**USB-5830 USB-5850 USB-5860** 

16-ch Isolated Digital Input and 16-ch Isolated Digital **Output USB 3.0 I/O module** 

16-ch Isolated Digital Input & 8-ch PhotoMOS Relay USB **3.0 I/O module** 

8-ch Isolated Digital Input & 8-ch Relay USB 3.0 I/O module







USB-5830

FCC C E ROHS

USB-5850

FCC CE ROHS

# USB-5860

FCC CE ROHS

#### **Features**

- USB 3.0 SuperSpeed
- Daisy chainable by built in USB hub
- 16-ch digital input and 16-ch digital output with 2,500 V<sub>DC</sub> isolation
- Wide input voltage range (10 ~ 30 V<sub>DC</sub>)
- Wide output voltage range (5 ~ 40 VDC) and high output current (350 mA/ch)
- Quick removable European type connector
- LED indicators for I/O status
- Supported operating systems: Windows 10/11

#### **Features**

- USB 3.0 SuperSpeed
- Daisy chainable by built in USB hub
- 16-ch digital input and 8-ch PhotoMOS Relay output (Form A) isolation
- Wide input voltage range (10 ~ 30 V<sub>DC</sub>)
- 1500 V<sub>DC</sub> optical isolation for relay outputs
- Quick removable European type connector
- LED indicators for I/O status
- Supported operating systems: Windows 10/11

#### **Features**

- USB 3.0 SuperSpeed
- Daisy chainable by built in USB hub
- 8-ch Isolated Digital Input and 8-ch Form A-type Relay Output
- Wide input voltage range (10 ~ 30 V<sub>DC</sub>)
- High-voltage isolation on input channel (2,500  $V_{DC}$ )
- Quick removable European type connector
- LED indicators for I/O status
- Supported operating systems: Windows 10/11

## Introduction

The USB-5800 series are industrial isolated digital input and output USB 3.0 I/O modules. Its compact size and DIN-rail mount kit can install easily in a cabinet. Built in USB hub can support daisy chain topology. Euro type pluggable terminal blocks and LED indicator help users to maintain and set up their system. All digital input and digital output channels are protected by 2,500

# **Specifications**

### **Digital Input**

Channels Input voltage Logic 0: 3 V max

Logic 1: 10 V min. (30 V max.) 2.500 Vnc

#### Isolation protection **Digital Output**

Channels

General

Interface

Connectors

Dimensions

Operating temperature

Storage temperature

Power Consumption

Storage humidity

Power supply

16 5 ~ 40 Vpc

USB 3.0

5 Ghns

Load voltage Load current

Isolation protection

Data transfer rates

350mA/ch (sink) @ 25°C 250mA/ch (sink) @ 60°C

Opto-isolator Response Time

#### Isolation protection 2.500 Vpc

**Specifications** 

**PhotoMOS Relay Output** Channels

Relay type

**Digital Input** 

Input voltage

Channels

Load Voltage Load current

Peak load current Isolation protection

Turn-on time Turn-off time

PhotoMOS SPST (Form A) 60V (AC peak or DC)

Logic 0: 3 V max.

Logic 1: 10 V min. (30 V max.)

4A @ 100ms (1 pulse) 1,500 Vpc 1 ms typical 0.6 ms typical

#### General

10-pin 3.81 mm terminal block

3-nin 3 81 mm screw terminal

3-piii 3.81 iiiiii Screw le block (power) \* 2 USB 3.0 type A (to PC) USB 3.0 type B (hub) 120 x 120 x 40 mm

Connectors

Data transfer rates

Dimensions

~ 95% RH (non-condensing) Storage temperature Storage humidity

Typical 240mA @ 5V; Max. 480mA @ 5V

10 ~ 30 Vpc

0 ~ 60°C (32 ~ 140°F) -40 ~ 70°C (-40 ~ 158°F)

# **Specifications**

#### **Digital Input**

Channels Input voltage

Logic 0: 3 V max.; Logic 1: 10 V min. (30 V max.) Isolation protection 2.500 Vnc

#### **Relay Output**

Channels

**Relay Type** 

Contact Rating (resistive) Max. Switching Power Max. Switching Voltage Resistance

Operating Time Releasing Time

Life Expectancy

Dimensions

Form A 2A @ 250Vac, 2A @ 30Vbc 500VA, 60W 270VAC, 125VDC  $30m\Omega$  max. Max. 10ms

Max. 5ms Mechanical 2 x 107 ops. at no load. Flectrical 3 x 104 ons. @ 2A/250V<sub>AC</sub>

USB 3.0

5 Gbps 10-pin 3.81 mm terminal block 4 (1/0)

3-pin 3.81 mm screw terminal block (power) \* 2 USB 3.0 type A (to PC) USB 3.0 type B (hub) 120 x 120 x 40 mm

0 ~ 60°C (32 ~ 140°F) -40 ~ 70°C (-40 ~ 158°F) Operating temperature

5 ~ 95% RH (non-condensing) 10 ~ 30 Vpc Typical 240mA @ 5V; Power supply Power Consumption Max. 420mA @ 5V

## General

Interface USB 3.0 Data transfer rates

Connectors

10-pin 3.81 mm terminal block \* 3 (I/O) 3-pin 3.81 mm screw terminal block (power) \* 2 USB 3.0 type A (to PC) USB 3.0 type B (hub) 120 x 120 x 40 mm 0 ~ 60°C (32 ~ 140°F)

Operating temperature -40 ~ 70°C (-40 ~ 158°F) 5 ~ 95% RH (non-condensing) Storage temperature Storage humidity 10 ~ 30 V<sub>DC</sub> Power supply Typical 240mA @ 5V; **Power Consumption** Max 460mA @ 5V

# Ordering Information

USB-5830-AE

16-ch isolated digital input & 16-ch isolated digital output USB 3.0 I/O module DIN RAIL A/D 100-240V 40W

# Ordering Information

USB-5850-AE

96PSD-A40W24-MM

16-ch isolated digital input & 8-ch PhotoMOS relay USB 3.0 I/O module DIN RAIL A/D 100-240V 40W

# Ordering Information

USB-5860-AE

96PSD-A40W24-MM

8-ch isolated digital input & 8-ch relay USB 3.0 I/O module DIN RAIL A/D 100-240V 40W

ADVANTECH

96PSD-A40W24-MM

Industrial I/O

All product specifications are subject to change without notice.