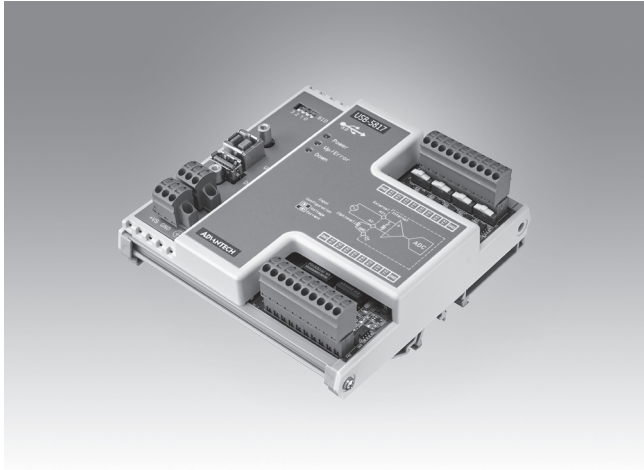# USB-5817
USB-5820

8-ch, 16-bit, 200 kS/s Isolated Analog Input USB 3.0 I/O Module

4-ch, 16-bit, 200 kS/s Isolated Analog Output USB 3.0 I/O Module

USB-5817

RoHS COMPLIANT 2002/95/EC C€ FCC

USB-5820

RoHS COMPLIANT 2002/95/EC C€ FCC

Features

- USB 3.0 SuperSpeed
- Daisy chainable by built-in USB hub
- 8 x 16-bit analog input channels with 2,500 V_{DC} isolation
- Support voltage and current measurement
- Wide common-mode voltage range (±275 V)
- Removable European-type connector
- Supported operating systems: Windows XP/7/8/10

Features

- USB 3.0 SuperSpeed
- Daisy chainable by built-in USB hub
- 4 x 16-bit analog output channels with 2,500 V DC isolation
- Multiple voltage and current output ranges
- Removable European-type connector
- Supported operating systems: Windows XP/7/8/10

Introduction

USB-5817 is a 8-ch, 16-bit, 200 kS/s Isolated Analog Input USB 3.0 I/O Module . Its compact size and DIN-rail mount kit make it easily installed 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. For safe and reliable operation, all of the 8 analog input channels are protected by a 2,500 V_{DC} isolation circuit. Furthermore, it supports both voltage and current measurement with common-mode voltage up to ±275 V.
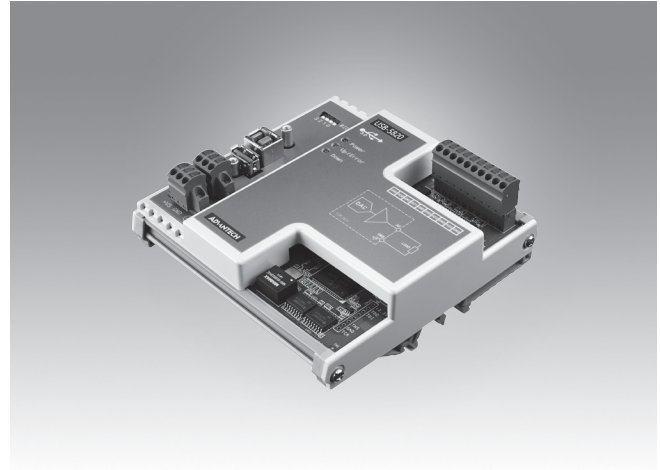
Introduction

USB-5820 is a 4-ch, 16-bit, 200 kS/s Isolated Analog Output USB 3.0 I/O Module . Its compact size and DIN-rail mount kit make it easily installed 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. For safe and reliable operation, all of the 4 analog output channels are protected by a 2,500 V_{DC} isolation circuit. Furthermore, it supports multiple voltage and current output ranges.

Specifications

Analog Input

Channels	8
Resolution	16 bits
Input Voltage Range	0 ~ 10 V, ±10 V , 0-20 mA
Common-Mode Voltage Range	±275 V
Measurement Error	< ±0.1%
Isolation Protection	2,500 V_{DC}
Sampling rate	200 kS/s (shared by all channels)
Input Impedance	Common-mode 200 kΩ, Differential 800 kΩ

General

Interface	USB 3.0
Data transfer rate	5 Gbps
Connectors	2 x 10-pin terminal block (I/O), 3.81 mm
	2 x 3-pin screw terminal block (power), 3.81 mm
	2 x RJ-45 (EtherCAT)
Dimensions	120 x 120 x 40 (4.72 x 4.72 x 1.57 in)
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	External 10 ~ 30 V_{DC} or USB bus power
Power Consumption	TBD mA typ./TBD mA max. @ 24 V external power
	TBD mA typ./TBD mA max. @ 5 V bus power

Specifications

Analog Output

Channels	4
Resolution	16 bits
Output Voltage Range	0 ~ 5 V, 0 ~ 10 V, ±5 V, ±10 V
Output Current Range	0 ~ 20 mA, 4 ~ 20 mA (source type)
Load	> 1 kΩ (voltage output)
	< 625 Ω (current output)
Output Error	< ±0.1%
Isolation Protection	2,500 V_{DC}
Updating rate	200 kS/s
Slew Rate	20 V/µs

General

Interface	USB 3.0
Data transfer rate	5 Gbps
Connectors	1 x 10-pin terminal block (I/O), 3.81 mm
	2 x 3-pin screw terminal block (power), 3.81 mm
	2 x RJ-45 (EtherCAT)
Dimensions	120 x 120 x 40 mm (4.72 x 4.72 x 1.57 in)
Operating Temperature	0 ~ 60 °C (32 ~ 140 °F)
Storage Temperature	-40 ~ 70 °C (-40 ~ 158 °F)
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Power Supply	External 10 ~ 30 V_{DC} or USB bus power
Power Consumption	TBD mA typ./TBD mA max. @ 24 V external power
	TBD mA typ./TBD mA max. @ 5 V bus power

Ordering Information

USB-5817-AE	8-ch, 16-bit, 200 kS/s Isolated Analog Input USB 3.0 I/O Module
96PSD-A40W24-MM	DIN rail A/D 100 ~ 240 V, 40 W, 24 V

Ordering Information

USB-5820-AE	4-ch, 16-bit, 200 kS/s Isolated Analog Output USB 3.0 I/O Module
96PSD-A40W24-MM	DIN rail A/D 100 ~ 240 V, 40 W, 24 V

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