

## XV488

8-channel PWM Isolated Output Expansion Board

### Features

- 8-channel PWM Output
- Burst Mode and Continuous Mode for PWM Output
- Software Trigger Mode for PWM Output
- Individual and Synchronous PWM Output
- 4 kV ESD and EFT Protection
- Dual Watchdog
- Wide Operating Temperature Range: -25 to +75°C



### Introduction

The XV488 provides 8-channel PWM (Pulse Width Modulation) Output, and can be used to develop powerful and cost-effective analog control systems. PWM is a powerful technique for controlling analog circuits that uses the Digital Output to generate a waveform with a variable duty cycle and frequency which can then be used to control an analog circuit in applications such as controlling the position or speed of motors, the brightness of lamps, or the speed of fans, etc. Either burst mode or continuous mode can be used for the PWM output depending on the application. In addition, all Digital The XV488 supports both the Modbus RTU and the DCON protocols, which can be configured via software. The XV488 allows the load voltage to be increased from +3.5 to +50 V for the 8-channels PWM (Pulse Width Modulation) output.

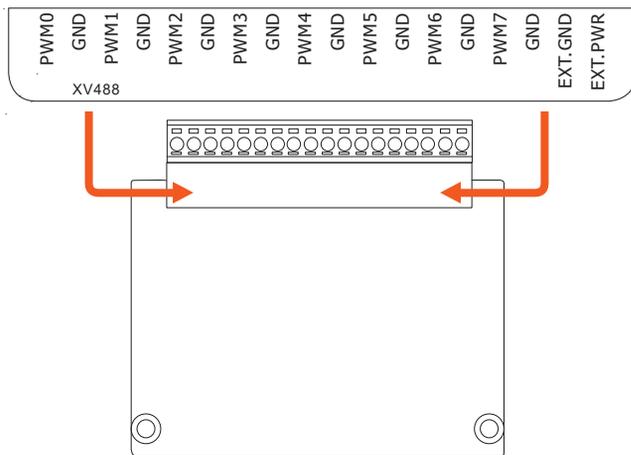
### System Specifications

Communication	
Interface	RS-232/TTL
Format	N, 8, 1
Baud Rate	115200 bps
Protocol	Modbus/RTU
Isolation	
Intra-module Isolation, Field-to-Logic	2000 Vdc
EMS Protection	
ESD (IEC 61000-4-2)	±4 kV Contact For Each Terminal
	±8 kV Air For Random Terminal
Power	
Power from Terminal Block	5 VDC
Consumption	W Max.
Mechanical	
Dimensions (W x L x H)	59 mm x 82 mm x 13 mm
Environment	
Operating Temperature	-25 ~ +75°C
Storage Temperature	-30 ~ +80°C
Humidity	10 ~ 90% RH, Non-condensing

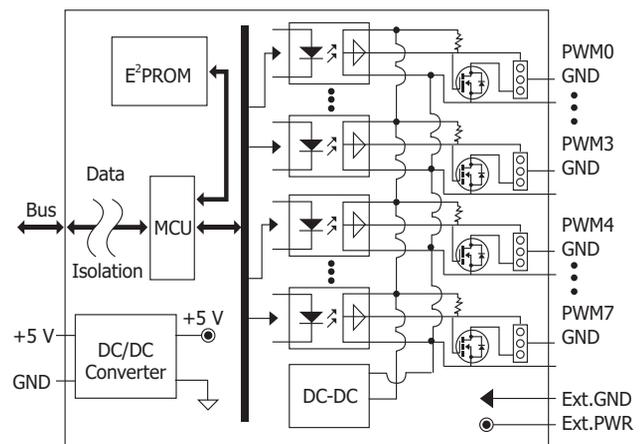
### I/O Specifications

PWM Output		Internal Power	External Power
Channels		8	
Type		PWM	
Sink/Source (NPN/PNP)		Sink	
Load Voltage		+5 VDC	+3.5 ~ +50 Vdc
Max. Load Current	Sink	+5 Vdc @ 10 mA/ Channel	+50 Vdc @ 200 mA/ Channel
	Source	+5 Vdc @ 1 mA/ Channel	-
PWM	Frequency	1 Hz ~ 500 KHz	
	Duty Cycle	0.1 to 99.9%	
	Mode	Burst, Continuous	
	Burst Count	1 to 65535	
	Trigger Start	Hardware or Software	
Power-on Value		-	
Safe Value		-	

## Pin Assignments



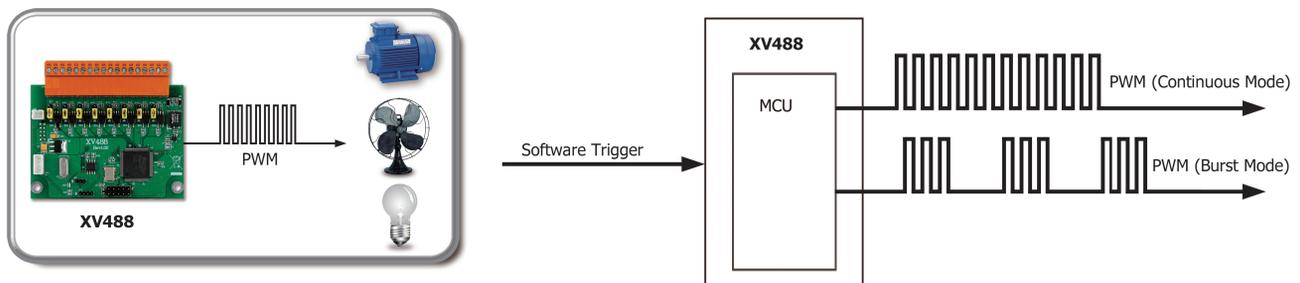
## Internal I/O Structure



## Wire Connections

Internal Power		
PWM Output	ON State Readback as 1	OFF State Readback as 0
Sink		
Source		
External Power		
PWM Output	ON State Readback as 1	OFF State Readback as 0
Sink		

## Applications



## Ordering Information

<b>XV488 CR</b>	8-channel PWM Isolated Output Expansion Board (RoHS)
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