

## iGate-850 Modbus/IEC61850 Gateway

### Product Overview

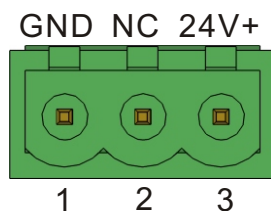
iGate-850 is a gateway which can provide a seamless connection between Modbus and IEC61850. It can convert Modbus meter data to IEC61850 standard data.

### Technical specifications

- [1] One way 10/100 BASE-T adaptive with RJ45 interface;
- [2] Supports IEC61850-8-1 (MMS) and GOOSE (meets the mechanism of the fast message demand of substation automation system);
- [3] Supports report service, control service, replace service, GOOSE service and time service;
- [4] Maximum data points: 800, supports up to 10 IEC61850 master station and up to 20 Modbus slave numbers;
- [5] With 2 serial ports, serial port can be RS-232, RS-485/422;
- [6] Transmission mode supports Modbus RTU and ASCII;
- [7] Serial parameters: baud rate: 200~38400bps optional, 8 data bits, 1 stop bit, parity: none, odd and even optional;
- [8] Supports redundant channel transmission;
- [9] Working temperature: -40°F~158°F(-40°C~70°C), relative humidity: 5% ~ 95% (non-condensing);
- [10] External Dimensions (W\*H\*D): 1.57 in\*4.92 in\*4.33 in (40mm\*125mm\*110mm);
- [11] Protection level: Ip20.

### Power interface

Power interface is shown as below:

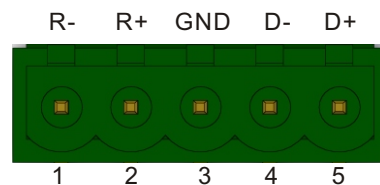


Pin	Function
1	GND
2	NC (Not Connected)
3	24V+, DC

### Features

- Provide free configuration software and ICD modeling software;
- Supports SNMP network management;
- Supports debugging two ends of the network ;
- Passed IEC61850-10 KEMA certification;

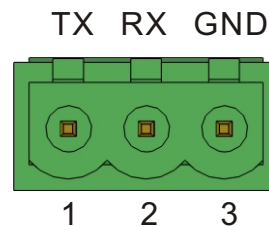
### RS-485/RS-422 interface



Pin	Function
1	R-, RS-422 Receive Negative
2	R+, RS-422 Receive Positive
3	GND
4	D-, RS-485/RS-422 Transmit Negative
5	D+, RS-485/RS-422 Transmit Positive

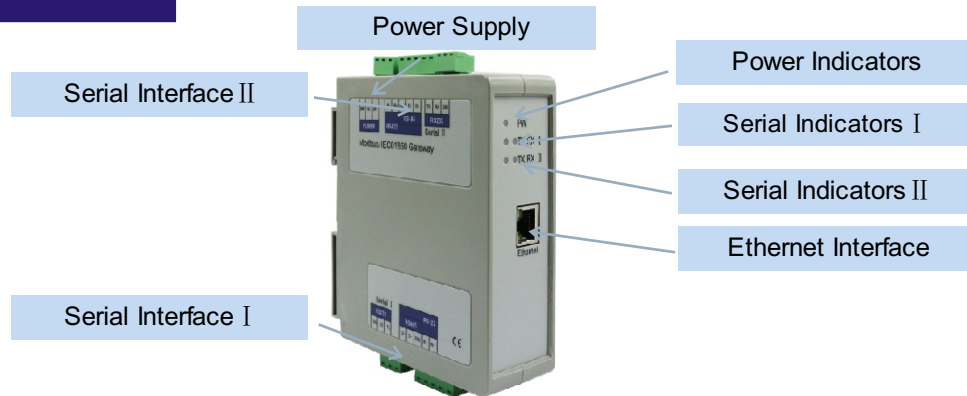
### RS-232 interface

RS-232 interface uses one 3-pin pluggable open terminal, and its pin description is shown as follows:



Pin	Function
1	TX, Connect RS232's TX of user device
2	RX, Connect RS232's RX of user device
3	GND, Connect RS232's GND of user device

## Appearance



## Indicators

Indicators		State	Description
Power		Red on	Module power supply is normal
		Red off	Module is not powered or power supply is abnormal
Serial Port I	TX	Red blinking	Serial port data sending
		Red off	Serial connection not established or error
	RX	Green blinking	Serial port data receiving
		Green off	Serial connection not established or error
Serial Port II	TX	Red blinking	Serial port data sending
		Red off	Serial connection not established or error
	RX	Green blinking	Serial port data receiving
		Green off	Serial connection not established or error

## Quick Start Guide

Notes to use iGate-850:

- A. Use network line to connect gateway to the network. The gateway factory IP address is 192.168.0.121, it needs to be changed when something is wrong with network connection.
- B. Power on.
- C. Use ICD modeling software to set up models for your Modbus devices. Use EasyConnect to configure the gateway. Download the configuration files into the gateway and restart (power off and power on) to let the configurations take effect.
- D. Restart is finished, enter into run mode.