



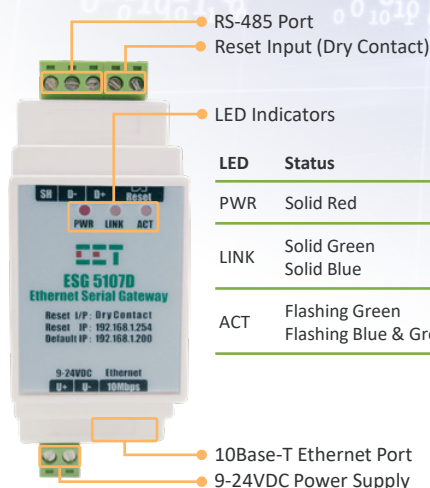
ESG 5107D Ethernet-Serial Gateway

Overview

The ESG 5107D is an Ethernet-Serial Gateway which provides a 10BaseT Ethernet port and a high-speed RS-485 port. It's an ideal equipment for connecting one or more upstream Workstations on an IP-based Ethernet LAN to the downstream serial devices on a RS485 network.

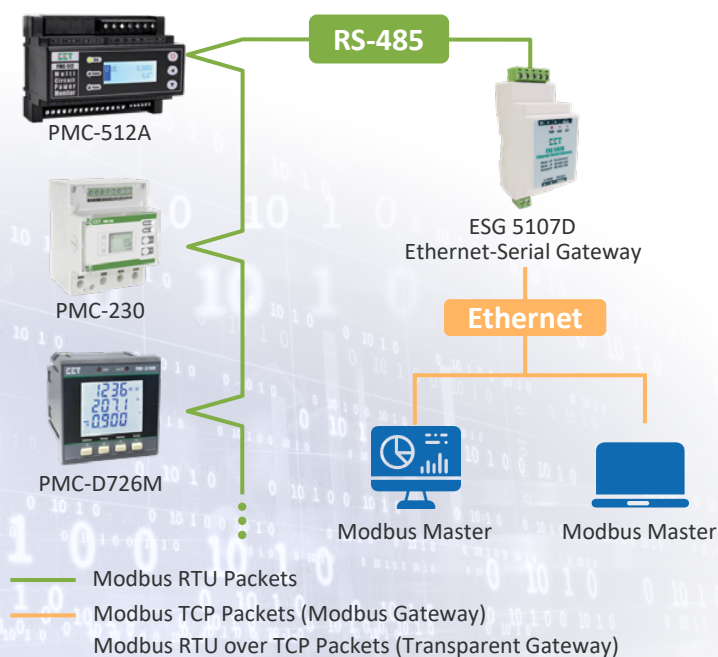
Features

- Compact size of 36.5 (W) x 58.7 (D) x 87.5 (H)
- DIN-rail 35mm installation with no tools required
- 3x LED indicators for a quick overview of device status
- 9-24VDC power supply
- "Dry contact" for reset input
- Supports up to 115kbps for its RS-485 port
- Multi-Master support (up to 10 Masters)
- Automatic or manual IP addressing
- Simple configuration via Web Interface



LED	Status	Descriptions
PWR	Solid Red	Device is powered on
LINK	Solid Green Solid Blue	Network connected TCP connection established
ACT	Flashing Green Flashing Blue & Green	Requests from Ethernet Responses from RS-485

Typical Applications



Transparent Gateway

The ESG 5107D allows one or more upstream Workstations (Modbus Masters) on an IP-based Ethernet LAN to directly connect to it via a TCP/IP connection for the transparent transfer of Modbus RTU packets inside TCP/IP frames to and from downstream Modbus enabled serial devices on a RS-485 network.

Modbus Gateway

The ESG 5107D translates the Modbus TCP requests from one or more Modbus TCP Masters on an Ethernet network to Modbus RTU packets and then forwards to downstream Modbus RTU devices on a RS-485 network and then translates the Modbus RTU responses from the RS-485 devices to Modbus TCP before transmitting them back to the Modbus TCP Masters.

Technical Specifications

Power Supply (U+, U-)

Power Input	9-24VDC
Burden	< 3W

RS-485 Port (D+, D-, SH)

Baudrate/bps	1200/2400/4800/7200/9600/14400/19200/ 28800/38400/57600/76800/115200
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10Base-T Ethernet Port

Speed	10 Mbps
Connector	RJ45
Cable	CAT5, CAT5e with maximum 100m distance
Surge Protection	1.5kVrms

Reset Input

Input Type	Dry Contact
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Terminal Dimensions

Power/RS-485/Reset	2.5mm x 2.8mm
Max. Wire Size	1.5mm ²
Max. Torque	5kgf.cm/M3 (4.3 lb-in)

Environmental Conditions

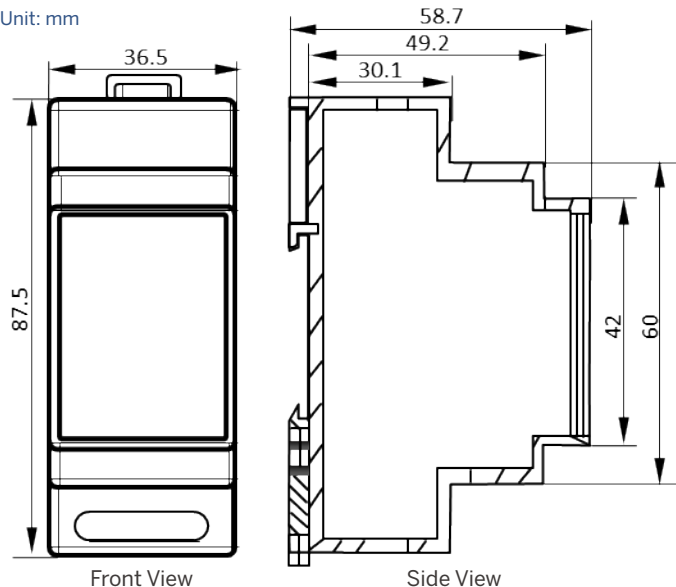
Operating Temperature	-10 °C to 60 °C
Storage Temperature	-30 °C to 80 °C
Humidity	5% to 95% non-condensing

Mechanical Characteristics

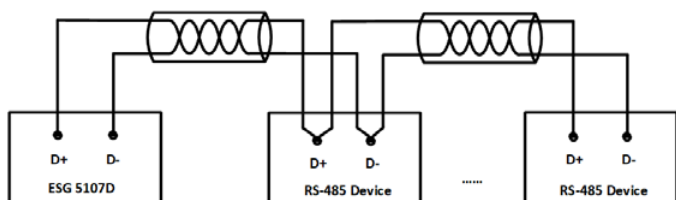
Unit Dimensions	36.5(W)x87.5(H)x58.7(D) mm
Mounting	DIN-Rail Mounting
Shipping Weight	TBD
Shipping Dimensions	TBD

Dimensions

Unit: mm



RS-485 Wiring



Web Interface

Logout [Chinese](#)

Device Information

Device Name	ESG5107D	Firmware Version	V1.460	MAC Address	28-5F-59-36-0C-5F
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Network Settings

IP Address	192.168.1.200	Subnet Mask	255.255.255.0	Gateway	192.168.1.1
IP Addressing	Static	Modbus Port	502	HTTP Port	80
Mode	TCP Server	Destination IP / Domain Name	192.168.1.3	Destination Port	4196

Serial Settings

Baudrate	9600	Data Bits	8	Parity	Even
Stop Bits	1	Flow Control	None		

Advanced Settings

Watchdog Reset	Disable	Watchdog Reset Time	300	5-1270s	Re-connect Time	12	1-255s
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Multi-Master Settings

Protocol	Modbus Gateway	Response Timeout	256	32-8000ms	Multi-Master	Yes
Transmit Delay	20	5-255ms				

NOTE: Time out is always 0 when Multi-Master is disabled. Time out only can be set as Multiples of 32.

Modify Web Password

New Password		Confirm Password			
Submit					

Setup Parameters

Parameter	Range/Default*
IP Address	192.168.1.200* (Specify the Device IP when IP Addressing is set to Static)
IP Addressing	Static*, DHCP
Modbus Port	502*
Baudrate (bps)	1200, 2400, 4800, 7200, 9600*, 14400, 19200, 28800, 38400, 57600, 76800, 115200
Data Bits	5, 6, 7, 8*
Parity	None, Odd, Even*, Mark, Space
Stop Bits	1*, 2
Protocol	Transparent Gateway, Modbus Gateway*
Response Timeout	32 to 8000 (ms), 0* (changes to 256 automatically if Multi-Master is enabled)
Multi-Master	Yes, No*
Transmit Delay	5 to 255 (ms), 20* (changes to 20 automatically if Multi-Master is enabled)

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