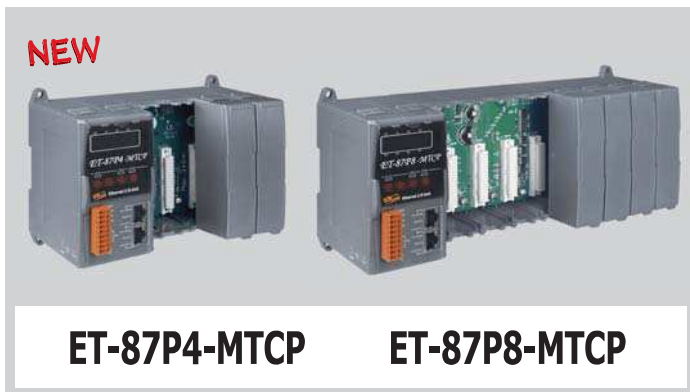


3.2. Modbus TCP I/O Expansion Unit



Features

- Two Ethernet Ports for Daisy-Chain Topology
- Supports Modbus TCP
- Supports Modbus RTU/ASCII
- Supports Modbus TCP to RTU Gateway
- Auto Configuration
- 4/8 I/O Slots for I-87K Series Modules
- Operating Temperature: -25 ~ +75 °C



Introduction

ET-87Pn-MTCP series is a Modbus TCP I/O expansion unit to expand I-87K series I/O modules over the Ethernet for industrial monitoring and controlling applications. It offers two Ethernet switch ports for daisy-chain topology. The daisy-chain feature allows ET-87Pn to connect in series to each other or other Ethernet devices. Users can easily simplify the cabling and save installation space with the feature.

It is designed to be used in harsh and noisy environment, so the hardware is manufactured with wide power input range (10 ~ 30 Vdc), isolated power input and can operate under wide temperature (-25 ~ +75°C). There are more than 50 I/O modules supported with the unit, including analog input/output, digital input/output, DI counter modules. To simplify installation and maintenance of I/O modules, it provides many useful features, such as: auto configuration, LED indicators for fault detection, dual watchdog to keep alive, programmable power on and safe values for safety.

Modbus is a very wide known protocol in the industrial manufacturing and environment monitoring fields. Many SCADA software, HMI and PLC has builtin driver to support Modbus devices. Besides, we also provide SDK on different platforms, such as Windows XP, Window CE 5.0/6.0, Linux, MiniOS7. Therefore, it is very easy to integrate remote I/O to customer's applications.

System Specifications

Models	ET-87P4-MTCP	ET-87P8-MTCP
Communication Ports		
Protocol	Modbus TCP Slave	
	Modbus RTU/ASCII Slave	
	Modbus TCP to RTU Gateway	
Ethernet	RJ-45 x 2, 10/100 Base-TX (Auto negotiating, Auto MDI/MDI-X, LED indicators)	
COM 1	RS-232 (to update firmware) (Rx/D, Tx/D and GND); non-isolated	
SMMI		
LED Display	Yes, 5-Digit LED Display	
Push Buttons	4	
I/O Expansion Slots		
Slot Number	4	8
	Note: For High Profi I-87K Modules Only	
Mechanical		
Dimensions (W x H x D)	188 mm x 132 mm x 111 mm	312 mm x 132 mm x 111 mm
Installation	DIN-Rail or Wall Mounting	
Environmental		
Operating Temperature	-25 ~ +75 °C	
Storage Temperature	-30 ~ +80 °C	
Ambient Relative Humidity	10 ~ 90% RH (non-condensing)	
Power		
Input Range	+10 ~ +30 VDC	
Isolation	1 kV	
Redundant Power Inputs	Yes	
Capacity	30 W	
Consumption	2 W	2.4 W