



ET-7255 PET-7255

(PoE) Ethernet I/O Module with 2-port Ethernet Switch, 8-ch DI and 8-ch DO

□ Features
■ Built-in Web Server
■ Web HMI
■ Support for both Modbus TCP and Modbus UDP Protocols
Communication Security
■ 2-port Ethernet Switch (LAN Bypass) for Daisy-Chain Wiring
■ Dual Watchdog
■ I/O Pair Connection
■ Built-in I/O
☐ DI/Counter: 8 Channels
☐ DO: 8 Channels
CE UK FC ROHS Z

■ Introduction

The ET-7255/PET-7255 provides 8 dry/wet contact digital input channels and 8 source-type digital output channels. It features optical isolation for 2500 VDC of transient overvoltage protection but doesn't provide channel-to-channel isolation. Each input channel can be used as a 32-bit counter and each output channel can drive 650 mA load. The power-on value and safe value of digital output channel are programmable. It can safely be used in applications where hazardous voltages are present.

■ System Specifications

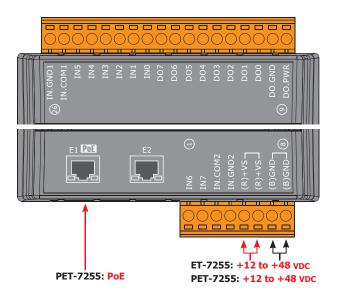
Model	ET-7255	PET-7255		
Software				
Built-in Web Server	Yes			
CPU Module				
Watchdog Timer	Module, Communication (Programmable)			
2-Way Isolation				
Ethernet	1500 VDC	-		
I/O	2500	VDC		
EMS Protection				
EFT (IEC 61000-4-4)	±2 kV for	Power Line		
ESD (IEC 61000-4-2)	±4 kV Contact for Each Terminal ±8 kV Air for Random Point			
Surge (IEC 61000-4-5)	±2 kV for Power Line			
LED Indicators				
Status	Run, Ethernet, I/O	Run, Ethernet, I/O, PoE		
Ethernet				
Ports	2 x RJ-45, 10/100 Base-TX, Swtich Ports			
PoE	-	Yes		
LAN bypass	Yes			
Security	ID, Password and IP Filter			
Protocol	Modbus TCP, Modbus UDP			
Power				
Reverse Polarity Protection	Yes			
Consumption	3.9 W (max.)	4.0 W (max.)		
Powered from PoE	-	IEEE 802.3af, Class1		
Powered from Terminal Block	+12 to +48 VDC			
Mechanical				
Dimensions (mm)	76 x 120 x 38 (W x L x H)			
Installation	DIN-Rail mounting			
Environment				
Operating Temperature	-25 to +75°C			
Storage Temperature	-30 to +80°C			
Humidity	10 to 90% RH, Non-condensing			

ICP DAS CO., LTD Website: http://www.icpdas.com Vol. 2023/03 1/2

■ I/O Specifications

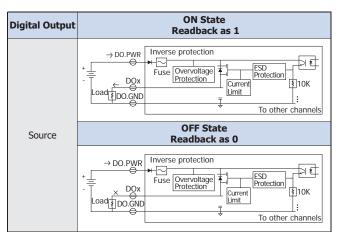
Model		ET-7255	PET-7255	
Digital Input/Counter				
Channels		8		
Туре		Dry Contact, Wet Contact		
Sink/Source (NPN/PNP)		Dry: Source Wet: Sink/Source		
ON Voltage Level	Dry	Close to GND		
ON Voltage Level	Wet	+10 to +50 VDC		
OFF Voltage Level	Dry	Open		
OFF Voltage Level	Wet	+4 VDC (max.)		
Max. Counts		4,294,967,295 (32-bit)		
Frequency		100 Hz		
Min. Pulse Width		5 ms		
Effective Distance		500m (max.)		
Input Impedance		10 kΩ		
Overvoltage Protection		+70 VDC		
Digital Output				
Channels		3	3	
Туре		Isolated Open Collector		
Sink/Source (NPN/PNP)		Source		
Load Voltage		+10 to +40 VDC		
Load Current		650 mA/channel at 25°C		
Overvoltage Protection		+47 VDC		
Short-circuit Protection		Ye	es	
Power on Value		Programmable		
Safe Value		Prograr	mmable	

■ Pin Assignments



■ Wire Connections

Digital Input/ Counter	Readback as 1	Readback as 0
	+10 ~ +50 VDC	OPEN or <4 VDC
Wet Contact (Sink)	INX 10K To other channels	INX 10K To other channels
	+10 ~ +50 VDC	OPEN or <4 VDC
Wet Contact (Source)	INX 10K To other IN.COMx To other channels	INX 10K To other channels



Digital Input/	ON State	OFF State
Counter	Readback as 1	Readback as 0
Dry Contact	Relay Close INx	× Relay Open INx

■ Ordering Information

ET-7255 CR	Ethernet I/O Module with 2-port Ethernet Switch, 8-ch DI and 8-ch DO (RoHS)
PET-7255 CR	PoE Ethernet I/O Module with 2-port Ethernet Switch, 8-ch DI and 8-ch DO (RoHS)

ICP DAS CO., LTD Website: http://www.icpdas.com Vol. 2023/03 2/2