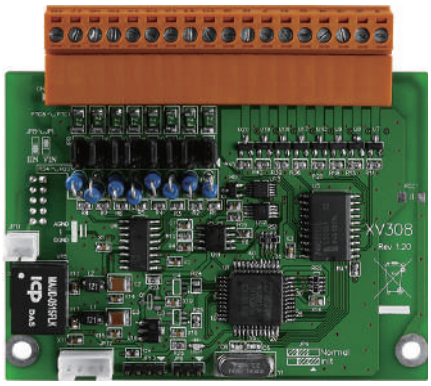


XV308

8-ch Isolated AI and 8-ch Isolated Universal Digital I/O Expansion Board

Features

- 8-channel Analog Input
- 8-channel Universal Digital Input/Output
- Digital Input Channels can be used as 32-bit Counters
- Configurable Power-on Value Settings
- Open Wire Detection for 4 ~ 20 mA
- Individual Channel Configuration
- 120 VDC Overvoltage Protection for Analog Input
- 60 VDC Overvoltage Protection for Digital Input
- Overload Protection for Digital Output
- Short-circuit Protection for Digital Output

Introduction

The XV308 provides 8 channels for analog input and 8 channels for universal digital input/output. Analog Input channels are Single-ended type and provide a programmable input range (±1 V, ±2.5 V, ±5 V, ±10 V, ±20 mA, 0 ~ 20 mA, 4 ~ 20 mA). Each Analog Input channels also provides a high overvoltage protection of 120 VDC. Universal digital input/output can be selected via wire connections. Digital input channels are sourcetype and can be used as 32-bit counters. Digital output channels are sink-type with short circuit protection and options for configuring power-on digital output values.

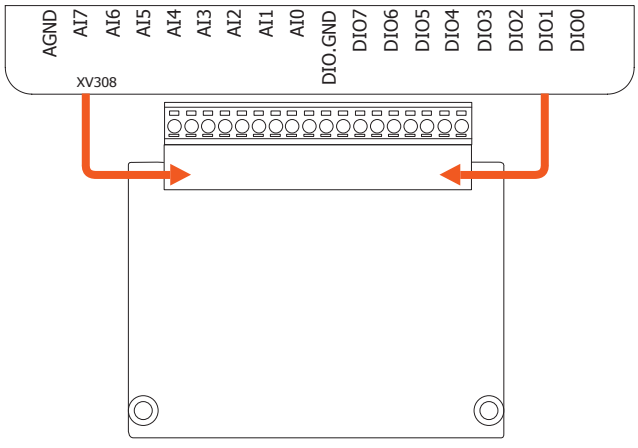
Specifications

Isolation		
Intra-module Isolation		2000 VDC
EMS Protection		
ESD (IEC 61000-4-2)		±4 kV Contact For Each Terminal
		±8 kV Air For Random Terminal
Analog Input		
Channels		8
Type		±1 V, ±2.5 V, ±5 V, ±10 V, ±20 mA, 0 ~ 20 mA, 4 ~ 20 mA (Jumper Selectable)
Resolution		16-bit
Accuracy	Normal Mode	±0.1%
	Fast Mode	±0.5%
Sampling Rate	Normal Mode	10 Hz
	Fast Mode	200 Hz (Total)
Input Impedance		20 MΩ
Overvoltage Protection		120 VDC
Individual Channel Configuration		Yes
Digital Input/Counter		
Channels		Digital Input and Digital Output=8 (By Wire Connection)
Wet Contact	ON Voltage Level	+1 VDC Max.
	OFF Voltage Level	+4 ~ 30 VDC
Dry Contact	ON Voltage Level	Close to GND
	OFF Voltage Level	Open
Max. Counts		32-bit (0~4,294,967,285)
Frequency		50 Hz
Min. Pulse Width		10 ms
Overvoltage Protection		60 VDC

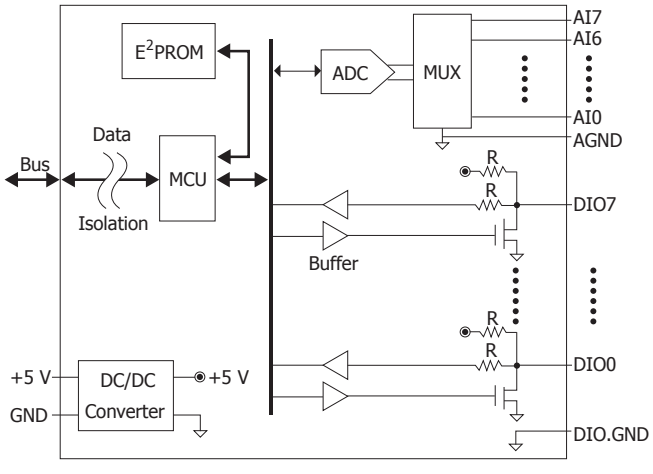
Digital Output	
Channels	Digital Input and Digital Output=8 (By Wire Connection)
Type	Sink
Load Voltage	3.5 ~ 50 VDC
Max. Load Current	700 mA
Overvoltage Protection	60 VDC
Overload Protection	Yes
Short-circuit Protection	Yes
Power-on Value	Yes, Programmable
COM Ports	
Ports	1 x RS-232
Baud Rate	115200 bps
Data Format	N, 8, 1
Protocol	Modbus/RTU
Power	
Consumption	0.8 W Max.
Powered from Terminal Block	5 VDC
Mechanical	
Dimensions (mm)	59 mm x 82 mm x 13 mm (W x L x H)
Environmental	
Operating Temperature	-25 ~ +75 °C
Storage Temperature	-30 ~ +80 °C
Humidity	10 ~ 90% RH, Non-condensing

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Pin Assignments

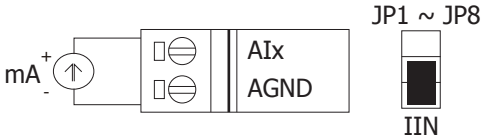


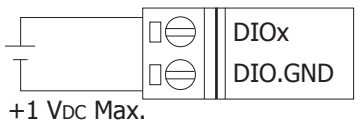
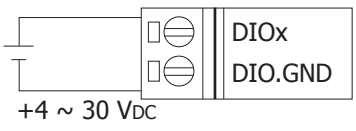
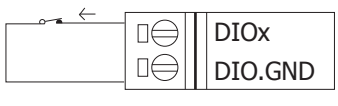
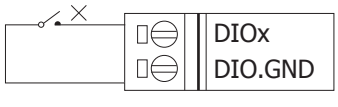
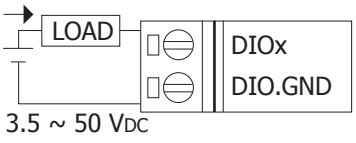
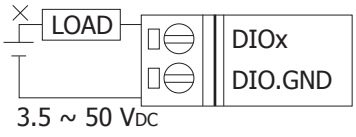
Internal I/O Structure



Wire Connections

Voltage Input (Single-ended Mode)


Voltage Input (Single-ended Mode)


Digital Input/ Counter	ON State Readback as 1	OFF State Readback as 0
	+1 VDC Max.	+4 ~ 30 VDC
Wet Contact (Sink)		
Dry Contact (Source)		
Digital Output	**ON State Readback as 1**	**OFF State Readback as 0**
Open Collector (Sink)		

Ordering Information

XV308 CR	8-ch Isolated AI and 8-ch Isolated Universal Digital I/O Expansion Board (RoHS)

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