



IEC850-211

IEC 61850 Client and Modbus TCP Server Gateway

Features

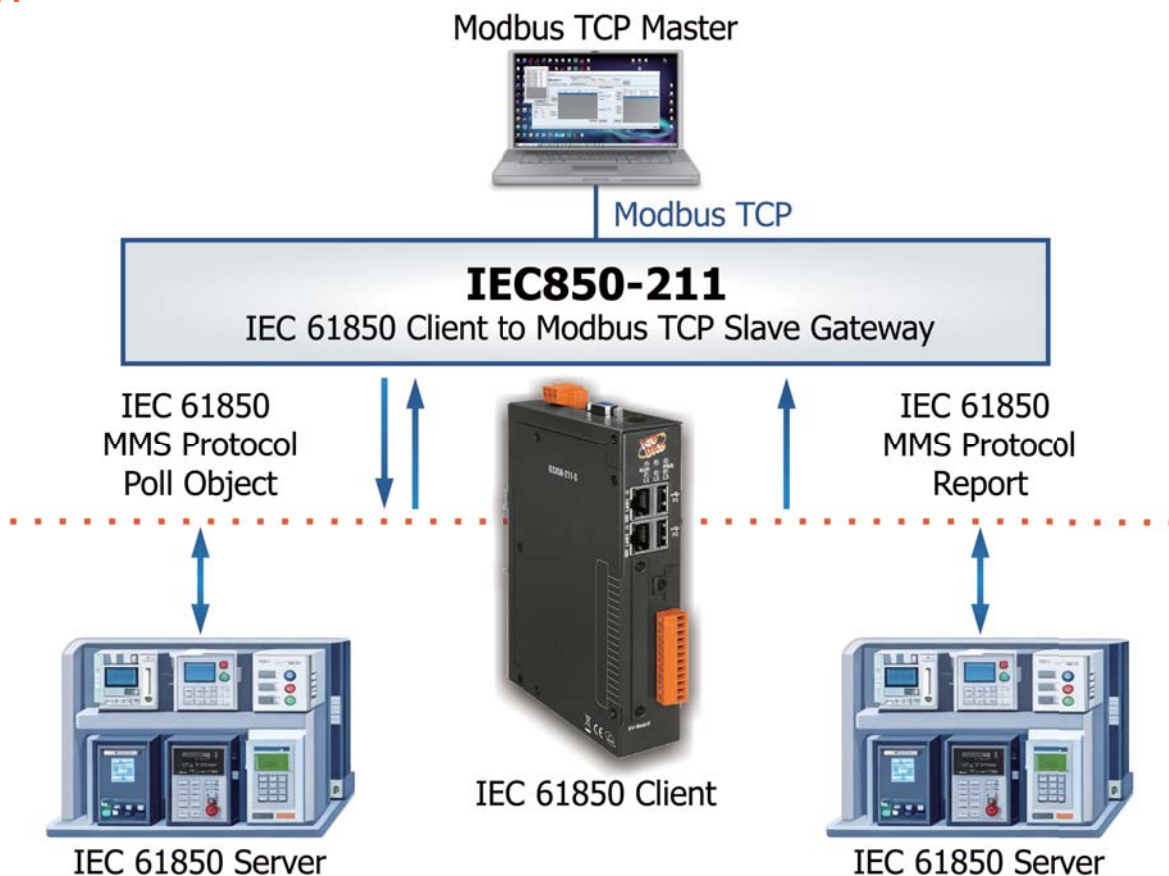
- Read and write IEC 61850 objects via Modbus commands
- Automatically map IEC 61850 data objects to Modbus registers via the Utility
- Supports MMS data types Boolean, Integer, Unsigned, Float, BIT_STRING, UTC_TIME
- Supports Modbus function codes 1, 2, 3, 4, 5, 6, 16
- Supports up to 10 IEC 61850 server connections
- Allows a total of 5000 mapping points
- Supports GOOSE Publish & Subscribe
- Supports IEC 61850 Reports
- The Utility supports importing SCL (SCD/CID/ICD) files



Introduction

IEC850-211 is a communication gateway that provides data conversion between an IEC 61850 Client and a Modbus Slave, enabling devices on an IEC 61850 network to be accessed and integrated by existing Modbus systems. It is particularly suitable for substation automation and power monitoring applications. The gateway supports various MMS data types, including Boolean, Integer, Unsigned, Float, BIT_STRING, and UTC_TIME, ensuring data integrity and consistency during conversion. In addition, it supports IEC 61850 Report and GOOSE Publish/Subscribe mechanisms to achieve real-time event transmission and high-speed communication. With the dedicated Utility tool, users can import SCL (SCD/CID/ICD) files and automatically configure data mapping, allowing IEC 61850 data objects to be mapped to Modbus registers, significantly simplifying system integration and improving overall deployment efficiency.

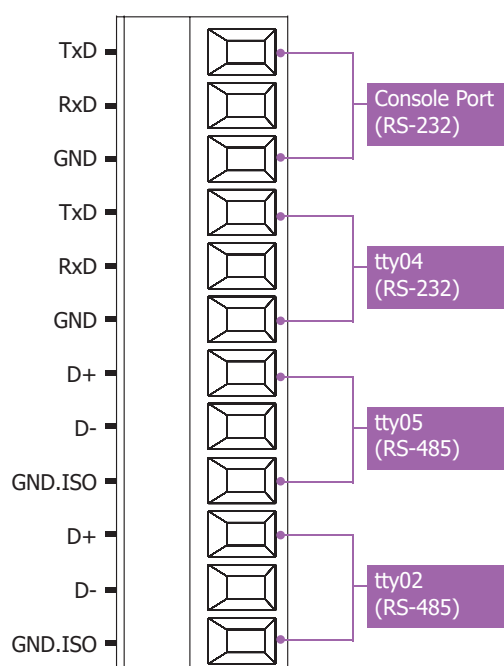
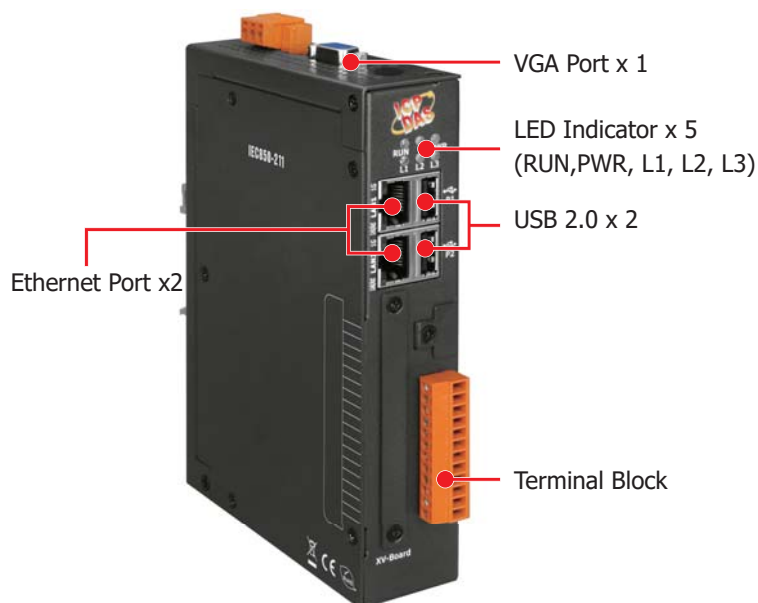
Applications



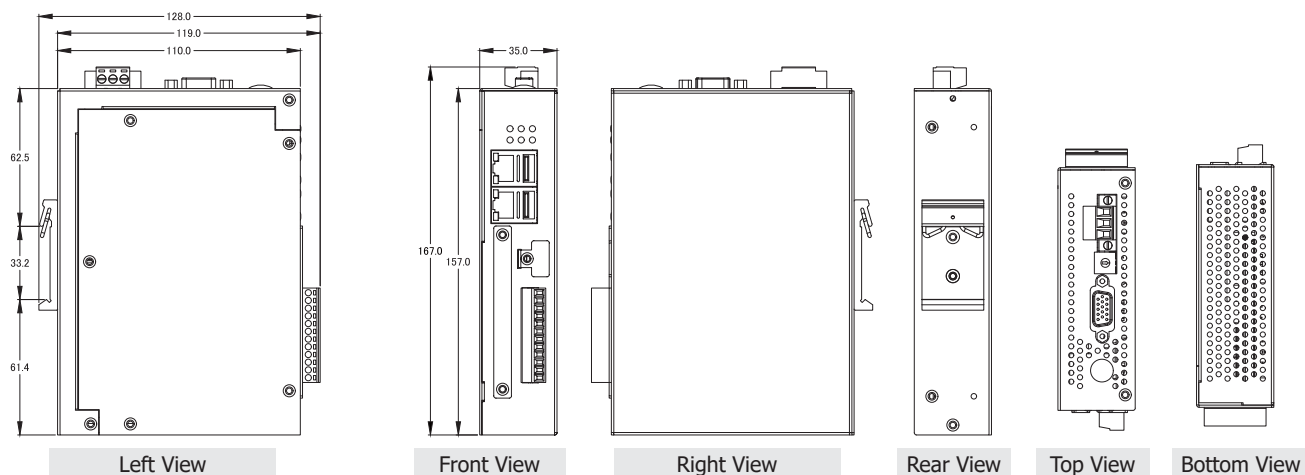
Specifications

System		
CPU	Cortex-A8, 1 GHz	
SDRAM	512 MB	
Flash	512 MB	
FRAM	64 KB	
LED Indicators	PWR(Power), RUN(Running), L1, L2, L3	
Communication Ports		
VGA	1 (reserved)	
Ethernet	RJ-45 x 2, 10/100/1000 Based-TX (Auto-negotiating, Auto MDI/MDI-X, LED indicators)	
USB 2.0	2 (reserved)	
Console Port	RS-232 (RxD, TxD and GND); Non-isolated	
ttyO2	RS-485 (reserved) (Data+, Data-); Non-isolated	
ttyO4	RS-232 (reserved) (RxD, TxD and GND); Non-isolated	
ttyO5	RS-485 (reserved) (Data+, Data-); 2500 VDC isolated	
Protocol		
Modbus	identity	Modbus TCP Server
	Function	1, 2, 3, 4, 5, 6,16
IEC 61850	identity	IEC 61850 MMS client
	connection	Max. 10 MMS servers
	MMS data types	Boolean, Integer, Unsigned, Float, BIT_STRING, UTC_TIME
	Data Point	5000
	control	status-only
		direct-with-normal-security
		direct-with-enhanced-security
		sbo-with-normal-security
		sbo-with-enhanced-security
Power		
Supply Voltage	+12 to +48 VDC	
Consumption	4.8 W	
Connector	3-pin Removable Terminal Block	
Mechanism		
Dimensions	35 mm x 167 mm x 119 mm	
Casing	Metal	
Installation	DIN-Rail	
Environment		
Operating Temp.	-25°C ~ +75°C	
Storage Temp	-30°C ~ +85°C	
Humidity	10 ~ 90% RH, non-condensing	

Pin Assignments



📏 Dimensions (Units: mm)



Ordering Information

IEC850-211 CR	IEC 61850 Client and Modbus TCP Server Gateway (RoHS)
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