



<b>■</b> Features
■ Built-in Web Server
■ Support Modbus TCP/UDP Protocols
■ Powerful 32-bit MCU Handles Efficient Network Traffic
■ 2-port Ethernet Switch (LAN Bypass) for Daisy-Chain Wiring
■ Dual Watchdog
■ I/O Pair Connection (Push and Polling)
Easy Firmware Update via Ethernet
LED Display to Indicate the I/O status
■ Wide Operating Temperature Range: -25 ~ +75°C
■ Built-in I/O
□ DI/Counter: 6 Channels
□ Power Relay: 6 Channels
CE FC KOHS Z

#### **■** Introduction

The ET-2260 provides 6 wet contact Digital Input channels and 6 Form A electromechanical Relays. With 2 Ethernet ports, the ET-2260 allows daisy chain connection which permits the flexibility in locating devices, eases installation and lowers infrastructure costs. It features 8 kV ESD protection, 4 kV EFT protection, 3 kV surge and 3750 Vpc I/O isolation to enhance noise protection capabilities in industrial environments. Each input channel can be used as a 32-bit counter. The power-on value and safe value of relay are configurable.

## **■ System Specifications** \_

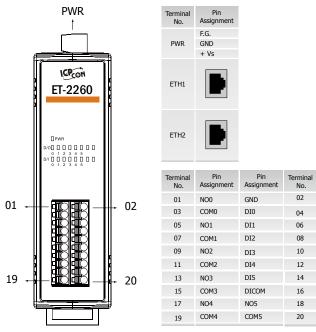
System					
CPU	32-bit ARM				
Communication					
Ethernet Port	2 x RJ-45, 10/100 Base-TX, Switch Ports				
Protocol	Modbus TCP, Modbus UDP				
Security	Password and IP Filter				
I/O Pair Connection	Yes (Push, Polling)				
Dual Watchdog	Yes, Module, Communication (Configurable)				
LAN Bypass	Yes				
LED Indicators					
System Running	Yes				
Ethernet Link/Act	Yes				
DI/DO status	Yes				
2-Way Isolation					
Ethernet	1500 VDC				
I/O	3750 VDC				
EMS Protection					
ESD (IEC 61000-4-2)	±8 kV Contact for Each Terminal and ±16 kV Air for Random Point				
EFT (IEC 61000-4-4)	±4 kV for Power Line				
Surge (IEC 61000-4-5)	±3 kV for Power Line				
Power					
Reverse Polarity Protection	Yes				
Powered from Terminal Block	+10 ~ +30 VDC				
Consumption	3.3 W (Max.)				
Mechanical					
Dimensions (L x W x H)	127 mm x 33 mm x 99 mm				
Installation	DIN-Rail Mounting				
Environment					
Operating Temperature	-25 ~ +75°C				
Storage Temperature	-30 ∼ +80°C				
Humidity	10 ~ 90% RH, Non-condensing				

ICP DAS www.ipc2u.ru www.icp-das.ru www.ipc2u.de www.ipc2u.com Rev.01

## **■ I/O Specifications** \_\_\_\_\_

Digital Ir	put/Counter	
Channels		6
Contact		Wet Contact
Sink/Source (NPN/PNP)		Sink/Source
On Voltage Level		+5 V <sub>DC</sub> ~ +50 V <sub>DC</sub>
Off Voltage Level		+1 V <sub>DC</sub> Max.
Input Impedance		7.5 kΩ
Counters	Max. Count	4,294,967,295 (32 bits)
	Max. Input Frequency	3 kHz
	Programmable Digital Filter	1 ~ 6500 ms (0.08 Hz ~ 500 Hz)
Overvoltage Protection		+70 VDC
Power Re	elay	
Channels		6
Туре		Power Relay, Form A (SPST N.O.)
Contact Rating		5 A @ 250 VAC/24 VDC (Resistive Load)
Min. Contact Load		10 mA @ 5 V
Operate Time		10 ms (max.)
Release Time		5 ms (max.)
Mechanical Endurance		$2 \times 10^7$ ops.
Electrical Endurance		10 <sup>5</sup> ops.
Power-on Value		Yes, Configurable
Safe Value		Yes, Configurable

## **■ Pin Assignments** —



#### Wire Connections

Digital Input/ Counter	Readback as 1	Readback as 0
	Close to GND	Open
Dry Contact	GND +S5 V DIX	SND +S5 V DIX
	+10 ~ +50 VDC	OPEN or <4 VDC
Sink	DIX 10K +- DICOM	DIX 10K
	+10 ~ +50 VDC	OPEN or <4 VDC
Source	DIX 10K	DIX 10K

#### **Power Relay** Load NOx (AC/DC) COMx **OFF State** Relay Output Readback as 0 Load NOx (AC/DC) COMx

**ON State** 

Note: When inductive loads are connected to the relays, a large counter electromotive force may occur when the relay actuates because of the energy stored in the load. These flyback voltages can severely damage the relay contacts and greatly shorten the relay life. Limit these flyback voltages at your inductive load by installing a flyback diode for DC loads or a metal oxide varistor for AC loads.

# Ordering Information \_

Ethernet I/O Module with 2-port Ethernet Switch, 6-ch ET-2260 CR Relay Output and 6-ch DI (RoHS)

### Related Products \_

NS-205 CR	Unmanaged 5-Port Industrial Ethernet Switch with Power Input $+10 \sim +30~\text{VDC}$ (RoHS)
NS-208 CR	Unmanaged 8-port Industrial 10/100 Base-TX Ethernet Switch with Power Input +10 ~ +30 V <sub>DC</sub> (RoHS)
DIN-KA52F CR	24 V/1.04 A, 25 W Power Supply with DIN-Rail Mounting (RoHS)
GPSU06U-6	24 V/0.25 A (max.) Power Supply

