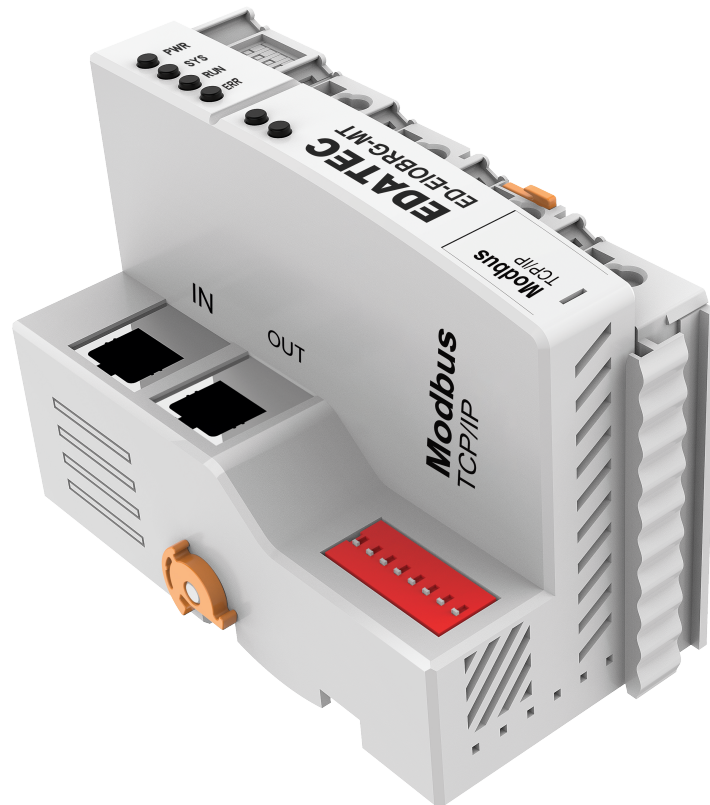




Modbus TCP Coupler

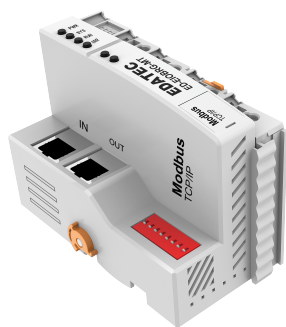
Datasheet

by EDA Technology Co., Ltd

built: 2026-08-10

Modbus TCP Coupler

- Modbus TCP Slave
- 2 x 100Mbps Ethernet ports
- Up to 100m transmission distance
- Supports expansion of up to 32 I/O modules
- Supports up to 127 cascaded nodes in a daisy-chain topology



Specifications

Communication Parameters	
Fieldbus	Modbus TCP
Adapter Type	Slave node
Mac/IP Address	Set it to the same subnet as the master station
Expandable I/O modules	≤32
Maximum input bytes	1024 Byte
Maximum output bytes	1024 Byte
Bus Rate	100Mbps
Bus Interface	RJ45
Distance Between Stations	≤100m
System Power	DC 24V (18V ~ 36V)
System Current	2A (Max)
Field Power	DC 24V (±20%)
Field Current	10A (Max)

Protection Parameter	
System Isolation Voltage	500V
Reverse Polarity Protection	Support
Overcurrent Protection	System power: support Field power: not support
Overvoltage Protection	Support

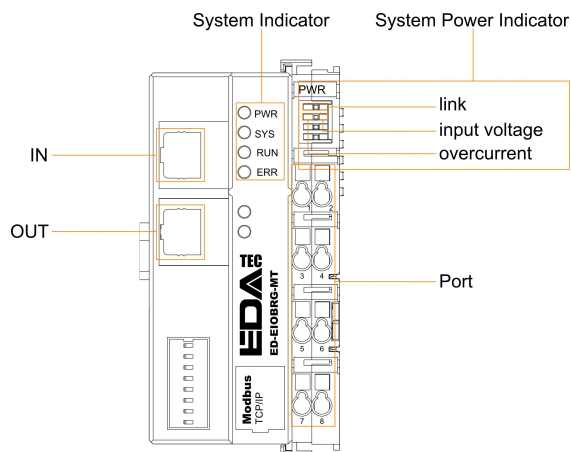
Wiring Parameter	
Wiring Specifications	0.2mm ² ~ 1.5mm ²
Wiring Method	Screwless

Mechanical Characteristics	
Dimensions	100mm x 70mm x 50.5mm
Weight	About 240g
Installation	DIN-rail installation

Environmental	
Operating Temperature	-10°C ~ 55°C
Storage Temperature	-20°C ~ 85°C
Ambient Humidity	5% ~ 95% (non-condensing)

Standards and Certifications	
EMC	EN IEC 61000-6-4:2019 EN IEC 61000-6-2:2019
RoHS	EN 62321-4:2014+A1:2017 EN 62321-5:2014 EN 62321-6:2015 EN 62321-7-1:2015 EN 62321-7-2:2017 EN 62321-8:2017

Interface Definition



Ethernet Port

IN	Input port, used to connect to a Modbus TCP master station on the same subnet or to the OUT port of another Modbus TCP slave station.
OUT	Output port, used to connect to the IN port of other Modbus TCP slave stations on the same subnet.

System Indicator

PWR	1 x green power indicators, used to view the power status of coupler.
SYS	1 x green system tip indicator, used to check the operational status of coupler.
RUN	1 x green running indicator, used to check the running status of coupler.
ERR	1 x red fault indicator, used to see if the coupler is malfunctioning.

System Power Indicator

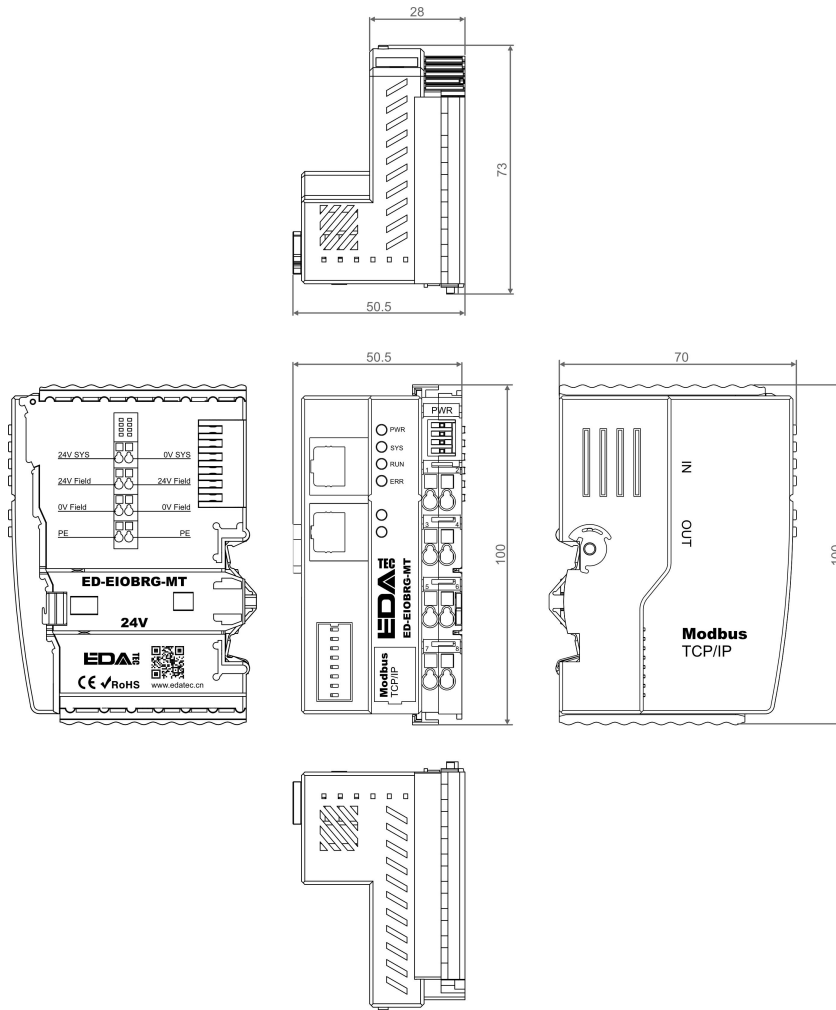
Link	1 x green link indicator, used to see if the connection of common terminal is normal.
Input Voltage	1 x green input voltage indicator, used to see if the input voltage is normal.
Overcurrent	1 x red overcurrent indicator, used to see if the coupler exceeds the maximum operating current.

Power Port

Pin No.	Description	Pin No.	Description
1	24V SYS	2	0V SYS
3	24V Field	4	24V Field
5	0V Field	6	0V Field
7	PE	8	PE

Dimensions

Unit: mm



Ordering Code

Model	Description
ED-EIOBRG-MT	Modbus TCP Coupler, 2 x Ethernet Ports

Expandable I/O Modules

Model	Description
ED-EIO8XP	8-channel digital input module (PNP)
ED-EIO8XN	8-channel digital input module (NPN)
ED-EIO16XP	16-channel digital input module (PNP)
ED-EIO16XN	16-channel digital input module (NPN)
ED-EIO8YP	8-channel digital output module (PNP)
ED-EIO8YN	8-channel digital output module (NPN)

Model	Description
ED-EIO16YP	16-channel digital output module (PNP)
ED-EIO16YN	16-channel digital output module (NPN)
ED-EIO4YR	4-channel digital output module (Relay)
ED-EIO4ADV	4-channel analog input module (voltage), -5~5V/0~10V/-10~10V, configurable
ED-EIO4ADA	4-channel analog input module (current), 4-20mA/0-20mA, configurable
ED-EIO8ADA	8-channel analog input module (current), 4-20mA/0-20mA, configurable
ED-EIO4AD	4-channel analog input module (voltage/current mixed), -5~5V/0~10V/-10~10V/4-20mA/0-20mA, configurable
ED-EIO4DAV	4-channel analog output module (voltage), -5 ~ 5V/0 ~ 10V/-10 ~ 10V, configurable
ED-EIO4DAA	4-channel analog output module (current), 4-20mA/0-20mA, configurable
ED-EIO4RTD	4-channel RTD Module
ED-EIO4TC	4-channel TC Module
ED-EIO2HCD	2-channel High Speed Counter Module
ED-EIOPWR	Power Expansion Supply Module
ED-EIOTERM	Bus End Cover

Packing List

- 1 x Modbus TCP Coupler