocol converter (Modbus TCP operating mode).

The Modbus Gateway is accessible via the integrated web server in an IP network. The configuration of the device and the parameter setting of the two interfaces (Ethernet / RS485) is done via the user-friendly web interface. In addition, the gateway for all METZ CONNECT Modbus RTU I/O devices of the MR series has templates for convenient configuration and operation of the modules.

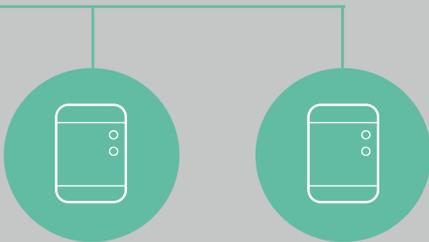
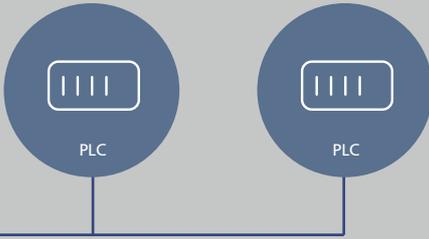
# System overview



# Features



## Modbus TCP Master Devices



Modbus RTU Slave Devices



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- [Overview](#)
- [Mode](#)
- [Network](#)
- [RS-485](#)
- [Security](#)
- [Monitoring](#)
- [Discovery](#)
- [Service](#)
- [Logout](#)

English

**Overview**

**Model**

Model	MR-TCP_Gateway
Serial number	123456
MAC address	01:02:03:04:05:06
Version	1.1

**Mode**

Operating mode	Modbus TCP
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**Network**

Link	100MBit Full Duplex
DHCP	On
Host Name	MR123
IP Address	192.168.1.254
IP Mask	255.255.255.0
Gateway IP	192.168.1.1

**RS-485**

Baud Rate	19200
Parity Bit	Even
Stop bits	1
Terminator	Connected
Modbus Timeout	10 ms

**Security**

Password	Set
Allowed Subnet IP	0.0.0.0

## Ordering information

### ACCESSORIES NETWORK COMPONENTS

								
P/N	11083001	1108300170	110561	11056170	110195	1308450577-E	130B117003-E	130E405032-E
Type	MR-GW	MR-F-GW	NG-4	NG4-F	EDS-205	RJ45 patch cord	REGplus IP20 C6A modul 180°M	C6A RJ45 field plug pro
Description	Modbus RTU / Modbus TCP Gateway	Modbus RTU / Modbus TCP Gateway	Power supply 24 V DC	Power supply 24 V DC	5-port switch with 10/100 BaseT(X) RJ45	Patch cords Cat.6A AWG 26 0.5 m yellow	RJ45 connection unit for mounting on support rail	RJ45 plug for field assembly

Further network components can be found on our website [www.metz-connect.com](http://www.metz-connect.com) or in our product overview "connection technology for devices, electric cabinets and systems".



## Simple configuration



Intuitive menu navigation and operation via smartphone, tablet or notebook by responsive design



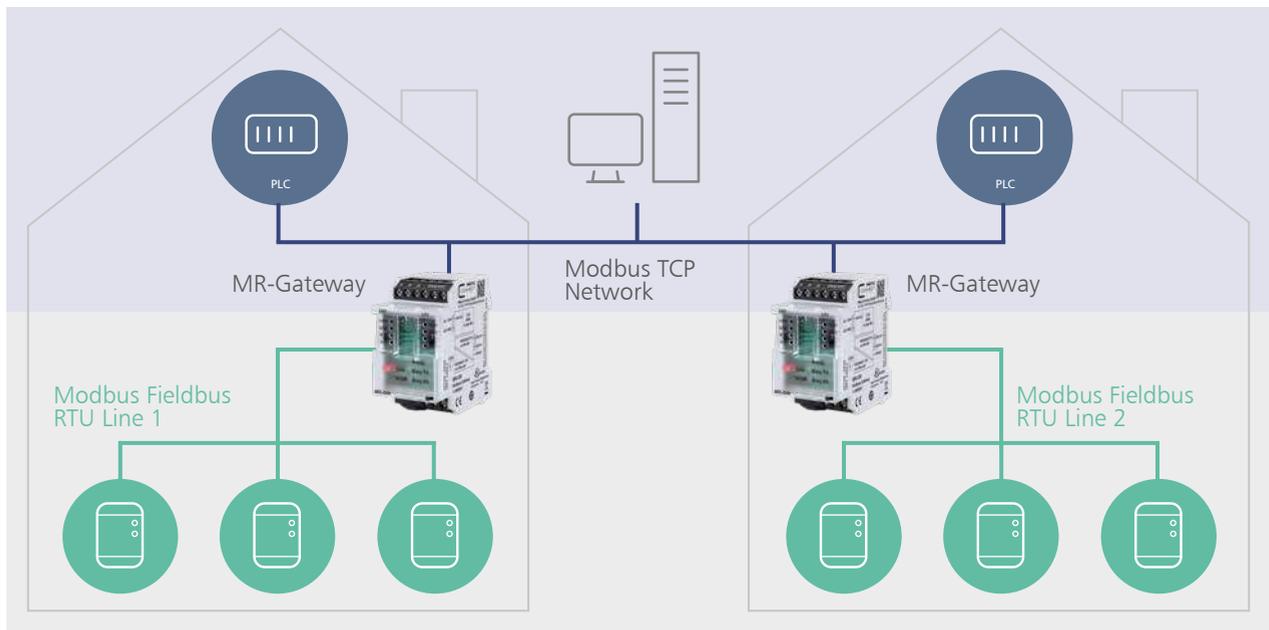
Status monitoring of TCP and RS485 communication



Simple device search of METZ CONNECT Modbus RTU devices on the RS485 bus

## Example of use

Interconnection of 2 Modbus RTU lines in an IP network



## Your benefits

- > connection of max. 32 Modbus RTU Slaves per line
- > simple integration of Modbus RTU Slaves into a Modbus TCP Network
- > Ethernet available throughout the building
- > no limitation to cable lengths
- > reliable and fast communication between automation and field devices
- > independent of technology and manufacturer



# Modbus RTU I/O Fieldbus module

				
<b>MR-DI4</b> <b>MR-F-DI4</b>	<b>MR-DI10</b> <b>MR-F-DI10</b>	<b>MR-SI4</b> <b>MR-F-SI4</b>	<b>MR-AI8</b> <b>MR-F-AI8</b>	<b>MR-CI4</b> <b>MR-F-CI4</b>
 1108341319  110834131970	 1108311319  110831131970	 11083913  1108391370	 11083213  1108321370	 1108401332  110840133270
4 digital inputs	10 digital inputs	4 SO inputs	8 configurable temperature or voltage inputs	4 current inputs 0-20 mA, 4 voltage inputs 0-10 V
				
<b>MR-DO4</b> <b>MR-F-DO4</b>	<b>MR-DOA4</b> <b>MR-F-DOA4</b>	<b>MR-TO4</b> <b>MR-F-TO4</b>	<b>MR-AOP4</b> <b>MR-F-AOP4</b>	<b>MR-AO4</b> <b>MR-F-AO4</b>
 1108361321  110836132170	 110836132101  11083613210170	 11083013  1108301370	 1108371302  110837130270	 1108351302  110835130270
4 relay outputs, manual control level	4 relay outputs	4 triac outputs, manual control level	4 voltage outputs 0-10 V, manual control level	4 voltage outputs 0-10 V DC
				
<b>MR-DIO4/2</b> <b>MR-F-DIO4/2</b>	<b>MR-DIO4/2S</b> <b>MR-F-DIO4/2S</b>	<b>MR-TP</b> <b>MR-F-TP</b>	<b>MR-SM3</b> <b>MR-F-SM3</b>	<b>MR-LD6</b> <b>MR-F-LD6</b>
 1108331326  110833132670	 110833132601  11083313260170	 11083813  1108381370	 11084113  1108411370	 11084413  1108441370
4 digital inputs, 2 relay outputs, changeover contact, manual control level	4 digital inputs, 2 relay outputs, NO contact, manual control level	6 digital inputs, 2 two-stage relay outputs, manual control level	3 analog inputs (230 V)  To capture three 230 Volt current circuits. Current, voltage and power can be measured and determined	6 analog inputs, 2 relay outputs  For monitoring filling levels and leakages, as well as switching magnetic valves
				
<b>MR-Multi I/O</b>	<b>MB-DIO 2/1-IP65   24 V</b>	<b>MB-DIO 4/2-IP65   24 V</b>	<b>MB-DIO 2/1-IP65   230 V</b>	<b>MB-DIO 4/2-IP65   230 V</b>
P/N 11084313	P/N 1108111326IP	P/N 1108121326IP	P/N 1108110526IP	P/N 1108120526IP
<ul style="list-style-type: none"> <li>&gt; 4 digital outputs (Photo MOS)</li> <li>&gt; 4 digital outputs (relays)</li> <li>&gt; 11 digital inputs</li> <li>&gt; 6 universal inputs (temperature/voltage)</li> <li>&gt; 1 analog input (current)</li> <li>&gt; 2 analog outputs (voltage)</li> <li>&gt; 1 SO input</li> </ul>	2 digital inputs, 1 relay outputs, changeover contact, manual operation level	4 digital inputs, 2 relay outputs, changeover contact, manual operation level	2 digital inputs, 1 relay outputs, changeover contact, manual operation level	4 digital inputs, 2 relay outputs, changeover contact, manual operation level

**METZ CONNECT GmbH**

Im Tal 2  
78176 Blumberg  
Germany  
  
Phone +49 7702 533-0  
Fax +49 7702 533-189  
  
info@metz-connect.com  
www.metz-connect.com

**METZ CONNECT USA Inc.**

200 Tornillo Way  
Tinton Falls, NJ 07712  
USA  
Phone +1-732-389-1300  
Fax +1-732-389-9066

**METZ CONNECT France SAS**

28, Rue Schweighaeuser  
67000 Strasbourg  
France  
Phone +33 3886 17073  
Fax +33 3886 19473

**METZ CONNECT AUSTRIA GmbH**

c/o German chamber of commerce  
in Austria  
  
Schwarzenbergplatz 5, Top 3/1  
1030 Vienna  
Austria  
Phone +43 1 227 12 64  
Fax +43 1 227 12 66

**METZ CONNECT Zhongshan Ltd.**

Ping Chang Road  
Ping Pu Industrial Park  
Sanxiang Town  
Zhongshan City, 528463  
Guangdong Province  
China  
Phone +86 760 86365 055  
Fax +86 760 86365 050

**METZ CONNECT Asia Pacific Ltd.**

Suite 1803, 18/F  
Chinachem Hollywood Centre,  
1 Hollywood Road, Central  
Hong Kong  
Phone +852 26 027 300  
Fax +852 27 257 522

