



ET-2217CI-4 ET-2217CI

Ethernet I/O Module with 2-port Ethernet Switch,
4/8-channel differential analog Inputs

Introduction

The ET-2217CI is a Channel to Channel Isolation analog input module that includes 8 differential analog input channels and provides a programmable input range on all analog inputs (± 1 V, ± 2.5 V, ± 5 V, ± 10 V, ± 20 mA). It provides high overvoltage protection of 120 VDC. The sampling rate of the ET-2217CI is adjustable and is available in either fast or normal mode and it also provides 4 kV ESD protection as well as 3750 VDC intra-module isolation.

The ET-2217CI-4 has the same specifications as the ET-2217CI but provides 4 differential analog input channels.

System Specifications

Model	ET-2217CI-4	ET-2217CI
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	
Dual Watchdog	Yes, Module, Communication (Programmable)	
LAN Bypass	Yes	
LED Indicators		
for System Running	Yes, 1 as Power/Communication Indicator	
for Ethernet Link/Act	Yes	
2-Way Isolation		
Ethernet	1500 Vdc	
I/O	2500 Vdc	
EMS Protection		
ESD (IEC 61000-4-2)	± 4 kV Contact for Each Terminal ± 8 kV Air for Random Point	
EFT (IEC 61000-4-4)	± 4 kV for Power Line	
Surge (IEC 61000-4-5)	± 2 kV for Power Line	
Power		
Reverse Polarity Protection	Yes	
Powered from Terminal Block	$+10 \sim +48$ Vdc	
Consumption	5.4 W (Max.)	
Mechanical		
Dimensions (L x W x H)	176 mm x 33 mm x 130 mm	
Installation	DIN-Rail Mounting	
Environment		
Operating Temperature	$-25 \sim +75^{\circ}\text{C}$	
Storage Temperature	$-30 \sim +80^{\circ}\text{C}$	
Humidity	10 ~ 90% RH, Non-condensing	

Features

- 3000 VDC Channel-to-Channel Isolation
- ET-2217CI-4
 - 4-channel differential analog inputs
- ET-2217CI
 - 8-channel differential analog inputs
- Built-in Web Server
- 120 VDC Overvoltage Protection
- Resolution: 12/16 bits
- Adjustable Sampling Rate
- 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
- Easy Firmware Update via Ethernet
- Wide Operating Temperature Range: $-25 \sim +75^{\circ}\text{C}$

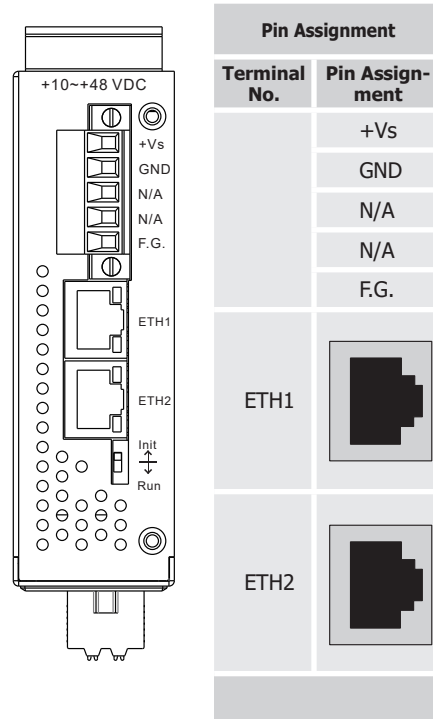


I/O Specifications

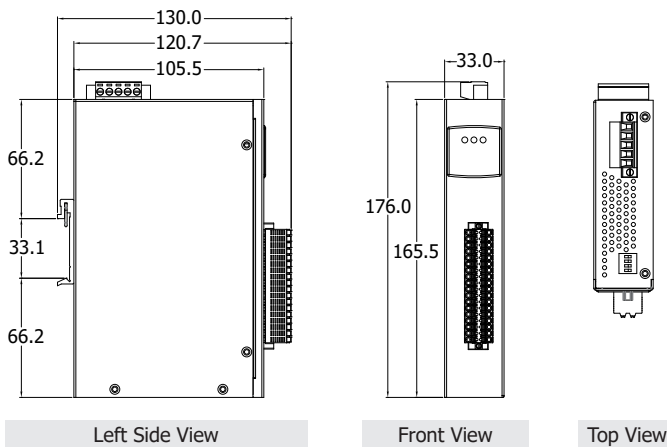
Model	ET-2217CI-4	ET-2217CI
Analog Input		
Channels	4 Differential	8 Differential
Input Range	Voltage	± 1 V, ± 2.5 V, ± 5 V, ± 10 V
	Current	± 20 mA
Resolution	Normal Mode	16-bit
	Fast Mode	12-bit
Accuracy	Normal Mode	$\pm 0.1\%$ of FSR
	Fast Mode	$\pm 0.5\%$ of FSR
Sampling Rate	Normal Mode	10 Hz (Total)
	Fast Mode	200 Hz (Total)
Zero Drift	$\pm 20 \mu\text{V}/^{\circ}\text{C}$	
Span Drift	$\pm 25 \text{ ppm}/^{\circ}\text{C}$	
Input Impedance Voltage	20 M Ω	
Overvoltage Protection	120 VDC	
Channel-to-Channel Isolation	Yes, 3000 VDC	

Pin Assignments

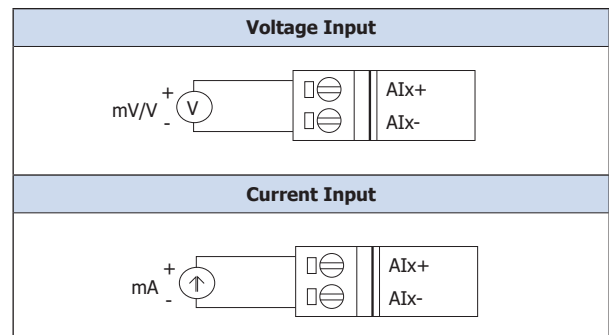
Pin Assignment		Terminal No.	Pin Assignment		
ET-2217CI	ET-2217CI-4		ET-2217CI	ET-2217CI-4	
AI0-	AI0-	02	01	A00+	AI0+
		04	03		
AI1-		06	05	AI1+	
		08	07		
AI2-	AI1-	10	09	AI2+	AI1+
		12	11		
AI3-		14	13	AI3+	
		16	15		
AI4-	AI2-	18	17	AI4+	AI2+
		20	19		
		22	21		
AI5-		24	23	AI5+	
		26	25		
		28	27		
A06-	AI3-	30	29	AI6+	AI3+
		32	34		
		34	33		
AI7-		36	35	AI7+	



Dimensions (Units: mm)







Wire Connections



Ordering Information

ET-2217CI-4 CR	Ethernet I/O Module with 2-port Ethernet Switch, 4-channel differential analog Inputs (RoHS)
ET-2217CI CR	Ethernet I/O Module with 2-port Ethernet Switch, 8-channel differential analog Inputs (RoHS)

Related Products

	NS-205 CR	Unmanaged 5-Port Industrial Ethernet Switch with Power Input +10 ~ +30 Vdc (RoHS)
	NS-208 CR	Unmanaged 8-port Industrial 10/100 Base-TX Ethernet Switch with Power Input +10 ~ +30 Vdc (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