

IEC850-211-S

Modbus TCP to IEC-61850 Gateway

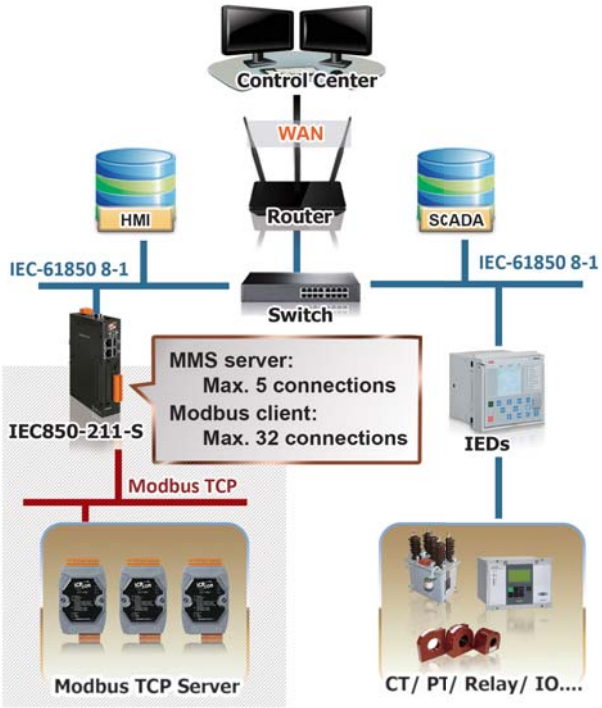
Features

- Read/Write Modbus register via IEC-61850
- Maps Modbus registers to IEC-61850 data objects via utility automatically
- Supports Logical Node GGIO and Data Object Ind,AnIn,SPCSO,AnOut
- Offers secure remote operations with a Select-Before-Operate feature
- Supports Modbus function code 1, 2, 3, 4, 5,6 and 16
- Allows up to 32 Modbus TCP server and 5 IEC-61850 MMS client connections
- Allows 9600 Modbus registers in total. (Includes coil, discrete inputs, input registers and hold registers)
- Provides ICD file via utility

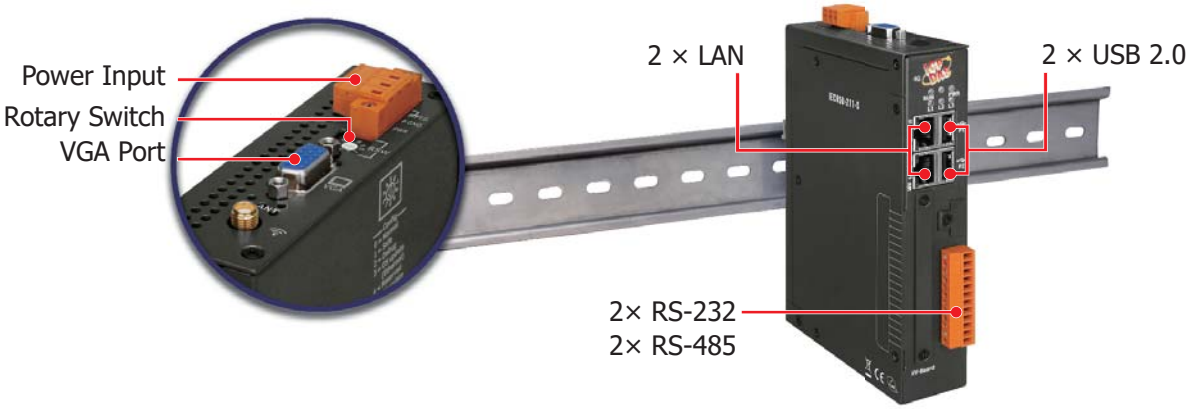
Introduction

IEC 61850 is an international standard defining communication protocols for intelligent electronic devices at electrical substations. It is developed by the International Electrotechnical Commission's (IEC) Technical Committee 57 reference architecture for electric power systems. The objective of the standard is to specify requirements and to provide a framework to achieve interoperability between the IEDs supplied from different suppliers. This protocol can run over TCP/IP networks or substation LANs using high speed switched Ethernet to obtain the necessary response times below four milliseconds for protective relaying.
IEC850-211-S is a network gateway allowing IEC-61850 MMS client to access Modbus TCP network as a Modbus TCP client. IEC-61850 protocol is used in substation automation. The IEDs exchange information with other IEDs or SCADA via IEC-61850 protocol for protection and control devices. IEC850-211-S support Logical Node GGIO and Data Object Ind,AnIn,SPCSO,AnOut. It also support data set and unbuffered report function to exchange data with a client. The data mapping rule can be configured via ICPDAS Utility.

Applications



Appearance

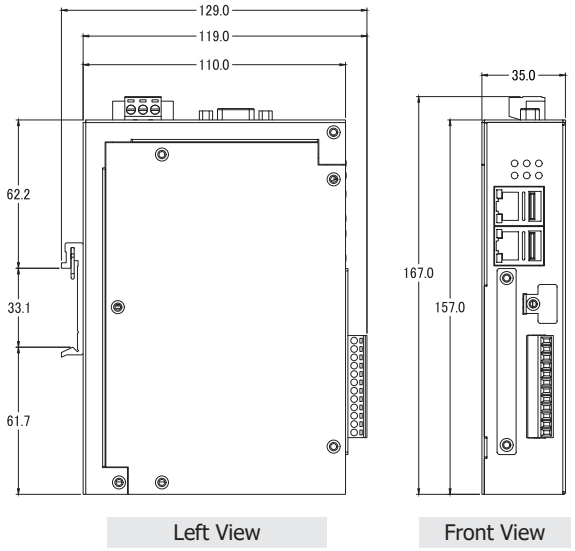


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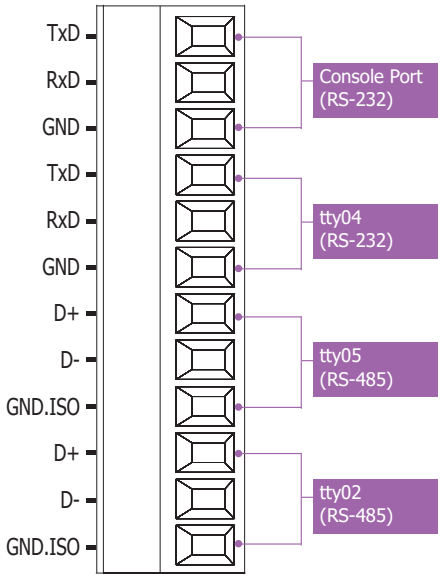
Specifications

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 client
	Function	1,2,3,4,5,6,16
	connection	Max. 32 Modbus TCP servers
IEC-61850	identity	IEC-61850 MMS server
	connection	Max. 5 MMS clients
	Logical Node	LLN0、LPHD、GGIO
	Data Object	Ind,AnIn,SPCSO,AnOut
	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		-40°C ~ +80°C
Humidity		10 ~ 90% RH, non-condensing

Dimensions (Units: mm)



Pin Assignments



Ordering Information

IEC850-211-S	Modbus TCP to IEC-61850 Gateway (RoHs)

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