



IGW3800-2T1D-TB-P (24VDC)

Rail Mounted Installation

MODBUS RTU To ETHERCAT Protocol ateway

- Supports 1 RS485 serial port to 2 10/100 Mbit/s Ethercat Ethernet interfaces, RJ45 interface
- Complies with standard Ethercat and Modbus protocol specifications, supports custom serial port protocols
- No need to configure Modbus parameters through Ethercat, supporting more Modbus device connections
- Support Modbus device point table import and export, facilitating engineer configuration
- Supports 24V DC DC power supply
- Support -20~70°C wide operating temperature range



EtherCAT



Industrial Grade



Fanless Desig

Introduction

IGW3800-2T1D-TB-P (24VDC) is a powerful and easy to configure gateway for seamless connection between Ethercat networks and serial device networks. This gateway can achieve bidirectional data exchange, support standard Modbus RTU devices, and also support custom serial port protocols.

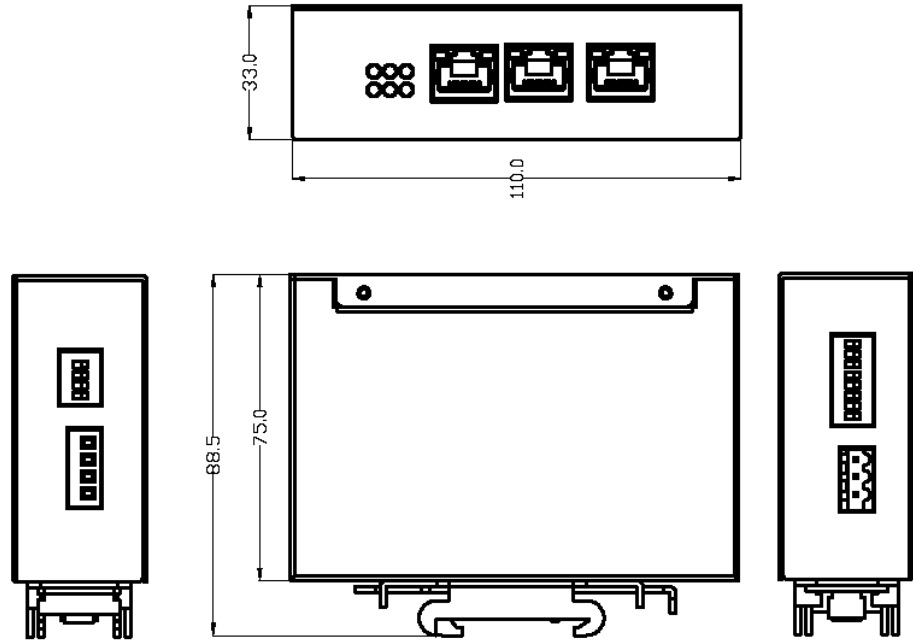
On the Ethercat side, the gateway operates as an Ethercat slave. Ethercat slave settings can be implemented by importing the provided XML file to the main site, and the ESI file is automatically generated by the configuration tool. On the serial port side, the device can serve as both a Modbus master and slave station and can be customized by the user. The mapping of serial port data and Ethercat network data is completed by the configuration software, and the data exchange between serial port devices and Ethercat network is completed through the gateway. Applied to frequency converters that support RS485 interfaces, intelligent high and low voltage electrical appliances, power measurement devices, intelligent on-site measurement equipment, instruments, PLC, DCS, FCS, etc

Features and Benefits

- ⦿ Supports 2-way 10/100 Mbit/s EthercatT Ethernet interface, meeting the Ethercat specification DS 301 V4.022
- ⦿ Complies with standard Ethercat and Modbus protocol specifications, supports custom serial port protocols
- ⦿ Graphical configuration without programming
- ⦿ Protocol conversion time in milliseconds
- ⦿ No need to configure Modbus parameters through Ethercat, supporting more Modbus device connections
- ⦿ Flexible serial port customization method
- ⦿ The configuration software can monitor and record Modbus network data online
- ⦿ Extensive industrial field application verification
- ⦿ High cost performance, can be quickly customized

Dimension

Unit:mm



Specification

ETHERCAT

Specification: DS 301 V4.022
Interface form: IN+OUT, 2-way 10/100Mbit/s Ethernet, RJ45
Switch: Integrated switch
Transferring data:
Supports 512 input bytes
Supports 512 output bytes

Serial port

Specifications: Modbus V1.1b3, Modbus RTU, V1.02
Number of serial ports: 1 RS485 interface, 4-bit wiring terminals, software selection interface
Node size: Up to 32 Modbus RTU slave devices can be connected, and up to 128 Modbus commands can be supported.
Supports up to 128 custom commands
RS485 terminal resistor: Qin style dial code
Support baud rates: 1200 Bit/s, 2400 Bits/s, 4800 Bits/s, 9600 Bits/s, 19200 Bits/s, 38400 Bits/s, 57600 Bits/s, 115200 Bits/s

Master and slave stations: Modbus RTU master and slave stations are optional

Verification: Supports odd, even, and no options

Modbus RTU function codes: 01H, 02H, 03H, 04H, 05H, 06H, 0FH, 10H functions

Custom protocol communication model: request response method

Custom protocol basic elements: constants, variables, checksums

Custom protocol triggering: supported, can set triggering address

Configuration tools	Tool Name: 3onedata Configuration Studio Configuration interface: Console port Engineering management: supports saving and loading Language: Supports switching between Chinese and English Modbus point table: supports importing and exporting Modbus point tables Interactive mapping: supports configuration of serial port data and Ethercat mapping
Connection, configuration, and firmware updates	Connection: Simple implementation of daisy chain linear topology structure Configuration: Connect the serial port and power supply through terminals Update: Through the Console port
Indicator light source	Power indicator light, Ethernet port indicator light, serial port indicator light, and operation indicator light 24 VDC soil 10%, 130mA typ
Protection/Isolation	Triple isolation: Serial port<=>Power supply<=>Ethernet Protection: reverse voltage/short circuit protection
work environment	Working temperature: -20~70 °C Storage temperature: -40~85 °C Relative humidity: 10%~95% (without condensation)
Mechanical structure	Shell: IP20 protection level, metal shell Installation: DIN 35mm rail installation Dimensions (width x height x depth): 33mm x 110mm x 75mm Weight: approximately 330g
authentication	CE, FCC, RoHS
Warranty	5 years

Ordering Information

Model	100Mbps Ethercat port	RS485	Configuration port	Source
IGW3800-2T1D-TB-P (24VDC)	2	1	1	24 VDC soil 10%



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