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

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_{DC} isolation
- Wide input voltage range (10 ~ 30 V_{DC})
- Wide output voltage range (5 ~ 40 V_{DC}) and high output current (350 mA/ch)
- Quick removable European type connector
- LED indicators for I/O status
- Supported operating systems: Windows 10/11

Specifications

Digital Input

Channels	16
Input voltage	Logic 0: 3 V max. Logic 1: 10 V min. (30 V max.)
Isolation protection	2,500 V_{DC}

Digital Output

Channels	16
Load voltage	5 ~ 40 V_{DC}
Load current	350mA/ch (sink) @ 25°C 250mA/ch (sink) @ 60°C
Isolation protection	2,500 V_{DC}
Opto-isolator Response Time	100us

General

Interface	USB 3.0
Data transfer rates	5 Gbps
Connectors	10-pin 3.81 mm terminal block * 4 (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)
Dimensions	120 x 120 x 40 mm
Operating temperature	0 ~ 60°C (32 ~ 140°F)
Storage temperature	-40 ~ 70°C (-40 ~ 158°F)
Storage humidity	5 ~ 95% RH (non-condensing)
Power supply	10 ~ 30 V_{DC}
Power Consumption	Typical 240mA @ 5V; Max. 480mA @ 5V

Ordering Information

USB-5830-AE	16-ch isolated digital input & 16-ch isolated digital output USB 3.0 I/O module
96PSD-A40W24-MM	DIN RAIL A/D 100-240V 40W 24V

USB-5850

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_{DC})
- 1500 V_{DC} optical isolation for relay outputs
- Quick removable European type connector
- LED indicators for I/O status
- Supported operating systems: Windows 10/11

Specifications

Digital Input

Channels	16
Input voltage	Logic 0: 3 V max. Logic 1: 10 V min. (30 V max.)
Isolation protection	2,500 V_{DC}

PhotoMOS Relay Output

Channels	8
Relay type	PhotoMOS SPST (Form A)
Load Voltage	60V (AC peak or DC)
Load current	1.2A
Peak load current	4A @ 100ms (1 pulse)
Isolation protection	1,500 V_{DC}
Turn-on time	1 ms typical
Turn-off time	0.6 ms typical

General

Interface	USB 3.0
Data transfer rates	5 Gbps
Connectors	10-pin 3.81 mm terminal block * 4 (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)
Dimensions	120 x 120 x 40 mm
Operating temperature	0 ~ 60°C (32 ~ 140°F)
Storage temperature	-40 ~ 70°C (-40 ~ 158°F)
Storage humidity	5 ~ 95% RH (non-condensing)
Power supply	10 ~ 30 V_{DC}
Power Consumption	Typical 240mA @ 5V; Max. 420mA @ 5V

Ordering Information

USB-5850-AE	16-ch isolated digital input & 8-ch PhotoMOS relay USB 3.0 I/O module
96PSD-A40W24-MM	DIN RAIL A/D 100-240V 40W 24V

USB-5860

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_{DC})
- 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

Specifications

Digital Input

Channels	8
Input voltage	Logic 0: 3 V max.; Logic 1: 10 V min. (30 V max.)
Isolation protection	2,500 V_{DC}

Relay Output

Channels	8
Relay Type	Form A
Contact Rating (resistive)	2A @ 250V_{AC}, 2A @ 30V_{DC}
Max. Switching Power	500VA , 60W
Max. Switching Voltage	270V_{AC}, 125V_{DC}
Resistance	30mΩ max.
Operating Time	Max. 10ms
Releasing Time	Max. 5ms
Life Expectancy	Mechanical 2 x 10^7 ops. at no load. Electrical 3 x 10^4 ops. @ 2A/250V_{AC}

General

Interface	USB 3.0
Data transfer rates	5 Gbps
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)
Dimensions	120 x 120 x 40 mm
Operating temperature	0 ~ 60°C (32 ~ 140°F)
Storage temperature	-40 ~ 70°C (-40 ~ 158°F)
Storage humidity	5 ~ 95% RH (non-condensing)
Power supply	10 ~ 30 V_{DC}
Power Consumption	Typical 240mA @ 5V; Max. 460mA @ 5V

Ordering Information

USB-5860-AE	8-ch isolated digital input & 8-ch relay USB 3.0 I/O module
96PSD-A40W24-MM	DIN RAIL A/D 100-240V 40W 24V

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 V_{DC} isolation.

All product specifications are subject to change without notice.

Last updated: 15-Jul-2025