

**SONNET™**  
*SIMPLY FAST™*



Enabling Expansion And High Performance

  
**THUNDERBOLT™**

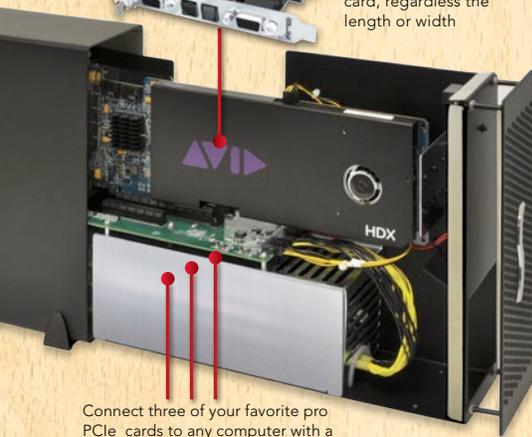


### Three Slots, No Compromises

Sonnet's Echo Express III-D and III-R enable you to connect three compatible full-size professional video capture, audio interface, and other special-purpose cards to your iMac®, Mac mini®, new Mac Pro®, MacBook Air®, or MacBook Pro® with a Thunderbolt port. The Echo Express III integrates a universal 300W power supply and includes a 75W auxiliary power connector for cards that require supplementary power. Featuring 20Gbps Thunderbolt 2 technology, these Echo chassis squeeze every bit of performance out of the most demanding PCIe cards and ensure optimum performance with every compatible computer. Two Thunderbolt ports support daisy chaining of up to six devices to a single port on your computer, while the included cable lock secures Thunderbolt cables to the back of the Echo chassis to prevent accidental cable disconnections.



Compatible with every Thunderbolt-compatible card, regardless the length or width



Connect three of your favorite pro PCIe cards to any computer with a Thunderbolt port

### Desktop, or Rackmount+

The Echo Express III is available in two versions, the III-D (desktop) and III-R (rackmount), to suit your workflow needs. The III-D's form factor makes it easy to transport. The III-R mounts in a rack space 2U tall, and it is just 16-inches deep, perfect for mounting in a wide range of portable racks, carts, cases, and in server racks, too. The III-R even provides space for other equipment—with an optional Mobile Rack Device Mounting Kit, you can install one or two mobile rack devices inside the III-R and connect them to the cards you installed. Sonnet also offers preconfigured packages, simplifying your equipment choices and installation steps. Take a look to the right to see the options.

### KEY FEATURES



Use PCIe expansion cards with computers lacking slots



Thunderbolt 2 interface delivers maximum performance with Mac Pro, backward compatible with 10Gbps Thunderbolt technology hosts and devices



Supports three full-length, full-height PCIe cards



Available as desktop model or 2U rackmount model



Optional Mobile Rack Device Mounting Kits support installation of one or two mobile rack peripherals; add hard drives, SSDs, LTO tape, drive, and more



Integrated 300W power supply; 75W auxiliary PCIe power connector for PCIe cards



Large, temperature-controlled fans automatically operate slower and quieter with cooler cards, and provide better cooling for hot cards



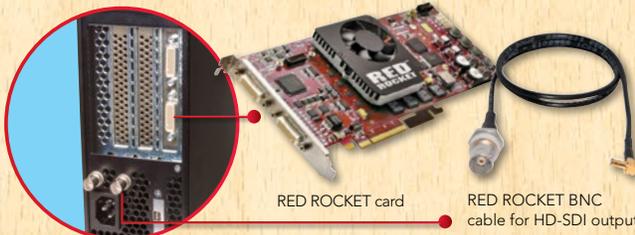
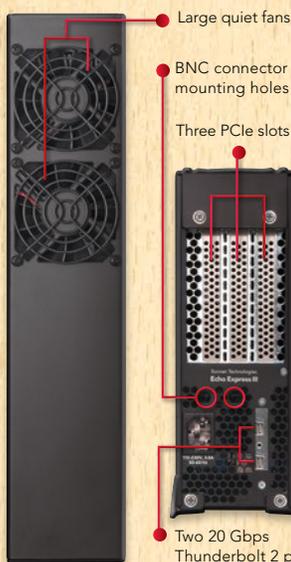
Backed with Sonnet's Pro 5-year warranty



Includes two Thunderbolt ports for daisy chaining devices

### Support for BNC Cable Connector Installation

Echo Express III's back panel has two mounting holes for BNC connectors, allowing the use of a RED ROCKET card without the need for the BNC connector bracket that would normally occupy a valuable PCIe slot.



RED ROCKET card

RED ROCKET BNC cable for HD-SDI output

### ADD STORAGE INSIDE THE EXPANSION CHASSIS



Install a 2.5" SSD drive onto a **Tempo SSD Pro Plus** PCIe card, and then install the card into the Echo Express III for super fast access to your data. For more info, visit [sonnettech.com/product/tempo SSDproplus.html](http://sonnettech.com/product/tempo SSDproplus.html)

### Managed Air Flow for Optimized Cooling and Quiet Operation

Computer-modeled airflow management and temperature-controlled fans enable efficient and quiet cooling of the PCIe cards



Quiet Cooling

**NEW**

# Mobile Rack Device Mounting Kit

MOBILE RACK MOUNTING BRACKET WITH POWER SUPPLY, FAN; OPTIONAL DEVICES, PCIE CARDS, CABLES

## + EXPAND MORE IN THE SAME SPACE

Using a Mobile Rack Device Mounting Kit, you can install devices such as SSD drive enclosures, an LTO tape drive, a card reader, or optical drive inside your Echo Express III-R or xMac Pro Server, connecting the devices to the cards you installed. The mounting bracket secures the devices, while the included 100W power supply inside powers them, and the attached internal fan keeps things cool. Choose a pre-configured kit or the basic edition.

Two Removable Face Plate Covers

Space for Two 5.25" Mobile Rack Devices; Install mobile rack devices in Echo Express III-R and xMac Pro Server

Integrated 100W Power Supply—Plenty of power for installed devices

Power Supply Wire Harness; Eight Power Connectors—Matching connector for nearly every device

Opening for Mobile Rack Kit  
Quiet Fan, 80 mm fan provides good airflow through the devices to cool them

### MOBILE RACK DEVICE MOUNTING KIT BASIC EDITION



With the Basic Edition, you provide the mobile rack devices, cables, and PCIe cards. The mounting kit includes the screws necessary to secure the devices, and eight power connectors from which to choose to connect them.

### STORAGE EXPANSION x8 EDITION



- Mobile Rack Device Mounting Kit
- Two 4x2.5" 6Gb/s SATA hot-swap drive cages
- Two mini-SAS-to-4x internal SATA cables
- 8-external port 6Gb/s SAS/SATA PCIe 2.0 host bus adapter

Add eight of your own 2.5" HDDs or SSDs to complete the package.

### BLU-RAY MASTERING EDITION



- Mobile Rack Device Mounting Kit
- 4x BD-R/8x DVD±RW Blu-ray burner
- 2x2.5" 6Gb/s SATA hot-swap drive cages
- Four eSATA-to-internal SATA cables
- 1x3.5" 6Gb/s SATA trayless hot-swap drive cage
- 4-port pro 6Gb/s eSATA PCIe 2.0 host controller

Add two of your own 2.5" HDDs or SSDs plus one 3.5" HDD to complete the package.

### PRO MEDIA READER EDITION



- Mobile Rack Device Mounting Kit
- 4x2.5" 6Gb/s SATA hot-swap drive cages
- Four eSATA-to-internal SATA cables
- 4-port pro 6Gb/s eSATA PCIe 2.0 host controller
- Qio MR Thunderbolt edition

Supports all major HD video memory card formats.

### MAC PRO MIGRATION EDITION



- Mobile Rack Device Mounting Kit
- 3x3.5" 6Gb/s SATA trayless hot-swap drive cages
- Four eSATA-to-internal SATA cables
- Tempo SATA Pro 6Gb 4-Port 6Gb/s eSATA PCIe 2.0 host controller

Add three of your own 3.5" hard drives to complete the package.

### DATA ARCHIVING & STORAGE EDITION



- Mobile Rack Device Mounting Kit
- 4x2.5" 6Gb/s SATA hot-swap drive cages
- Mini-SAS-to-SAS (SFF-8482) cable
- Mini-SAS-to-internal x4 SATA cable
- 8-external port 6Gb/s SAS/SATA PCIe 2.0 host bus adapter

Add your LTO tape drive and four HDDs or SSDs to complete the package.



**NEW**

# Echo Express SEL

DESKTOP THUNDERBOLT 2-TO-PCIe CARD EXPANSION CHASSIS

FEATURES **20 Gbps**  
Thunderbolt 2  
Technology

Thunderbolt Cable Lock  
Included

Thunderbolt Cable Included

Mac & Windows  
COMPATIBLE

## The Smallest, Quietest Thunderbolt 2-to-PCIe Card Expansion System Available

The Echo Express SEL offers full 20Gbps Thunderbolt performance and supports a single low-profile, PCIe expansion card. A perfect match for many Thunderbolt-compatible 16Gb and 8Gb Fibre Channel, 10 Gigabit Ethernet, SAS and SATA host bus adapters and RAID controller cards, the SEL enables you to connect one of these cards to add a high-speed networking or storage interface connection to any Mac with a Thunderbolt 2 or Thunderbolt port, including the new Mac Pro.

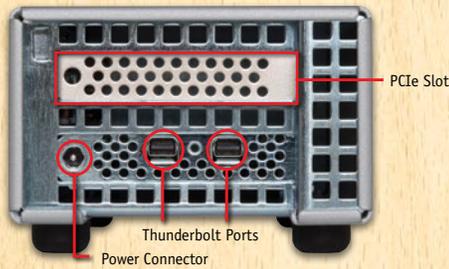
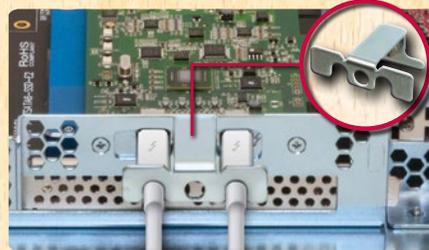
## Designed for High-Performance, Low-Profile Adapter Cards

Sonnet designed the Echo Express SEL specifically to house a single low-profile PCIe card, allowing us to reduce the enclosure to a scant 4" wide by 8.4" long by 2.8" tall.



## Thunderbolt Cable Lock Included

Sonnet includes a lock that secures Thunderbolt connectors plugged into the Echo chassis. It is easy to install and prevents accidental cable disconnections.



## KEY FEATURES

- +** Enables use of high-performance PCIe cards with any Mac with a Thunderbolt port
- 20 Gbps** Thunderbolt 2 interface delivers maximum performance with Mac Pro, Backward compatible with 10Gbps Thunderbolt technology hosts and devices
- PCIe 2.0 x8 slot supports one low-profile, single-width card
- Temperature-controlled fan automatically operates slower and quieter with cooler cards; provides better cooling for hotter cards
- Includes two Thunderbolt ports for daisy chaining devices
- 80W power supply provides plenty of power for card and downstream Thunderbolt devices

**NEW**

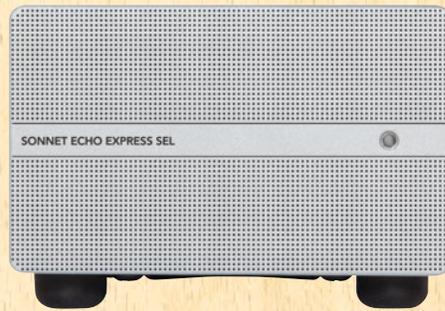
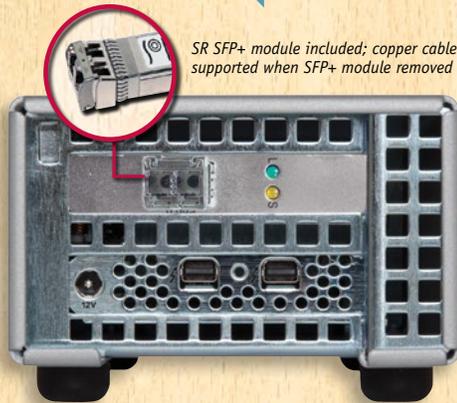


## Echo Express SEL 10GbE Thunderbolt 2 Adapter

THUNDERBOLT 2-TO-10 GIGABIT ETHERNET ADAPTER

**PREINSTALLED** ADD ULTRA-FAST 10 GIGABIT ETHERNET  
Connectivity to Thunderbolt 2 technology-equipped computers. Perfect for 10GbE SAN networks.

SR SFP+ module included; copper cable supported when SFP+ module removed



- Simple way to add 10 Gigabit Ethernet connectivity to any computer with a Thunderbolt port
- Perfect for 10GbE SAN and high traffic Ethernet networks
- Ideal for supporting bandwidth-intensive applications
- Two Thunderbolt ports support daisy chain of multiple devices

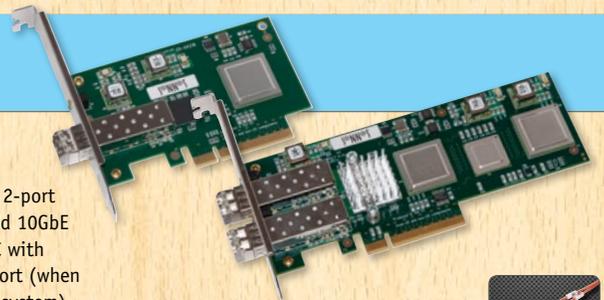
**NEW**

## Presto™ 10GbE 1-Port / Presto 10GbE Server 2-Port

10 GIGABIT ETHERNET ADAPTER FOR PCI EXPRESS CARD SLOT

- Low-profile x8 PCIe cards with one or two 10 Gigabit Ethernet ports
- 10x the bandwidth of Gigabit Ethernet
- Optimized for use over Thunderbolt 2
- SR and LR SFP+ modules available (sold separately)

Offering 10x the performance of Gigabit Ethernet, Sonnet's Presto 10GbE 1-port and 2-port PCIe cards are powerfully-simple ways to add 10GbE connectivity to your Mac Pro or Windows PC with PCIe slots, or any Mac with a Thunderbolt port (when used with a Thunderbolt-to-PCIe expansion system). They're perfect solutions for where low latency, high bandwidth, and low CPU overhead are required.



Using optional SFP+ modules, connect to high-speed infrastructure from greater distances via fiber optic cables.





# Echo Express SE II

DESKTOP THUNDERBOLT 2-TO-PCI-E  
CARD EXPANSION CHASSIS



## Use Two PCIe Cards With Computers Lacking Slots

Sonnet's Echo Express SE II enables you to connect two high-performance, professional pro video capture and processing, digital audio interface, DSP accelerator, FireWire, RAID controller, 10 Gigabit Ethernet, eSATA, and other PCIe cards to any Mac with a Thunderbolt port. Accommodating cards up to 7.75" long, this compact Thunderbolt 2-to-PCIe card expansion chassis supports nearly every Thunderbolt-compatible PCIe card on the market, including double-width (PCIe card + daughter card) cards. Measuring just 6.5" wide by 4.6" tall by 11" long, the Echo Express SE II takes up little space wherever you work, be it in the studio, on location, at your desk, or in the edit suite. Two Thunderbolt 2 ports support daisy chaining of up to six devices to a single port on your computer, while the included cable lock secures Thunderbolt cables to the back of the Echo chassis to prevent accidental cable disconnections.

## Cool Design Outside and In

The Echo Express SE II's aluminum outer shell securely protects the cards inside and helps transfer heat away from them. The large and quiet, temperature-controlled fan automatically speeds up and slows down smoothly as needed, so there's no guesswork in deciding which switch position to select. The enclosure is ventilated front, back, and bottom to facilitate airflow over the cards.

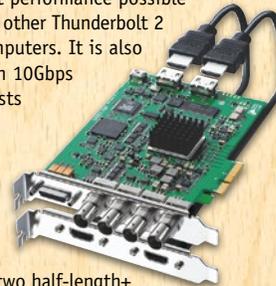


## 20Gbps Thunderbolt 2 Technology Built for Speed

The original Thunderbolt interface provided breakthrough bandwidth for external expansion, supporting the maximum performance of most PCIe cards. However, some bandwidth-hungry cards such as 16Gb Fibre Channel, 10 Gigabit Ethernet, and some storage interface cards are performance-limited by 10Gbps Thunderbolt. Thunderbolt 2 technology was developed to open up the bottleneck by providing even more bandwidth to enable greater performance. Featuring a 20Gbps Thunderbolt 2 interface, the Echo Express SE II ensures that even the most demanding PCIe cards will function at their best performance possible with the new Mac Pro and other Thunderbolt 2 technology-equipped computers. It is also backward compatible with 10Gbps Thunderbolt-equipped hosts and devices.

## Two PCIe 2.0 Slots Plus Space for a Daughter Card

The Echo Express SE II's PCIe 2.0 x8 slots support two half-length+ (up to 7.75" long), full-height, single-width PCIe cards, or one single-width card plus one double-width card. Some specialty cards, such as RME's HDSPe MADI FX card, Blackmagic Design's DeckLink 4K Extreme, and the Lynx AES16e-50, include a daughter card that mates with and provides additional external connections to the main card. The daughter card occupies the adjacent PCIe card space without filling a slot. The Echo Express SE II accommodates a daughter card's installation without wasting a slot.



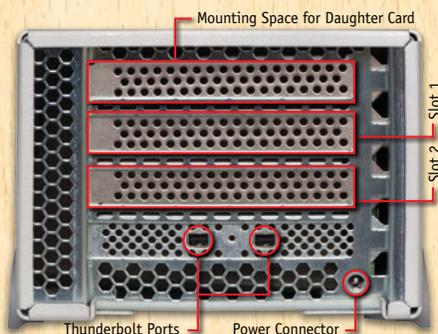
## KEY FEATURES

- Enables use of high-performance PCIe cards with any Mac with a Thunderbolt port
- Thunderbolt 2 interface delivers maximum performance with Mac Pro, backward compatible with 10Gbps Thunderbolt technology hosts and devices
- Includes two Thunderbolt ports for daisy chaining devices
- Two PCIe 2.0 x8 slots support two half-length+ (up to 7.75" long), full-height, single-width cards
- Supports daughter card installation without sacrificing a PCIe slot
- Large, temperature-controlled fan automatically operates slower and quieter with cooler cards; provides better cooling for hot cards
- 80W power supply handles any combination of cards plus power for a downstream device

## ADD STORAGE INSIDE THE EXPANSION CHASSIS



Install a 2.5" SSD drive onto a **Tempo™ SSD** PCIe card, and then install the card into the Echo Express SE II for super fast access to your data. For more info, visit [sonnettech.com/product/tempo-ssd.html](http://sonnettech.com/product/tempo-ssd.html).



## THUNDERBOLT-COMPATIBLE CARDS?

Do you have a card in mind but aren't sure if it's compatible? Check out our **PCIe Card Thunderbolt Compatibility Chart** to learn more.



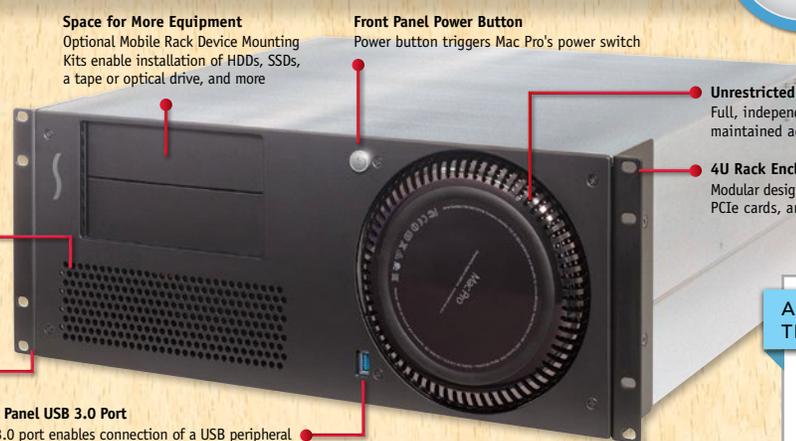


**NEW**



# xMac™ Pro Server

PCIe 2.0 EXPANSION SYSTEM/4U RACKMOUNT ENCLOSURE FOR NEW MAC PRO® WITH THUNDERBOLT™ 2 PORTS



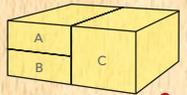
**Space for More Equipment**  
Optional Mobile Rack Device Mounting Kits enable installation of HDDs, SSDs, a tape or optical drive, and more

**Front Panel Power Button**  
Power button triggers Mac Pro's power switch

**Unrestricted Airflow**  
Full, independent airflow through the Mac Pro is maintained according to Apple specifications

**4U Rack Enclosure**  
Modular design allows you to work with computer, PCIe cards, and mobile rack devices separately

**Air Flow Management for Optimized Cooling**  
Variable-speed fans cool the PCIe card expansion system separately



**Modular Design**  
See A, B, and C modules for details below

**Optional Mobile Rack Device Mounting Kits**  
Basic kit includes mounting bracket with 100W power supply and fan. Pre-configured kits include PCIe adapter card, plus cables and devices.



A Mobile Rack Device Mounting Kit (Optional)

**Front Panel USB 3.0 Port**  
USB 3.0 port enables connection of a USB peripheral

**Two Thunderbolt Ports with connector lock**

**Universal 300W power supply**  
75W auxiliary power connector allows use of cards that require supplementary power

**Mounting Holes for BNC Connectors**  
Save a slot by installing connectors used by cards like the RED ROCKET or RME's HDSpe MADI FX

**Three PCIe 2.0 Slots**

**Protective Steel Cocoon**  
Covered with soft touch padding, holds the Mac Pro firmly in place while protecting its mirror finish

**Panel-Mount Cables**  
Panel-mount HDMI, two Gigabit Ethernet, three USB 3.0, and power cables connect the Mac Pro to the back of the xMac Pro Server for convenient external connection. One Thunderbolt cable included.



B PCIe Card Expansion Module (Included)



C Computer Mounting Module (Included)

## ADD STORAGE INSIDE THE EXPANSION MODULE



Install two 2.5" SSD drives onto a **Tempo SSD Pro Plus** PCIe card, and then install the card into the xMac Pro Server for super fast access to your data. For more info, visit [sonnettech.com/product/tempo SSD pro plus.html](http://sonnettech.com/product/tempo SSD pro plus.html)

## KEY FEATURES

- Provides PCIe card expansion for Mac Pro, connecting PCIe slots to the computer via Thunderbolt 2 technology
- Makes the Mac Pro road-ready, securely holding the computer, PCIe cards and expansion equipment in place in a sturdy 4U rackmount enclosure
- Supports three full-length, single-width cards, or one double-width card plus one single-width card
- Thunderbolt 2 interface delivers maximum performance with Mac Pro, backward compatible with 10Gbps Thunderbolt technology devices
- Integrated 300W power supply; 75W auxiliary PCIe power connector for PCIe cards
- Optional Mobile Rack Device Mounting Kits enable installation of HDDs, SSDs, a tape or optical drive, and more inside the xMac enclosure
- Remarkably quiet operation—cards cooled by two large, temperature-controlled, variable-speed fans
- Front panel power button and USB 3.0 port allow operation without accessing the back of the computer
- Panel-mount cables connect the Mac Pro's Gigabit Ethernet, USB 3.0, and HDMI ports to ports on the back of the xMac for convenient external connection
- Auto-power on/off for PCIe cards when the Mac Pro powers on/off or sleeps
- PCIe Card Expansion Module includes two Thunderbolt ports for daisy chaining devices. Thunderbolt cable included.
- Supports every Thunderbolt-compatible card available
- 5-year warranty included at no additional cost

## PRODUCT OVERVIEW

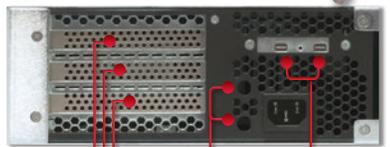
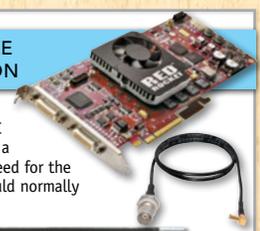
If you're a pro user in the video or audio industries, the new Mac Pro may be the answer to your dreams, with a twist—it offers the power you need, but lacks the built-in expandability you count on. The new Mac Pro's compact size makes it more transportable and rackable than the old tower, but prevents onboard installation of PCIe expansion cards, and the computer still requires an enclosure to make it road- or rack-ready and provide convenient cable management. Sonnet's **xMac Pro Server** PCIe expansion system/4U rackmount enclosure addresses these issues and increases a Mac Pro's potential in a big way.

Building on the concept of our award-winning xMac mini Server PCIe 2.0 expansion system/1U rackmount enclosure for Mac® mini, we designed a 4U rackmount enclosure exclusively for the new Mac Pro, and integrated

the three PCIe 2.0 slots, 20Gbps Thunderbolt 2 technology, and expandability of the Echo Express III-R Thunderbolt 2 expansion chassis for PCIe cards. To support a wide range of popular mobile racks, carts and portable rack cases, the xMac Pro Server is just 16" deep. A steel cocoon with soft touch padding protects the Mac Pro, firmly holding it in place while protecting its mirror finish. The PCIe expansion system provides support for three high-performance cards. Using an optional Mobile Rack Device Mounting Kit, you can mount and connect additional equipment, such as storage expansion, inside the xMac Pro Server's enclosure. The computer, PCIe card expansion system, and mobile rack devices reside in separate modules within the xMac Pro Server's sturdy steel outer enclosure to simplify setup and maintenance. Get an xMac Pro Server to make your new Mac Pro fully mobile!

## SUPPORT FOR BNC CABLE CONNECTOR INSTALLATION

xMac Pro Server's back panel has two mounting holes for BNC connectors, allowing the use of a RED ROCKET card without the need for the BNC connector bracket that would normally occupy a valuable PCIe slot.



Space for three PCIe cards      Mounting holes for BNC connectors      Thunderbolt ports

## CONFIGURATION IDEAS

Take a look at the **Mobile Rack Device Mounting Kits** on page 2 to see some of the kits we've come up with to expand a Mac Pro's capabilities!



Mac Pro, PCIe cards, Mobile Rack Device Mounting Kit, and mobile rack devices not included.

**NEW**

**Pro Rackmount Solution**

Sonnet's RackMac Pro makes Mac Pro rack integration simple. Configured with one mounting bracket to start, the RackMac Pro securely encloses one Mac Pro in 4U of rack space—with the optional second mounting bracket, you can mount two Mac Pros side-by-side. Because of the RackMac Pro's modular design, you can install or work with one computer at a time.

Constructed of sturdy steel to protect the computers, the RackMac Pro enables unrestricted airflow through the Mac Pros to keep them cool, according to Apple's specifications, even when the RackMac is installed between other equipment in the rack. A front panel power switch and USB 3.0 port for each computer enables you to turn the computers on and off, and connect a peripheral to each without having to access the back of the computer. Panel-mount HDMI, Gigabit Ethernet, USB 3.0, and power cables connect the ports on the back of each Mac Pro to ports on the back of the RackMac Pro for convenient external connection. The RackMac Pro's open-back design allows access to the computers' Thunderbolt ports.



**Travel and Server Room-Ready**

The RackMac Pro's padded mounting brackets hold your computers firmly in place (without marring the mirror finish) even during transport, making it perfect for use in transportable rack applications. Installed in the server room, the RackMac Pro's included rackmount extension rails allow easy and secure mounting in racks from 16 to 26 inches deep. Wherever it is deployed, a RackMac Pro holds your Mac Pros in style.

**MODULAR DESIGN**



- Secure rackmount enclosure for one or two Mac Pro computers
- 4U height, standard mounting holes, and rackmount extension rails enable easy installation into any standard equipment rack
- Supports full airflow through each computer from front to back, even when mounted in a fully loaded rack
- Front panel buttons enable operation of the computers' power switches
- Front panel USB 3.0 ports support connection of a USB peripheral (keyboard, flash drive, etc.) to each computer
- Panel-mount HDMI, Gigabit Ethernet, USB 3.0, and power cables connect the Mac Pros' ports to ports on the back of the RackMac Pro for convenient external cable connection
- Strong, secure padded brackets envelop the Mac Pros to protect the computer's finish and hold them firmly in place, making the RackMac Pro road-ready and perfect for portable rack installations
- Includes mounting support for specialty Network Interface Thunderbolt adapters such as Promise Technology SANLink Fibre Channel adapters
- Configured with one Mac Pro mounting bracket; optional mounting bracket supports second Mac Pro

Mac Pro computers not included.

**SONNET THUNDERBOLT EXPANSION SYSTEMS AT-A-GLANCE**

	Slots	PCIe Connector	Cards	Thunderbolt Ports	Thunderbolt Interface	Universal Power Supply	PCIe Auxiliary Power	Desktop	Rackmount	Warranty
Echo Express SEL	1	x8	Low-Profile	2	Thunderbolt 2 (20Gbps)	80W External		<input checked="" type="checkbox"/>		1 Year
Echo Express SE II	2 1	x8/x8 none	Half-Length+ Daughter Card	2	Thunderbolt 2 (20Gbps)	80W External		<input checked="" type="checkbox"/>		1 Year
Echo Express III-D	3	x8/x16/x8	Full-Length	2	Thunderbolt 2 (20Gbps)	300W Internal	One 75W connector	<input checked="" type="checkbox"/>		5 Years
Echo Express III-R	3	x8/x16/x8	Full-Length	2	Thunderbolt 2 (20Gbps)	300W Internal	One 75W connector		<input checked="" type="checkbox"/>	5 Years
xMac Pro Server	3	x8/x16/x8	Full-Length	2	Thunderbolt 2 (20Gbps)	300W Internal	One 75W connector		<input checked="" type="checkbox"/>	5 Years
xMac mini Server	2	x16/x8	Full-Length Half-Length	2	Thunderbolt (10Gbps)	150W Internal	One 50W connector		<input checked="" type="checkbox"/>	5 Years



NEW



# xMac™ mini Server

THUNDERBOLT-TO-PCI-E EXPANSION SYSTEM  
FOR MAC MINI WITH THUNDERBOLT PORT



## KEY FEATURES



1U rackmount enclosure houses Mac mini, PCIe slots, and integrated power supply



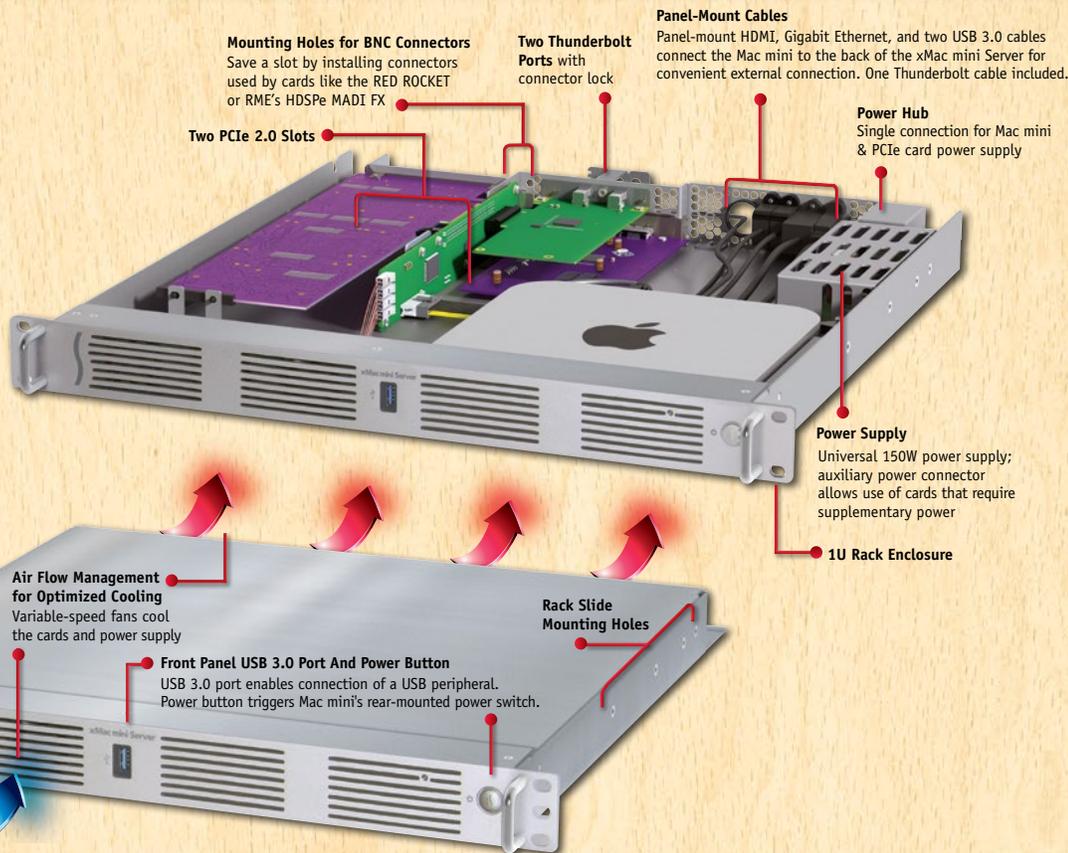
Connects two PCIe cards to the Mac mini through Thunderbolt expansion



Enables use of pro video capture, audio interface, 8Gb Fibre Channel, 10 Gigabit Ethernet, and RAID controller cards with a Mac mini with Thunderbolt technology



150W universal power supply; auxiliary power connector enables use of power-hungry cards such as the Avid Pro Tools|HDX PCIe card



Mac mini, PCIe cards not included.

## MORE FEATURES



Variable-speed, temperature-controlled fans cool installed cards, power supply and Mac mini; now with quiet mode



Front panel power button and USB 3.0 port allow operation without accessing the back of the computer



Fans and power supply are user-replaceable



Auto-power on/off for PCIe cards when the Mac mini powers on/off or sleeps



Panel-mount cables connect the Mac mini ports to ports on the back of the xMac mini Server for convenient external connection



Two Thunderbolt ports support daisy chaining of Thunderbolt peripherals



Includes Thunderbolt cable to connect PCIe slots to Mac mini



Includes lock to secure Thunderbolt cables



Rack slides available to support installation into any depth rack

## PRODUCT OVERVIEW

Sonnet's **xMac mini Server** transforms a Mac mini with Thunderbolt technology from a simple server to something much more. It securely mounts a Mac mini inside a custom 1U enclosure and connects two PCIe 2.0 slots (with a 150W power supply + auxiliary power connector for installed cards) to enable you to harness the power of full-size pro video capture, audio interface, 8Gb Fibre Channel, 10 Gigabit Ethernet, RAID controller cards, and more! Temperature-controlled fans deliver strategic airflow to cool the enclosure. Two Thunderbolt ports, one to connect the PCIe slots to the Mac mini, the second for daisy chaining other Thunderbolt devices, are included. A USB 3.0 port and a power button on the front panel allow operation of the system without requiring access to the back of the computer. xMac mini Server expands a Mac mini's potential in a big way!

### Built to Serve

With its 1U rack design, front panel power switch and USB port, and 17.75-inch depth, the third generation xMac mini Server is perfect for use in a wide range of popular mobile racks, carts and rack cases, and server rooms as well. The top cover is easily removed to provide access to the PCIe slots, the Mac mini, and the user-replaceable fans and power supply. Panel-mount HDMI, Gigabit Ethernet, and two USB 3.0 cables are included to connect the ports on the back of the Mac mini to ports on the back of the xMac mini Server for convenient external connection. One Thunderbolt cable is also included. The built-in power hub connects to the Mac mini and to the xMac mini Server's power supply to allow a single power cable to support the entire server. No power bricks hanging off the back of your rack with this system!

## CONFIGURATION IDEAS



### ADD PROFESSIONAL PCIe CARDS TO YOUR MAC MINI

Scan here to discover some of the many ideas people have come up to expand their Mac mini's potential.

FULL + HALF + DAUGHTER CARD



xMac mini Server supports one full-length, single-width PCIe card plus one half-length (up to 6.6"), full-height, single-width card plus a daughter card. With the included daughter card mounting bracket supports, you can install cards like RME's HDSpe MADI FX, Blackmagic Design's DeckLink 4K Extreme, and the Lynx AES16e-50! You can install BNC connectors to support HD/SDI output from RED ROCKET, or for MADI and word clock I/O from cards like the HDSpe MADI FX.

- Secure rackmount enclosure for one or two Mac minis
- 1U height and standard mounting holes allow easy installation into any standard equipment rack
- Front panel USB 3.0 ports support connection of a USB peripheral (keyboard, flash drive, etc.) to each computer
- Front panel buttons enable operation of the computers' rear-mounted power switches
- 11-inch mounting depth and form rubber cushions that hold the computers firmly in place during transport make RackMac mini perfect for portable rack installations
- Manages airflow through each computer from front to back, even when mounted between two other rackmount components
- Front panel openings allow use of the IR receiver and viewing of power indicator LEDs
- Provides open access to back of the computers for cable connection/disconnection
- Cable tie holes enable you to secure the power cord and other attached cables and avoid accidental disconnects while keeping them tidy
- Allows insertion of CDs and DVDs into computers with optical drives, or Apple USB SuperDrive installed in optional Sonnet SuperDrive mounting bracket



### Rack 'Em Up!

The RackMac mini mounts one or two Mac minis side-by-side in 1U of rack space. Constructed of rugged steel, this fully assembled rackmount solution places the computers behind an neat front panel fitted with a power switch



and USB 3.0 port for each computer, enabling you to turn the computers on and off, and connect a peripheral to each, without having to access the back of the computer. The

RackMac mini manages airflow through the computers to keep them as cool as ambient air, even when installed between other rackmount devices.

The RackMac also allows normal WiFi and Bluetooth wireless operation in many configurations (depending on rack type and position in rack).

### Road Trip-Ready

Do you need to take your mini on the road? The RackMac mini is a perfect solution for musicians, DJs, and videographers alike. Its shallow 11-inch mounting depth allows the RackMac mini to be installed in nearly any rack mobile rack, cart, and portable rack case or rack bag. Combine this with the RackMac's use of internal rubber cushions to hold your computers firmly in place even during transport, and you have a product perfect for use in transportable rack applications.



## THUNDERBOLT PRO SxS CARD READER



THUNDERBOLT



SXS



SxS,  
SxS Pro  
SxS-1  
SxS Pro+  
XQD\*



- Fastest, least-expensive SxS memory card reader available
- 10Gbps Thunderbolt technology
- Reads SxS memory cards at full speed, up to 150 MB/s
- Supports all SxS media, including SxS PRO+
- Reads XQD cards with adapter (sold separately)
- OS X and Windows compatible

Sonnet's Thunderbolt Pro SxS Card Reader is the fastest, least-expensive SxS memory card reader available! Compatible with any computer with a Thunderbolt port, including the iMac, Mac mini, new Mac Pro, MacBook Air, MacBook Pro, and now, Windows computers, this Sonnet adapter connects directly to your computer's Thunderbolt port or at the end of a Thunderbolt device chain with a Thunderbolt cable (not included). Set up for this Sonnet adapter is simple—just download the latest Thunderbolt-ready Sony SxS driver. Now you can ingest footage from SxS memory cards at up to 150 MB/s!



## THUNDERBOLT PRO P2 CARD READER



THUNDERBOLT



P2



P2  
P2 E-series  
P2 F-series  
microP2 \*



- Fastest, least-expensive P2 memory card reader available
- 10Gbps Thunderbolt 2 technology
- Read speeds up to 70 MB/s; supports all P2 memory cards and frame rates at maximum speed
- Reads microP2 cards with adapter (sold separately)
- OS X compatible

Sonnet's Thunderbolt Pro P2 Card Reader is the fastest, least-expensive P2 memory card reader available—now you can ingest footage from P2 memory cards at up to 70 MB/s! This Sonnet adapter is bus-powered and connects directly to your computer or at the end of a Thunderbolt device chain with an included Thunderbolt cable. Sonnet's Thunderbolt Pro P2 Card Reader is compatible with any Mac with a Thunderbolt port.

## Tempo™ SSD

CONVERTIBLE HALF-/FULL-LENGTH 6GB/S  
SATA 2.5" SSD PCIe CARD

NEW



## Tempo SSD Pro Plus

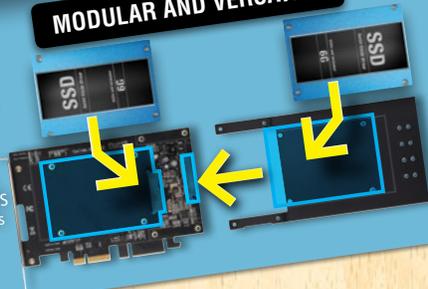
6Gb/s SATA DUAL 2.5" SSD PCIe CARD  
WITH eSATA PORTS



### TEMPO SSD

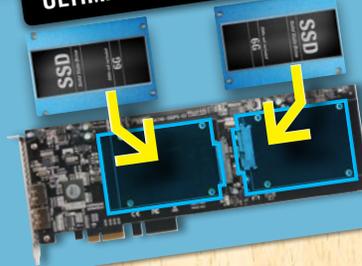
Features a unique modular design. Out of the box, this Sonnet solution is a half-length, full-height card to which you attach one SSD. With the included extension plate attached, the Tempo SSD is transformed into a full-length card to accommodate an additional SSD. Adding the second SSD allows you to improve performance and data security by exploiting OS X or Windows RAID features. This card delivers read speeds up to 660 MB/s from a pair of SSDs configured as a RAID 0 set.

### MODULAR AND VERSATILE



OR

### ULTIMATE PERFORMANCE



### TEMPO SSD PRO PLUS

Is a full-length, full-height card to which you attach two SSDs and connect two external storage systems. If you've got the space and need the best performance possible, this is the card for you. This card is performance-engineered to deliver read speeds up to 960 MB/s from a pair of SSDs or external drives configured as a RAID 0 set. It is backed with Sonnet's Pro 5-year warranty.

Read Performance

960 MB/s



Write Performance

810 MB/s

Tempo SSD Pro Plus

660 MB/s



Tempo SSD

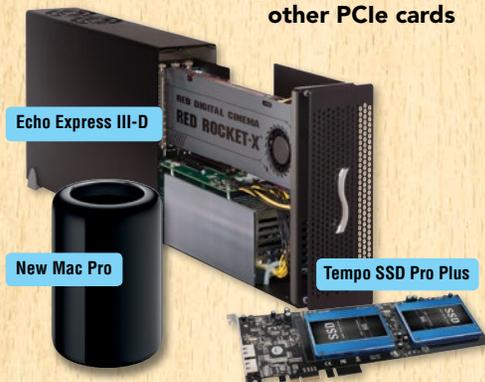
540 MB/s

### Simple SSD Upgrade Solutions, Plus More

If you've been thinking about storage, you know

that SSDs are a hot option. Offering performance that easily outperforms hard disk drives, they are also more reliable, and their prices keep dropping so you can get more capacity than ever. If you've got a Mac Pro tower or Windows desktop computer, you could get a couple of 2.5" SSDs (plus necessary adapters) and install them in empty drive bays (if there are any), but the 3Gb/s SATA interface in your computer won't support fast 6Gb/s SSDs at full speed. Sonnet engineered a couple of great alternatives—Tempo SSD Pro Plus and Tempo SSD. They're fast 6Gb/s SATA PCI Express adapter cards that enable you to attach widely available 2.5" SSDs and install the assembly neatly into a single PCIe slot, no cables or drivers necessary.

### Add high speed storage alongside your other PCIe cards



Echo Express III-D

New Mac Pro

Tempo SSD Pro Plus

Tempo SSD Pro Plus and RED ROCKET-X cards installed in an Echo Express III-D Thunderbolt 2-to-PCIe card expansion chassis make a powerful combination

NEW

## Tempo™ PCIe SSD

PCI EXPRESS® SSD CARD

- Low-profile x4 PCIe 2.0 card with one 512 GB PCIe SSD
- Optimized for use over Thunderbolt 2; 1100 MB/s read, 1000 MB/s write
- Supports booting under OS X 10.9.2+

Tempo PCIe SSD adds 512 GB of high-performance, low-latency storage to your computer. This low-profile x4 PCIe 2.0 host card installs easily into a computer's PCIe slot to deliver data transfers of up to 1100 MB/s without RAID 0. Optimized for Thunderbolt, this card is perfect for adding more high-speed storage in any Thunderbolt-to-PCIe expansion system. You can even boot from an installed operating system!

512 GB SSD INCLUDED

up to 1100 MB/s

### PLUS eSATA Connections

Connect one or two external storage systems with eSATA interfaces to the Tempo SSD Pro Plus for even greater flexibility and capacity.



- PCIe cards with high-performance SATA controllers
- Support standard 2.5" SSDs—add your own SSDs
- Read speeds up to 960 MB/s (Tempo SSD Pro Plus) or 660 MB/s (Tempo SSD)
- Optimized for maximum performance over Thunderbolt
- Supports connection of two external storage systems with eSATA interfaces (Tempo SSD Pro Plus)
- Bootable under OS X, Windows 8 and 7
- Supports OS X and Windows\* RAID features
- Drive health monitoring with S.M.A.R.T. data reporting

\* Windows does not support booting from RAID.



## Echo 15 Thunderbolt 2 Dock

15-PORT DOCKING STATION WITH  
INTERNAL DRIVE BAY + OPTICAL DRIVE

## Echo 15 Pro+ Thunderbolt 2 Dock

16-PORT DOCKING STATION WITH  
INTERNAL DRIVE BAY + BLU-RAY BURNER

- Thunderbolt 2 Ports**  
Connect your computer to one port; daisy-chain additional Thunderbolt devices or connect an external display to the other
- Audio In and Speaker Ports**  
Connect a line-level input and speakers

- FireWire™ 800 Port**  
Connect FireWire drives and other peripherals
- Gigabit Ethernet Port**  
Connect a wired router, switch, or modem
- Two Rear Panel USB 3.0 Ports**  
Supports charging even when computer is off
- Two 6Gb/s eSATA Ports**  
Connect single- and multi-drive storage systems with eSATA interfaces

- Optical Drive**  
Choose between DVD burner, Blu-ray player, or Blu-ray burner\* options

- Two Front Panel USB 3.0 Ports**  
Connect and charge devices such as iPads, iPhones, and iPods, even when computer is off

- Audio Ports**  
Easily connect headphones or digital audio device, and a microphone

- Drive Bay Echo 15**  
Install one 2.5" SSD or 3.5" hard drive

- Drive Bays Echo 15 Pro+**  
Install two 2.5" SSDs or one 3.5" hard drive



### Connect To Your Peripherals with One Cable

Sonnet's **Echo 15 Thunderbolt 2 Docks** enable you to connect any computer with a Thunderbolt port to your peripherals through a single Thunderbolt cable. Simply plug in your printer, keyboard, mouse, cable modem, cell phone, headphones, speakers, microphone, and other devices to the Echo dock with their supplied cables, and connect your computer to the dock with a Thunderbolt cable. When it's time to take your computer and go, just unplug the Thunderbolt cable! An Echo dock gives you plenty of ports to choose from, including USB 3.0, 6 Gb/s eSATA, FireWire 800, Gigabit Ethernet, headphone/digital audio jack, microphone jack, stereo speakers jack, line level audio input jack; and Thunderbolt. For your convenience, two USB 3.0, headphone and microphone ports are placed on the front of the enclosure.



### Optical Drive Included

If you've purchased a new MacBook Air, MacBook Pro, Mac Pro, or one of many Ultrabook™ computers, you may have noticed something's missing—an optical drive. Not to worry, Echo docks have you covered. The Echo 15 includes your choice of a DVD/CD±RW drive or a drive that adds the capability to play† Blu-ray Disc™ movies; the Echo 15 Pro+ includes a Blu-ray burner that reads and writes Blu-ray, DVD and CD discs.



### Storage Space Perfect for a Time Machine® (Drive)

Sonnet designed the Echo 15 dock with the extra space, mounting hardware, and connectors for you to install a 3.5" HDD (hard disk drive) or 2.5" SSD (solid state drive), while the Echo 15 Pro+ provides you the option to install a pair of SSDs. The fast 6Gb/s SATA interface supports an HDD at its maximum speeds, and a pair of SSDs at up to 940 MB/s. Add a high-capacity drive to use as your Mac's Time Machine drive, to back up your Mac's or PC's data, or to store your ever growing media library; or, you can install one or two\* high-performance SSDs for blazing-fast access to applications and files. Best of all, the drives mount inside the Echo dock, so you can expand your storage without the fuss of adding another drive, power brick, and cable clutter.



- Connect your computer to and disconnect it from the dock with one Thunderbolt cable; leave your peripherals connected to the Echo dock
- Provides Multiple Ports—Thunderbolt 2, USB 3.0, 6 Gb/s SATA and eSATA, FireWire 800, and Gigabit Ethernet
- Latest technology offers greater bandwidth for moving files between connected devices; backward-compatible with 10Gbps Thunderbolt hosts and devices
- Choose between a DVD±RW drive, a Blu-ray disc player (BD-ROM/8x DVD±RW), or a Blu-ray burner\* (BD-R/8x DVD±RW)
- Supports Internal Hard Drive or SSDs—Install one 3.5", or one or two 2.5" 6 Gb/s SATA drives\* inside the dock
- Four USB 3.0 Ports—Connect any devices; charge iPads and iPhones even when computer is off
- Mac and Windows Compatible—Support OS X 10.8.5+ now, Windows 8/7 soon ††

### Thunderbolt 2 Interface

Echo 15 docks feature 20Gbps Thunderbolt technology, the latest available. Thunderbolt 2 offers greater bandwidth for moving files at high speed between connected devices when the dock is connected to a Thunderbolt 2 host computer. Also, with their Thunderbolt 2 interfaces, Echo 15 docks can be placed anywhere in a device daisy chain without affecting other devices' performance.



\* Dual 2.5" SSD mounting option and Blu-ray burner available only with Echo 15 Pro+ Thunderbolt Dock

† Blu-ray Disc movie player software for Mac included; for Windows sold separately.

†† Windows 8/7 compatibility requires PC with Thunderbolt 2



[www.sonnettech.com](http://www.sonnettech.com)

SCAN FOR WEB INFO



Product includes 5-year limited warranty; see [www.sonnettech.com/support/warranty.html](http://www.sonnettech.com/support/warranty.html) for details



Product equipped with 20Gbps Thunderbolt 2 technology



Product includes lock which secures most copper Thunderbolt cables' connectors from disconnection



Product includes Sonnet Thunderbolt cable