



GT850-ES

Modbus / IEC61850 Gateway

Introduction

The GT850-ES enables seamless communication between Modbus TCP/RTU instruments and IEC61850 power client systems. The gateway can act as a Modbus RTU master or Modbus TCP client/server, featuring two RS-485 ports and two Ethernet ports, allowing Modbus devices with RS-485 and TCP interfaces to connect to IEC61850 master systems. It converts Modbus RTU and Modbus TCP instrument data into IEC61850-compliant power protocol data.

High Real-Time Performance

Supports GOOSE and report services, which can quickly enable data exchange and ensures real-time performance and high efficiency.



Strong EMI Resistance

Uses an isolated power supply to handle various complex industrial environments, improving resistance to electromagnetic interference to ensure reliability.



Ease of Use

Configure the gateway easily with SST-IEM-CFG, enabling fast and straightforward communication setup.



Wide Range of Applications

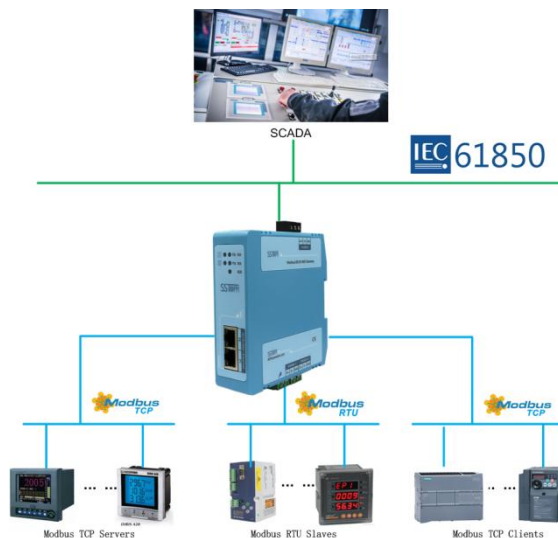
Functions as an IEC61850 server and features two Ethernet ports with a built-in Ethernet switch.



Up to 36 Modbus TCP devices per channel can be connected to IEC61850.

Typical Application

The GT850-ES gateway can connect Modbus serial and Modbus TCP devices to power systems, enabling real-time data exchange and control command transmission between the IEC61850 client system and the field device network.

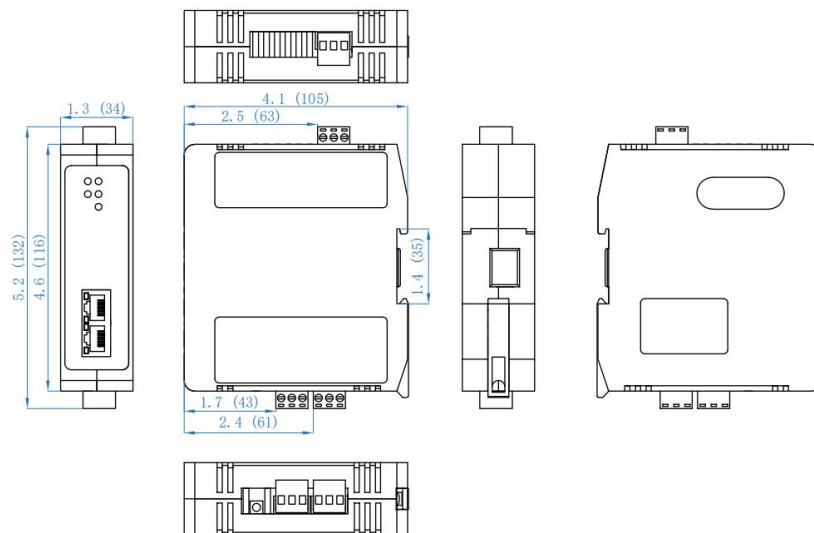


Technical Specifications

IEC61850 Features	
Operation Mode	IEC61850 Server
Ethernet Ports	2 Ports for the IEC61850 and Modbus TCP interface
IEC61850 Supported Services	Supports Report, Control, GOOSE, and Time Synchronization Services
Number of IEC61850 Clients	16
Maximum Data Points	1200
Modbus Features	
Operation Mode	Modbus RTU/ASCII Master, Modbus TCP Client/Server
Number of Modbus Serial Connections	31 devices per serial port, 36 devices on Modbus TCP side
Supported Function Code	01H, 02H, 03H, 04H, 05H, 06H, 0FH, 10H, 17H
Electrical / Environmental	
DC Input Voltage	24 VDC (9V-30V), 250mA (24VDC).
Operating Temperature	-4°F to 140°F (-20°C to 60°C), Humidity 5% to 95%
Certification	CE Compliant
Physical	
Dimensions (W x H x D)	1.3in x 4.6in x 4.1in (34mm x 116mm x 105mm)
Mounting	35mm (1.4in) DIN Rail
Ethernet Ports	2 Ports, 10/100 Base-T, RJ45 Connector
Power Interface	3-Pin Terminal Block

Dimensions

Unit: Inch (mm)



Product Recommendations

Model Name	Network Interface 1	Network Interface 2
GT200-BM-2RS	BACnet IP	Modbus Serial
GT200-MT-RS485	Modbus TCP	Modbus Serial