



ATTO Technology, Inc.

# ExpressSAS R30F 16 Port SAS RAID Adapter

## 3-Gb SAS/SATA II Connectivity with Integrated RAID Support

### Product Features

#### **Blazing Fast Performance**

- Up to 3-Gb/sec per port transfer rates with SAS, SATA and SATA II attachment
- Increased bandwidth through x8 PCI Express host interface
- Point-to-point technology delivers full throughput to each connected storage device

#### **Smooth Data Streaming**

- Alleviate data transfer bottlenecks and move data more efficiently while managing latency with ATTO's exclusive ADS™ technology
- Improve I/O through optimized data movement

#### **One Click Installation**

- One-click installation allows for quick and easy set-up
- Simple GUI based utility for effortless adapter configuration
- BIOS setup utility provides flexibility for custom applications

The ATTO ExpressSAS R30F RAID Adapter combines 3-Gb SAS/SATA II connectivity with sixteen internal ports and integrated RAID support making it the ideal SAS RAID adapter for both IT and digital media environments requiring flexible connectivity options and the highest performance with data protection.

The ATTO ExpressSAS host adapter product family provides enhanced reliability and performance thanks to more than 15 years of experience with SCSI hardware and storage connectivity solutions. Using the latest in PCI Express bus technology and sixteen internal port configuration, the ATTO ExpressSAS R30F RAID adapter delivers blazing fast performance with transfer rates of up to 3-Gb per second per port. With four internal x4 Mini SAS connectors, the R30F provides connectivity of up to 16 internal SAS/SATA targets or up to 128 target devices through an expander. The R30F also features 512MB of ECC-protected DDR2 DRAM to allow support for multiple RAID groups.

The ATTO ExpressSAS R30F RAID adapter is engineered for the most stringent IT server and digital media workgroup environments. To satisfy the data protection requirements of these environments, ATTO leverages its time tested ATTO RAID Stack (ARS™) technology based on a proven RAID core that is compatible with multiple operating systems, applications, and drives.

The easy-to-use GUI utility enables RAID management, monitoring, and configuration. ATTO also incorporates its field proven Advanced Data Streaming (ADS™) technology to meet the most demanding performance requirements of data intensive applications. In addition, ATTO provides industry standard PCIe to SAS control using Serial SCSI Protocol (SSP), Serial ATA Tunneling Protocol (STP), and Serial Management Protocol (SMP)

### Technical Highlights

- x8 PCIe host interface
- Half-height
- 16 internal ports
- Outstanding performance with up to 3-Gb/sec per port
- Highly configurable RAID (0, 1, 4, 5, 10, 50, JBOD and DVRAID support)
- SAS, SATA and SATA II connectivity
- Support for up to 16 direct attached drives or up to 128 SAS/SATA devices through expanders
- Exclusive Advanced Data Streaming (ADS™) technology
- User friendly GUI configuration utility
- Driver support for Windows® and Linux
- RoHS Compliant
- 3-year standard product warranty

**Technical Specification**  
ExpressSAS R30F RAID Adapter

**PRELIMINARY  
RAID Adapter**

For More Information:  
[www.ATTOTech.com](http://www.ATTOTech.com)  
or to Purchase:  
[www.ATTOSTore.com](http://www.ATTOSTore.com)  
(716) 691-1999



# ExpressSAS 16 Port RAID Adapter

ATTO Technology, Inc.

## 3-Gb SAS/SATA II Connectivity with Integrated RAID Support

Hardware Specifications	
Applications	<ul style="list-style-type: none"> <li>Support for IT server and digital media workgroup solutions requiring high-bandwidth and data protection. Applications include audio/video, VOD, fixed content, database and other data intensive environments.</li> </ul>
Maximum Transfer Rate	<ul style="list-style-type: none"> <li>Up to 3-Gb/sec per port</li> </ul>
Advanced Capabilities	<ul style="list-style-type: none"> <li>Device support for SAS, SATA and SATA II</li> <li>SES Support</li> <li>Support for Staggered drive spin-up</li> <li>Pass-through mode to support tape devices</li> <li>Support for RAID levels 0, 1, 4, 5, 10, 40, 50, JBOD and DVRAID (future support for 6 and 60)</li> <li>On-line capacity expansion (OCE)</li> <li>Hot spare, auto-rebuild</li> <li>Native Command Queuing</li> <li>Cache memory—512MB ECC protected memory</li> <li>User friendly GUI for RAID setup</li> </ul>
PCI Bus Specifications	<ul style="list-style-type: none"> <li>x8 PCI Express host interface</li> <li>Supports PCI Express Base Spec 1.0a</li> </ul>
Connectivity	<ul style="list-style-type: none"> <li>Easy-to-install low-profile connection bracket; full-height bracket included in Finished Goods packaging</li> <li>Four x4 Internal Mini SAS (SFF-8087) connectors</li> </ul>
Software Specifications	
Driver Support	<ul style="list-style-type: none"> <li>Windows® Server 2003, 2008, XP, Vista</li> <li>Linux (Red Hat and SuSE)</li> </ul>
Agency Approvals	
Safety and Environmental	<ul style="list-style-type: none"> <li>FCC Rules, Part 15, Class B</li> <li>CE Mark: CISPR 22:2002/EN55022:2002, Class B</li> </ul>
Compliance	<ul style="list-style-type: none"> <li>RoHS Compliant</li> </ul>
Environmental & Physical Specifications	
Dimensions	<ul style="list-style-type: none"> <li>Length 8.640"</li> <li>Height 2.900"</li> </ul>
Operating Environment	<ul style="list-style-type: none"> <li>Temperature: 0-60° C (32°-140°F)</li> <li>Humidity: 5 - 95% non-condensing</li> </ul>
Storage Environment	<ul style="list-style-type: none"> <li>Temperature: -40°-70°C (-40°-157°F)</li> <li>Humidity: 5 - 95% non-condensing</li> </ul>
Power	<ul style="list-style-type: none"> <li>Conforms to PCIe spec 1.0a</li> </ul>
Airflow	<ul style="list-style-type: none"> <li>150 lf/m (min) recommended</li> </ul>
Ordering Information	
Model Number	<ul style="list-style-type: none"> <li>ESAS-R30F-000 (RoHS)</li> </ul>

### PRELIMINARY

Technical Specification  
ExpressSAS R30F RAID Adapter



ATTO Technology, Inc.

## Power Behind the Storage

For More Information:  
[www.ATTOTech.com](http://www.ATTOTech.com)  
 or to Purchase:  
[www.ATTOSTore.com](http://www.ATTOSTore.com)  
 (716) 691-1999