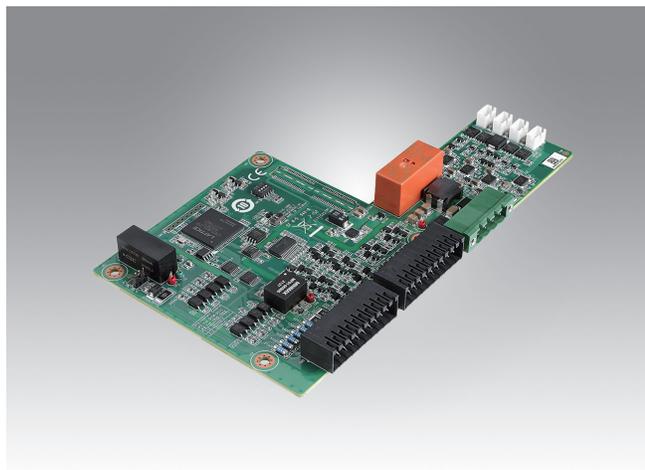


# AIIS-1882

## 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<sub>DC</sub> 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<sub>DC</sub> 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<sub>DC</sub> isolation circuit.

### Specifications

#### Lighting Output (PWM)

- **Channels** 4, with default 2-pin output connector\*
- **Lighting Method** Strobe (configurable duration) or on/off mode
- **PWM High Time** 10  $\mu$ s ~ 105 ms\*\*
- **PWM Low Time** 10  $\mu$ s ~ 105 ms\*\*
- **Load Voltage** Internal power: 12V<sub>DC</sub>  
External Power: 12~24V<sub>DC</sub>, follows the external power source
- **Load Current** Bus powered: 1A max. for each channel, total 4A max.  
External power: 2A max. for each channel, total 4A max.
- **Isolation protection** 2,500 V<sub>DC</sub>
- **Trigger source** Corresponded trigger channel

#### 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** 16 $\mu$ s~131 ms
- **Response time** 15  $\mu$ s max.

#### Digital Input

- **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<sub>DC</sub>
- **Response time** 100  $\mu$ s max.

#### Digital Output

- **Channels** 16
- **Output Type** Sink (NPN) or Source (PNP) selectable by software
- **Load Voltage** 5 ~ 40 V<sub>DC</sub>
- **Load Current** 350 mA max. for each channel
- **Isolation protection** 2,500 V<sub>DC</sub>
- **Response time** 100  $\mu$ s max.

#### General

- **I/O Connector** 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)  
1 x 4-pin connector for external power input
- **Dimensions (L x W)** 175 x 101 mm (6.89" x 3.98")
- **Operating Temperature** 0 ~ 60°C (32 ~ 140°F)
- **Storage Temperature** -40 ~ 70°C (-40 ~ 158°F)
- **Storage Humidity** 5 ~ 95% RH (non-condensing)

### Ordering Information

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

### Accessories

- **PSD-A40W12** DIN Rail AC to DC 100-240V 40W 12V
- **PSD-A40W24** DIN Rail AC to DC 100-240V 40W 24V
- **98R318820000** 3-pin lighting accessory for AIIS-1882

### Compatible System

- **AIIS-3411P-00A1** Compact vision system with 4-ch PoE camera interface
- **AIIS-3411U-00A1** Compact vision system with 4-ch USB camera interface

\* 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.