



XV107

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

Sink-type Digital Output Source-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 an 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.

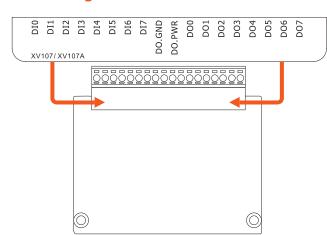
Specifications

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		
Туре		Wet Contact, Source		
Wet Contact	ON Voltage Level	+3.5 ~ 50 VDC		
Wet Contact	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		
Туре		Sink		
Load Voltage		3.5 ~ 50 VDC		
Max. Load Current		700 mA/channel		
Overvoltage Protection		60 VDC		
Overload Protection		Yes		
Short-Circuit Protection		Yes		
Power on Value		Yes, Programmable		

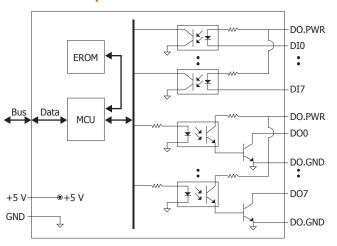
COM Ports				
Ports	1 x RS-232			
Baud Rate	115200 bps			
Data Format	N, 8, 1			
Protocol	Modbus/RTU			
Power				
Consumption	0.15 W Max.			
Powered from Terminal Block	5 VDC			
Mechanical				
Dimensions (mm)	59 mm x 82 mm x 13 mm (W x L x H)			
Mechanical				
Operating Temperature	-25 ~ +75 °C			
Storage Temperature	-30 ∼ +80 °C			
Humidity	10 ~ 90% RH, Non-condensing			

ICP DAS CO., LTD Website: http://www.icpdas.com Vol. 2020.08 1/2

■ Pin Assignments



■ Internal I/O Structure



■ Wire Connections

Input Type	Readback as 1	Readback as 0
	+3.5 ~ +50 VDC	+1 VDC Max.
Source	DO.PWR	+ DO.PWR
Output Type	Readback as 1	Readback as 0
Drive Relay	DO.PWR DOx DO.GND	DO.PWR DOX DO.GND
Resistance Load	DO.PWR DOx DO.GND	DO.PWR DOx DO.GND

■ Ordering Information

XV107 CR 8-ch Isolated DI (Wet, Source) and 8-ch Isolated DO (Sink, NPN, 3.5 ~ 50 VDC) Expansion Board (RoHS)

ICP DAS CO., LTD Website: http://www.icpdas.com Vol. 2020.08 2/2