

XV107A

8-ch Isolated DI and 8-ch Isolated DO
Expansion Board

Features

- Source-type Digital Output
- Sink-type Digital Input
- All Input Channels Can Be Used As 32-bit Counters
- Configurable Power-on Value Settings
- 70 VDC Overvoltage Protection for Digital Input
- Overload Protection for Digital Output
- Short-circuit Protection for Digital Output



Introduction

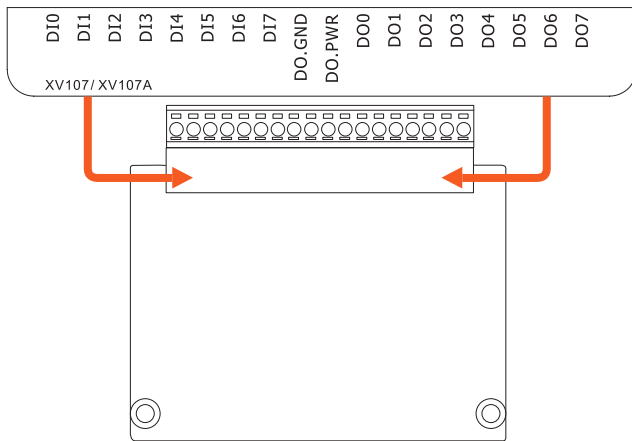
The XV107 provides 8 channels for digital input and 8 channels for digital output, each of which features photocouple isolation. The XV107 supports sink-type output with short circuit protection, while the input is source-type. All input channels can be used as 32-bit counters. There are options for configuring power-on digital output values. 4 kV ESD protection and 3750 VDC intra-module isolation are also provided. The XV107A has the same specifications as the XV107, except that the input and output types are reversed.

Specifications

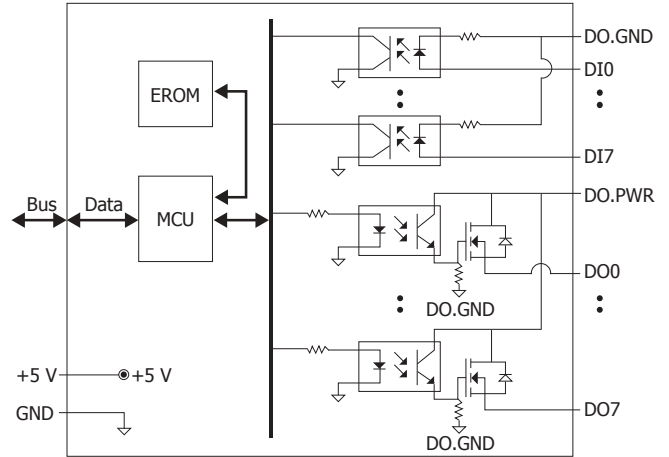
Isolation		
Intra-module Isolation	3750 VDC	
EMS Protection		
ESD (IEC 61000-4-2)	±4 kV Contact For Each Terminal	
	±8 kV Air For Random Terminal	
Digital Input/Counter		
Channels	8	
Type	Wet Contact, Sink	
Wet Contact	ON Voltage Level	+3.5 ~ 50 VDC
	OFF Voltage Level	+1 VDC Max.
Max. Counts	32-bit (0 ~ 4, 294, 967, 285)	
Min. Pulse Width	10 ms	
Input Impedance	10 KΩ, 0.5 W	
Overvoltage Protection	70 VDC	
Digital Output		
Channels	8	
Type	Source	
Load Voltage	10 ~ 40 VDC	
Max. Load Current	650 mA/channel	
Overvoltage Protection	47 VDC	
Overload Protection	Yes	
Short-Circuit Protection	Yes	
Power on Value	Yes, Programmable	

COM Ports	
Ports	1 x RS-232
Baud Rate	115200 bps
Data Format	N, 8, 1
Protocol	Modbus/RTU
Power	
Consumption	0.45 W Max.
Powered from Terminal Block	5 VDC
Mechanical	
Dimensions (mm)	59 mm x 82 mm x 13 mm (W x L x H)
Mechanical	
Operating Temperature	-25 ~ +75 °C
Storage Temperature	-30 ~ +80 °C
Humidity	10 ~ 90% RH, Non-condensing

Pin Assignments



Internal I/O Structure



Wire Connections

Input Type	Readback as 1	Readback as 0
Sink	+3.5 ~ +50 VDC	+1 VDC Max.
Output Type	Readback as 1	Readback as 0
Drive Relay		
	Resistance Load	

Ordering Information

XV107A CR	8-ch Isolated DI (Wet, Sink) and 8-ch Isolated DO (Source, PNP, 10 ~ 40 VDC) Expansion Board (RoHS)
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