



# SealSO Embedded Single Port Inline USB 3 Isolator

Part: ISO-3-0EM | Model: SeaISO 0EM USB 3 Isolator (Left) and SeaISO USB 3 Isolator (Right)\*

For applications that require embedded USB isolation, the SealSO™ ISO-3-OEM is the ideal solution. The OEM single-port, inline USB isolator offers a simple method of protecting host and field equipment from damaging transients and surges commonly found in commercial, industrial and medical environments. The ISO-3-OEM protects both the data and power lines with 4 kV of medical-grade isolation between the host control system and connected USB equipment.

The ISO-3-OEM is USB bus powered and the efficient DC/DC design allows energy transfer over the isolation barrier. The isolator provides up to 1A to a downstream USB device when connected to a 1.5A USB port. Convenient high-retention USB connectors prevent accidental cable disconnections.

Supported in Microsoft Windows, Linux, and other USB aware operating systems, the ISO-3-0EM requires no separate drivers. The ISO-3-0EM is a USB 3.1 Gen 2 compatible device connecting to the host over a high-speed link and features 10 GB/S data rates between the downstream USB device.

The printed circuit board includes M2 x 4mm threaded standoffs to simplify mounting in your application. Standard operating temperature range is 0°C to 60°C and extended temperature ranges are optional.

A variety of USB cables are available as accessories.

<sup>\*</sup>Content included to be treated as confidential and PRELIMINARY. Specifications included herein are subject to modification without notice.



### **Features & Specifications**

## SealSO Embedded Single Port Inline USB 3 Isolator

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#### **Features**

- Protects host and field equipment from damaging surges and transients
- · UL Recognized in accordance with EN60601-1 3rd Edition requirements
- · 2 MOPP Protection
  - · 4000 VAC Isolation
  - 8mm Creepage
  - · Double Insulation
- · Features medical-grade 4 kV isolation, data and power
- Powered by USB host connection; supports energy transfer with isolation.
- Provides up to 1A to downstream current (requires 1.5A available from host computer)
- · Backwards compatable with USB 2.0
  - · Low Speed (1.5Mbps)
  - · Full Speed (12Mbps)
  - · High Speed (480Mbps)
- Supported in Microsoft Windows, Linux and other USB aware operating systems
- · Compliant with CE, FCC, RoHS and WEEE directives

#### **Specifications**

| Family                   | SealSO   |
|--------------------------|--|
| Certifications           | EN60601-1 3rd Edition, FCC, CE                                     |
| Dimensions               | 3.381" (L) x 1.414" (W) x 0.90" (H) -<br>3.67" (L) (w/ connectors) |
| Humidity Range           | 10 – 90% Relative Humidity, Non-<br>Condensing                     |
| Host Interface(s)        | USB  |
| Max Data Rate            | 10 GB/S  |
| Operating<br>Temperature | 0°C to 60°C (32°F to 140°F)  |
| # of Ports               | (1) USB Type-B<br>(1) USB Type-A                                   |
| Power Requirement        | USB 5VDC, 1.5A   |
| RoHS Compliant           | Yes  |
| Storage Temperature      | -40°C to 85°C (-40°F to 185°F)                                     |
| Upstream Isolation       | 4000 VAC Isolation   |
| USB Specification        | 3.1 Gen 2 Compatible (Host<br>Connection)                          |

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