AIIS-1882

4-ch PWM Lighting Control for **AIIS Vision System**



Features

- Designed specifically for machine vision applications
- 4-ch lighting control output with trigger input
- Programmable delay time, PWM high/low time, and output lighting duration
- Up to 350 mA and 40 V_{DC} digital output capability by external power
- 12-ch isolated digital input and 16-ch isolated digital output
- Software configurable digital filter for isolated digital input and trigger
- Software selectable sink (NPN)/source (PNP) type for isolated digital output
- 2,500 V_{DC} isolation protection for all I/O signals

Introduction

The AIIS-1882 is a 4-ch lighting control with 4-ch digital trigger, 12-ch isolated DI/16-ch isolated DO expansion module. Each lighting control channel contains one trigger input and a PWM output (for lighting). The programmable delay time, PWM high/low time, and output lighting duration make it suitable for machine vision applications. All I/O signals are protected by 2,500 V_{DC} isolation circuit.

Specifications

Lighting Output (PWM)

•	Channels
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- Lighting Method
- PWM High Time
- PWM Low Time 25 ns ~ 105 ms**
- Internal power: 12VDC Load Voltage
 - External Power: $12 \sim 24V_{DC}$, follows the external power source

4, with default 2-pin output connector*

Strobe (configurable duration) or on/off mode

Load Current Bus powered: 1A max. for each channel, total 4A max. External power: 2A max. for each channel, total 4A max.

25 ns ~ 105 ms**

- Isolation protection
- Corresponded trigger channel Trigger source

Trigger (for lighting output)

 Channels 	4
 Input voltage 	Logic 0: 3 V max. Logic 1: 10 V min. (30 V max.) (wet contact only)
 Digital Filter 	16µs~131 ms
 Response time 	15 μs max.

 $2,500 V_{\text{DC}}$

Digital Input

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 Channels 	12
 Input voltage 	Logic 0: 2 V max.
	Logic 1: 5 V min. (24 V max.)
	(Wet contact supported only)
 Isolation protection 	2,500 V _{DC}
Response time	100 µs max.

* Optional 3-pin cable for ordering

** The high/low period subject to change according to actual external lighting device's response. This is measured without external loading.

Digital Output

Channels	
Output Type	

- Load Voltage
- Load Current
- Isolation protection
- Response time

General

- I/O Connector

16

 $5 \sim 40 \; V_{\text{DC}}$

2,500 VDC

100 µs max.

Ordering Information

- AIIS-1882-AE
- 4-ch PWM Lighting Control for AIIS Vision System

Accessories

PSD-A40W12 PSD-A40W24

98R318820000

Compatible System

- AIIS-3411P-00A1
- AIIS-3411U-00A1

Sink (NPN) or Source (PNP) selectable by software

DIN Rail AC to DC 100-240V 40W 12V DIN Rail AC to DC 100-240V 40W 24V

3-pin lighting accessory for AllS-1882

Compact vision system with 4-ch PoE camera interface Compact vision system with 4-ch USB camera interface

2 x 20-pin connector for DIO and trigger 4 x 2-pin pin header for PWM lighting control (refer to user manual for pin assignment) 1x 4-pin connector for external power input 175 x 101 mm (6.89" x 3.98")

350 mA max. for each channel

- Dimensions (L x W)
 - **Operating Temperature** 0 ~ 60°C (32 ~ 140°F) Storage Temperature
- -40~70°C (-40~158°F) Storage Humidity 5 ~ 95% RH (non-condensing)