

### INTRODUCTION

The USB 3.1 to eSATAp Adapter is the easiest solution for connecting any eSATA storage device to the latest USB 3.1 (SuperSpeed+) or the ubiquitous USB 3.0/2.0 port. You can also connect standard SATA devices to the USB 3.1, 3.0 or 2.0 port by using an Addonics SATA to eSATA converter adapter, making this adapter a very handy accessory for both Notebook, Desktop, server or any computer system.



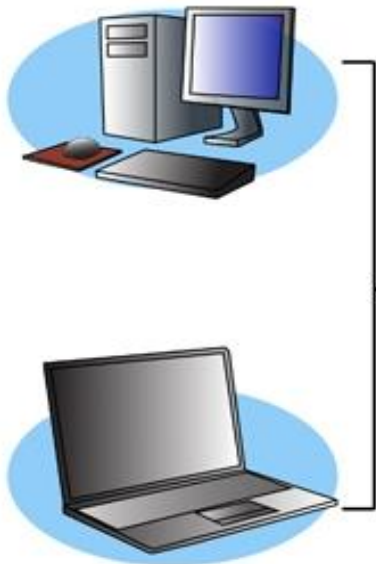
Diagram showing connection using eSATA or eSATAp cable



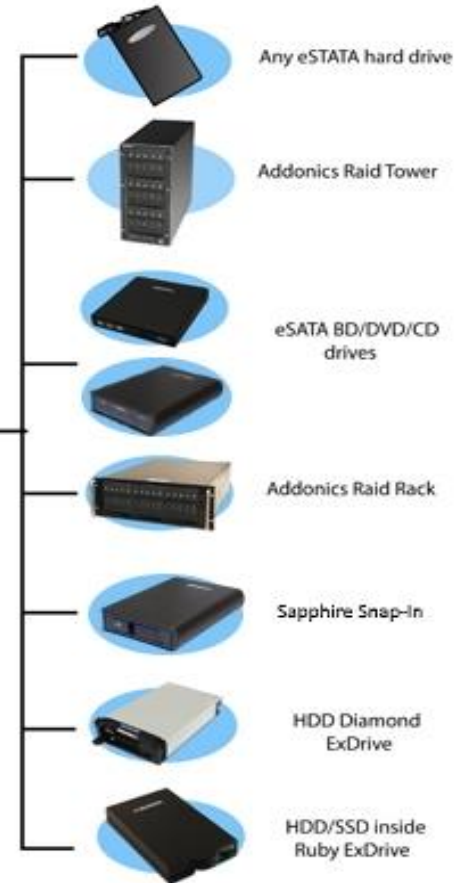
Diagram showing connection using optional USB extension cable



Attach to the USB port of either Desktop or Notebook computer



USB 3.1 - eSATAp adapter

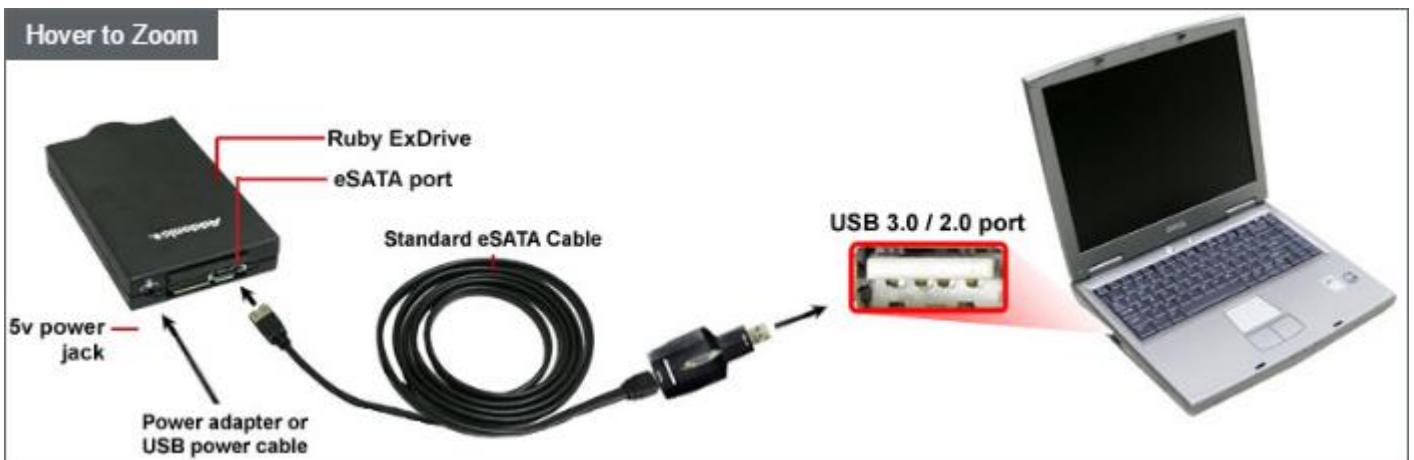


The eSATA port on this adapter is an eSATA USB Hybrid port (EUHP), a new port commonly found on new generations of Notebook computers. This new port works with both standard eSATA and Addonics Universal Hybrid eSATA cable (universal eSATAp cable). The Universal eSATAp cable enables low power 5V eSATA device such as 2.5" eSATA hard drives, the Addonics Ruby / Ruby Cipher drive kits, eSATA / USB DigiDrives and the Micro SATA DigiDrives to be directly powered from the computer without using any external power adapters. To learn more about this eSATA USB Hybrid port, please visit the following EUHP tutorial page.

The diagram below illustrates how the Addonics universal eSATAp cable connects the Addonics Ruby eSATA drive to the USB port on a Notebook and offers true portability for low power eSATA storage via this Addonics adapter. The universal eSATAp cable also comes with a set of interchangeable power tips to support most low power 5V eSATA storage devices.



Diagram below illustrates connecting eSATA storage device using standard eSATA cable to USB port via the USB 3.0 - eSATAp adapter. In this case, the storage device requires separate power adapter or USB power cable for the eSATA storage device



### FEATURES

- Connect any eSATA storage to any USB port
- Support USB 3.1 / 3.0 / 2.0 / 1.1
- Maximum transfer rate:
  - 10 Gbps - USB 3.1 SuperSpeed+
  - 5 Gbps - USB 3.0 Super Speed
  - 480 Mbps - USB 2.0 High Speed
  - 12 Mbps - USB 1.1
- Compatible with external hard drive, SSD, optical drive with eSATA interface
- Power directly from USB port. No power adapter is required
- Hybrid eSATA USB port on adapter to support connecting eSATA storage with following cabling options and benefits:
  1. Using Addonics Universal eSATAp cable\* - supports connecting data and 5V power over a single cable to any eSATA storage. Low power\* 5V eSATA storage devices can be directly powered from the USB 3.0 or 2.0 port for true portability. Addonics Ruby eSATA ExDrive, Ruby Cipher ExDrive, Micro SATA reader / writer or most common 2.5" eSATA drives are low power eSATA devices.
  2. Using standard eSATA cable - connect any eSATA storage devices to USB 3.0 or 2.0 with data only. Separate power source required to power the eSATA device.
  3. Using generic Hybrid eSATA USB cable - provide both power and data to eSATA storage device that is equipped with Hybrid eSATA USB port such as the Addonics eSATAp CFast memory adapter.
    - LED indicator for power and drive access
    - OS independent

\* Addonics Universal eSATAp cable comes with a set of power tips that fit a wide range of power plug sizes commonly found on many eSATA device. Please check the size of the power tip to determine if it fits your device.

USB 3.0 port supports minimum 900 mA which is adequate for most 5V storage devices. USB 2.0 port supports minimum 500mA and thus in some situation may not be able to power certain 5V storage device.

**Note:**

The adapter is compatible with hardware port multipliers where the hard drives are configured as a single raid volume.

**Features comparison between the Addonics USB 3.1 - eSATA adapter and other similar adapters in the market**

Features	Addonics USB3.1 - eSATAp adapter (ADU31ESP)	Other adapters in the market
Host connection	USB 3.1/3.0/2.0	USB 3.1/3.0 / 2.0
Maximum throughput	USB 3.1 - 10 Gbps	
Device connection	<p><b>eSATAp</b></p> <ul style="list-style-type: none"> <li>- support any eSATA storage</li> <li>- Addonics universal eSATAp cable can be used to provide both power and data connections to operate low power 5V eSATA storage device</li> </ul>	<p><b>eSATA</b></p> <ul style="list-style-type: none"> <li>- for data connection only, no power support for the eSATA storage.</li> </ul>

### SPECIFICATIONS

- USB (host end) -
  - model: ADU31ESP
    - Standard USB 3.1 type A plug
    - Compliant with Universal Serial Bus 3.1 Specification
    - Supports SuperSpeed+ (10 Gbps), SuperSpeed (5 Gbps), HighSpeed (480 Mbps), FullSpeed (12 Mbps), and LowSpeed (1.5 Mbps) transaction
  - Support Mass Storage Device Class Bulk only transfer
  - Support USB vendor command (Control Endpoint) and SCSI vendor command
  - Support USB host controller for UHCI, OHCI, EHCI m
- eSATA (device end) -
  - Compliant with Serial ATA Specification Revision 2.6
  - Supports Serial ATA transfer rate of 6.0 Gbps
  - Supports ATA/ATAPI Packet Command Set
  - Supports ATA/ATAPI LBA 48 Addressing mode
  - Hybrid eSATA USB port, same as combo eSATA USB port found on many new Notebook-
    - support 5V and eSATA data over a single cable when using Addonics Universal eSATAp cable or generic hybrid eSATA USB cable
    - support standard eSATA cable
  - Support spread spectrum in receiver
  - Support PIO, MDMA and UDMA mode data transfer
  - Support SATA power saving mode partial and slumber mode
- Maximum power consumption: 250 mA at 5V
- Dimensions: (W x D x H) - 38mm x 80.55mm x 14.62mm (1.5in x 3.17in x 0.58in)
- Weight: 22 g (0.78 oz.)
- Enclosure: plastic ABS black
- Operating temperature and humidity: 0 to 70° C, 5 - 90% RH
- Storage temperature and humidity: -40 to 85° C, 5 - 95% RH (non-condensing)
- RoHS compliant