### 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 VDC
- **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, A1)
  - 2 x 3-pin screw terminal block (3.81 mm, power)
- **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 VDC or USB bus power
- **Power Consumption**: 350 mA typical @ 24 V external 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

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### 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)
- **Isolation Protection**: 2,500 VDC
- **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)
- **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 VDC or USB bus power
- **Power Consumption**: 450 mA typical/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

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All product specifications are subject to change without notice. Last updated: 5-Jun-2019