Casa Systems
SMM8x10G Switch and Management Module

Winning and keeping residential and enterprise video and Internet services customers has never been tougher. Service providers face a range of competition in a business that requires rapid response but is still capital intensive. They need partners who are fast enough to get them ahead of their competition and committed to keeping them there, which is why more and more, leading providers depend on Casa Systems.

With the SMM8x10G Switch and Management Module, Casa Systems provides the switching scale ultra-broadband solutions demand. The SMM8x10G enables line-rate forwarding with 80G switching throughput per module. Each SMM8x10G provides eight 10GE interfaces (SFP+) and two 1GE interfaces (SFP). The SMM8x10G is a single slot module, which can be added to either Casa’s C100G or C40G CCAP chassis. Up to two SMM8x10G modules can be deployed in Casa’s C40G or C100G chassis.

The SMM8x10G provides robust switching and routing features to support a range of services including MPLS, BGP (IPv4 and IPv6), and L2 VPN. Designed for the high availability service providers require, the SMM8x10G runs in Active-Active mode on the data plane and Active-Protect on the control plane and provides 1+1 redundancy. Features such as IEEE 1588v2 Precision Timing and SyncE provide precision timing services required for ultra-broadband services, including mobile backhaul. Management interfaces including CLI, Telnet, SSH, SNMPv1, 2, 3, TACACS+ and Radius enable user friendly, flexible network management.
### Feature

<table>
<thead>
<tr>
<th>Feature</th>
<th>Benefit</th>
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<tbody>
<tr>
<td><strong>Capacity and Throughput</strong></td>
<td></td>
</tr>
<tr>
<td>Eight 10GE and two 1GE interfaces per SMM8x10G module</td>
<td>80G bi-directional switching throughput enables ultra-broadband services with minimal hardware</td>
</tr>
<tr>
<td>1+ Terabit Backplane</td>
<td>End user speeds can be constrained at various points. Adequate bandwidth between the switch card and line card assures higher throughput.</td>
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<tr>
<td><strong>Reliability</strong></td>
<td></td>
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<tr>
<td>Product Reliability</td>
<td>99.999% availability and hitless failover assure services are consistently delivered to subscribers. Active-Active mode on the data plane and Active-Protect on the control plane and provides 1+1 redundancy.</td>
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<tr>
<td>Vendor Reliability</td>
<td>Casa Systems' track record proves a reliable history of bringing new technologies to market first, at each generational shift. Casa's winning design, vision of the future, freedom from reliance on third party silicon providers, and passion to be first with the best solution all create value for our customers. Service providers who want faster time to revenue, lower lifetime TCO, and gigabit+ speeds today choose Casa Systems.</td>
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<tr>
<td>Service and Support</td>
<td>Casa's support engineers own our customers’ problems from the first contact (we have no call centers) to resolution with a sense of urgency and ownership — even if the problem turns out to be with another vendor's equipment. This means less network downtime for our customers.</td>
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## Technical Specifications

### Capacity

Eight 10GE interfaces (SFP+) and two 1GE interfaces (SFP) per module

### Management

Two management ports:
- 1G Ethernet (RJ45) and a Console port (RJ45)

Command line interface (CLI) Telnet
SSH
SNMPv1, v2 & v3
Standard DOCSIS & IETF MIBs
IPDR
Casa Systems Enterprise MIBs
Event logging through Syslog Electronic mail notification
Resource usage reporting TACACS+ and RADIUS
Front LEDs including Status, Active, and Alarm

### Environmental

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
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<tbody>
<tr>
<td>Operating temperature</td>
<td>0° to 50° C</td>
</tr>
<tr>
<td>Storage temperature</td>
<td>-40° to 70° C</td>
</tr>
<tr>
<td>Operating Humidity</td>
<td>5% to 95%, non-cond.</td>
</tr>
<tr>
<td>Power Requirements (DC)</td>
<td>-40.5 to –60 V (dual)</td>
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<tr>
<td>Power Consumption</td>
<td>160W</td>
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### Additional Features

IEEE 1588v2 Precision Timing and Synchronous Ethernet support for delivering precision timing services for cellular backhaul

### IP Features

- OSPF v2 and OSPF v3
- IS-IS (IPv4 & IPv6)
- RIPv2 and RIPng
- BGP (IPv4 & IPv6)
- PIM-SM
- IGMP snooping
- IGMP v2 and v3
- Static IP routing
- DHCP Relay and option 82
- DHCPv6
- DHCP prefix delegation
- Multiple DHCP servers
- Proxy ARP IP subnet bundling
- Multiple default routes
- Access Control Lists
- L2 MPLS
- L3 MPLS
- L2VPN VLAN Tagging
- Link Aggregation
- IPFIX
- Pseudowire redundancy

### Regulatory Compliance

Designed to NEBS level 3 requirements
Safety: EN/UL/IEC/CAN/CSA/C22.2 60950-1
EMC: FCC Part 15 Class A & CISPR Class A
Immunity: EN61000-4