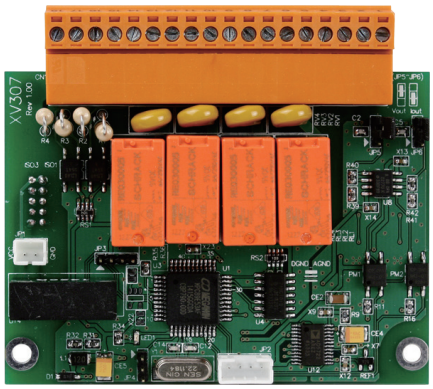


XV307

2-ch AO, 4-ch DI and 4-ch Power Relay Expansion Board

Features

- Multifunction (2 AO, 4 DI, 4 Relay)
- Individual Channel Configuration for Analog Output
- Jumper Selectable Voltage or Current Output
- Open Wire Detection for Current Output
- Configurable Power-on Value Settings
- 70 VDC Overvoltage Protection for Digital Input

Introduction

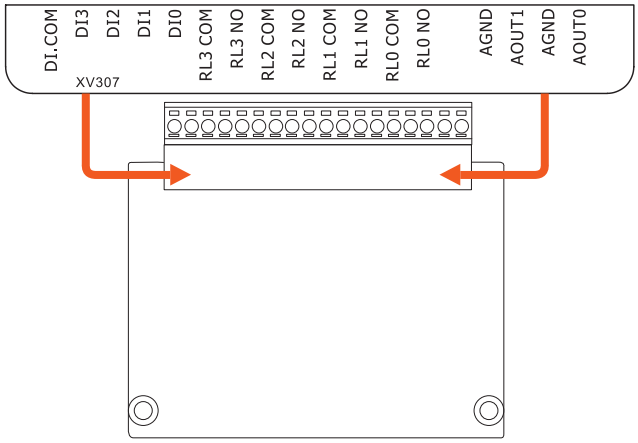
The XV307 is a multifunction expansion board that includes 2 Analog Output channels, 4 Digital Input channels and 4 Form A Relay Output channels. The Analog Output channels are 12- bit at +/-5 V, +/-10 V, 0 ~ +20 mA or +4 ~ +20 mA, and voltage and current outputs are jumper selectable. The XV307 also provides options for configuring power-on values for the Analog Output and Digital Output. 4 kV ESD protection and 2000 VDC intra-module isolation are also provided to enhance noise immunity capabilities in industrial environments.

Specifications

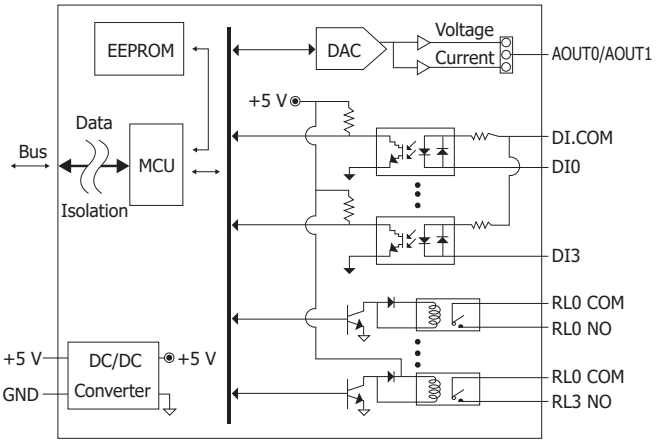
Isolation		
Intra-module Isolation		2000 VDC
EMS Protection		
ESD (IEC 61000-4-2)		±4 kV Contact For Each Terminal
		±8 kV Air For Random Terminal
Analog Output		
Channels		2
Type		0 V ~ +5 V, ±5 V, 0 V ~ +10 V, ±10 V, 0 mA~ +20 mA, +4 mA ~ +20 mA (Jumper Selectable)
Resolution		12-bit
Accuracy		±0.1%
Voltage Output Capability		10 V @ 20 mA
Current Load Resistance		500 Ω
Individual Channel Configuration		Yes
Power on Value		Yes
Digital Input/Counter		
Channels		4
Type		Wet Contact, Sink/Source
Wet Contact	ON Voltage Level	+3.5 ~ +50 VDC
	OFF Voltage Level	+1 VDC Max.
Max. Counts		32-bit (0 ~ 4, 294, 967, 285)
Frequency		50 Hz
Min. Pulse Width		10 ms
Input Impedance		10 KΩ, 0.5 W
Overvoltage Protection		70 VDC

Relay Output		
Channels		4
Type		Power Relay (Form A)
Form A Relay	Contact Rating	6 A @ 35 VDC
		6 A @ 240 VAC
	Operate Time	5 ms (typical)
	Release Time	1 ms (typical)
	Electrical Endurance	1 x 10^5 ops.
	Mechanical Endurance	30 x 10^6 ops.
Power on Value		Yes
COM Ports		
Ports		1 x RS-232
Baud Rate		115200 bps
Data Format		N, 8, 1
Protocol		Modbus/RTU
Power		
Consumption		1.6 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

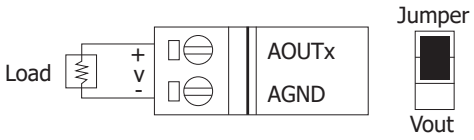


Internal I/O Structure

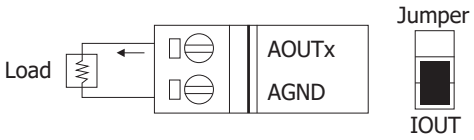


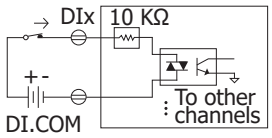
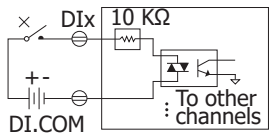
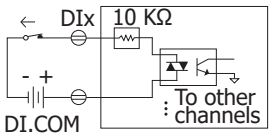
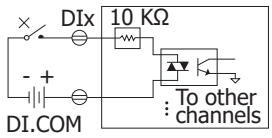
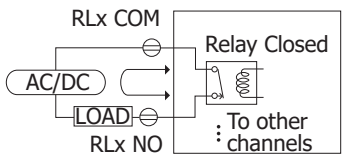
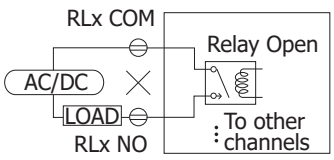
Wire Connections

Voltage Output



Current Output



Digital Input/Counter	Readback as 1	Readback as 0
Wet Contact (Sink)	+3.5 ~ +50 VDC	+1 VDC Max.
		
Wet Contact (Source)	+3.5 ~ +50 VDC	+1 VDC Max.
		
Power Relay	**Readback as 1**	**Readback as 0**
Relay Output		

Ordering Information

XV307 CR	2-ch AO, 4-ch DI (Wet) and 4-ch Power Relay (6A Rating Current) Expansion Board (RoHS)