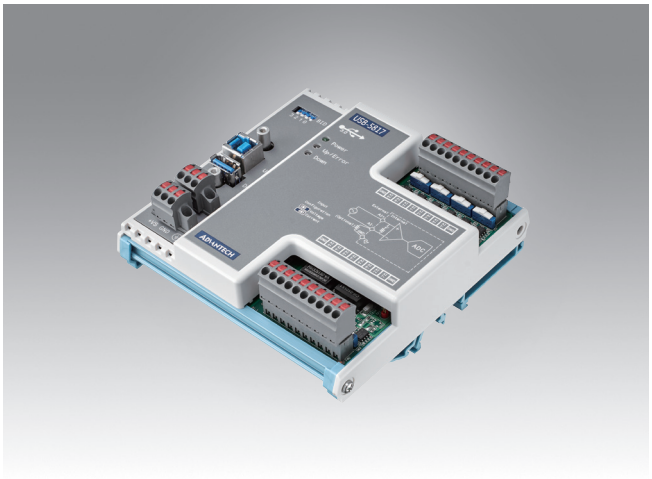
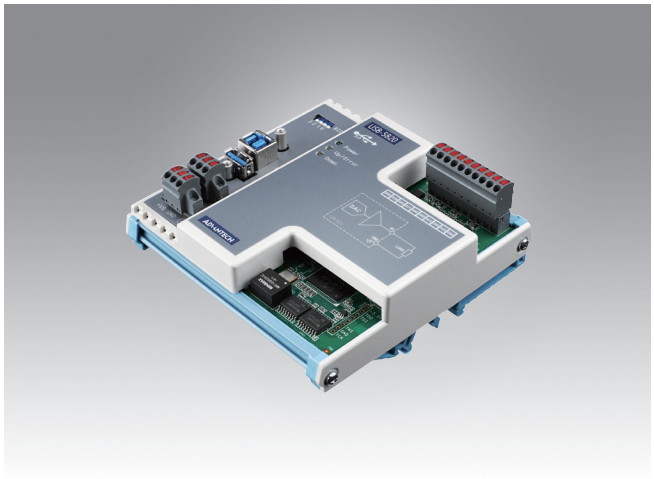
USB-5817
USB-5820

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

USB-5820

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

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, the controller (host) side is 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.

Specifications

Analog Input

Channels	8
Resolution	16 bits
Input Voltage Range	±10 V , 0-20 mA
Common-Mode Voltage Range	±275 V
Measurement Error	< ±0.01% of full-scale range
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 (3.81 mm, AI) 2 x 3-pin screw terminal block (3.81 mm, power) USB 3.0 type A (downstream port) USB 3.0 type B (upstream port)
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)
Storage Humidity	5 ~ 95% RH (non-condensing)
Power Supply	External 10 ~ 30 V_{DC} or USB bus power
Power Consumption	100 mA typical @ 24 V external power 350 mA typical @ 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

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-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, the controller (host) side is protected by a 2,500 V_{DC} isolation circuit. Furthermore, it supports multiple voltage and current output ranges.

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% of full-scale range
Isolation Protection	2,500 V_{DC}
Updating rate	200/n kS/s, where n is number of enabled channel (n = 1 ~ 4)
Slew Rate	1 V/µs

General

Interface	USB 3.0
Data transfer rate	5 Gbps
Connectors	1 x 10-pin terminal block (3.81 mm, A/O) 2 x 3-pin screw terminal blocks (3.81 mm, power) 1 x USB 3.0 type A (downstream port) 1 x USB 3.0 type B (upstream port)
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)
Storage Humidity	5 ~ 95% RH (non-condensing)
Power Supply	External 10 ~ 30 V_{DC} or USB bus power
Power Consumption	100 mA typ./130 mA max. @24 V external power 450 mA typ./770 mA max. @5 V bus power

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

Last updated: 5-Jun-2019