Casa Systems
SMM300Gm 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 SMM300Gm Switch and Management Module, Casa Systems provides the switching scale ultra-broadband solutions demand. The SMM300Gm enables line-rate forwarding with 300G switching throughput per module and terabit backplane capacity. Each SMM300Gm provides two 100GE interfaces (QSFP28) and ten 10GE interfaces (SFP+). The SMM300Gm is a single slot module, which can be added to either Casa’s C100G or C40G CCAP chassis. Up to two SMM300Gm modules can be deployed in Casa’s C100G chassis, enabling 600G aggregate throughput per C100G chassis. Note: Casa does not currently support a mix of SMM300Gm cards in the same chassis.

The SMM300Gm 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 SMM300Gm 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.
<table>
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<tr>
<th>Feature</th>
<th>Benefit</th>
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<tr>
<td><strong>Capacity and Throughput</strong></td>
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<tr>
<td>Two 100GE and ten 10GE interfaces per SMM300Gm module</td>
<td>300G bi-directional switching throughput enables ultra-broadband services with minimal hardware. SMM300Gm only differ in the choice of packet processor.</td>
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<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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<td><strong>Reliability</strong></td>
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<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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<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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<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

Two 100GE interfaces (QSFP28) and ten 10GE 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

Operating temperature 0° to 50° C
Storage temperature -40° to 70° C
Operating Humidity 5% to 95%, non-cond.
Power Requirements (DC) -40.5 to –60 V (dual)
Power Consumption 160W

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

The SMM300Gm does not support PowerKey Video Encryption Libraries and will therefore not be suited for deployments where that particular function is necessary. DVB or PME deployments are not affected.