



# E6000™ Converged Edge Router (CER) Router System Module (RSM)

## Specifications

### Installation Environment

|                         |  |
|-------------------------|--|
| Management Interfaces   | 10/100/1000 Mbps Ethernet (RJ-45) plus Console (serial port, RJ45)           |
| Network-side Interfaces | 10 Gigabit Ethernet (SFP+) auto-baud, eight per module                       |
| Connector Access        | NSI Ethernet ports via front of chassis, management ports via rear (RSM PIC) |

### Management Access

- In-band Management with Access Control Lists via any NSI port
- Out-of-Band Management via dedicated Ethernet port on RSM PIC
- Console (serial) port on RSM PIC

### Future Capabilities (not supported in Release 1.0)

- Dedicated Ethernet interface on RPIC for Conditional Access System (CAS)
- Active and Stand-by DTI interfaces on RPIC

### Physical

|                                 |   |
|---------------------------------|---|
| Power                           | -48 VDC (-40 to -72 VDC)                            |
| Power Consumption:              | 215 W nominal and TBD W max at -48 VDC, 77°F (25°C) |
| Operating Temperature:          |   |
| Short Term °F (°C)              | +23 to +131 (-5 to +55)                             |
| Long Term °F (°C)               | +41 to +104 (+5 to +40)                             |
| Storage Temperature °F (°C)     | -40 to +158 (-40 to +70)                            |
| Operating Humidity (Min.-Max.)  | 5 to 85% (Non condensing)                           |
| Dimensions (H x W x D) in. (cm) | 13.8 x 1.2 x 17.8 (35.0 x 3.0 x 45.3)               |
| Weight lbs. (kg)                | 5.1 (2.3)   |

### Software Release 1.0 Features (Partial List)

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|--|---|
| <ul style="list-style-type: none"> <li>Downstream CAM (DCAM) (128D Annex A or B) <ul style="list-style-type: none"> <li>8 RF (F Connectors) per Physical Interface Card (PIC)</li> <li>128 Channels</li> <li>Max 16 Channels per RF connector</li> <li>Up to 7+1 RF Sparing in Rel. 1.0</li> </ul> </li> <li>Upstream CAM (UCAM) <ul style="list-style-type: none"> <li>Flexible Mapping of Upstream Channels to RF Connectors</li> <li>Up to 12 Upstream Channels per RF Connector</li> <li>24 RF (MCX) Connectors per Physical Interface Card (PIC)</li> <li>Up to 5+1 RF Sparing in Rel. 1.0</li> </ul> </li> <li>IPv6 Features <ul style="list-style-type: none"> <li>Cable Modem Management</li> <li>Dual-Stack CPE</li> <li>IS-IS Routing with Multi-topology support</li> <li>Cable Source Verify with DHCP Lease Query</li> <li>Route Injection (RI) for DHCPv6 Prefix Delegation</li> <li>OSPFv3</li> <li>Prefix Stability</li> </ul> </li> <li>DOCSIS 3.0 Multicast IP Video Support (via IGMPv3 Control)</li> </ul> | <ul style="list-style-type: none"> <li>Policy-Based Routing</li> <li>DOCSIS 3.0 24 Channel Bonding (Downstream)</li> <li>DOCSIS 3.0 Four Channel Bonding (Upstream)</li> <li>IS-IS, BGPv4</li> <li>PacketCable™ Multimedia Support</li> <li>Dynamic Cable Modem Load Balancing</li> <li>SII Lawful Intercept (RFC 3924)</li> <li>802.1Q VLAN tagging</li> <li>Extended ACLs &amp; Named ACLs</li> <li>Secure Shell v2 (SSHv2)</li> <li>DOCSIS Ping</li> <li>DHCP Relay Agent (Option 82)</li> <li>DNS Client</li> <li>TFTP Enforce and Dynamic MIC</li> <li>BSoD L2 VPN</li> <li>BPI+ Enforce</li> <li>IPDR/SP</li> </ul> |
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# Technical Specification

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# ARRIS E6000 RSM Technical Specification

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## Specifications Continued...

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### Regulatory

Designed to NEBS Level 3 Requirements  
Safety: UL® 60950, CSA C22.2 No. 950, IEC60950  
EMC: GR-1089-CORE (ESD, Grounding Electrical Safety)  
FCC Part 15 Class A, EN300 386-2 (CISPR 22, Class A)  
Environmental: GR-63-CORE, ETS 300 019

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### Ordering Information

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801023 E6000 CER Duplex Chassis Kit - Two RSMs, No CAMs, Release 1.x  
801022 E6000 CER Simplex Chassis Kit - One RSM, No CAMs, Release 1.x  
799012 E6000 CER Router System Module Kit - 1 RSM and RSM PIC  
796836 E6000 CER Router System Module (796836)  
796847 E6000 CER RPIC - Physical Interface Card for RSM (796847)

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Specifications are subject to change without notice.

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