

Casa Systems C40G CCAP Technical Specifications



System

2x280 Gbps switching capacity
 MPEG switching from any port to any port
 4 DOCSIS/CCAP module slots per system
 1~3 Downstream modules per system
 1~3 Upstream modules per system

DOCSIS Features

Full DOCSIS 3.0 compliant and 3.1 ready
 Full EuroDOCSIS 3.0
 DOCSIS 3.0 downstream channel bonding up to 64 channels
 DOCSIS 3.0 upstream channel bonding up to 64 channels
 DOCSIS 3.0 AES encryption/decryption
 DOCSIS 3.0 IPv6
 DOCSIS 3.0 Multicast
 Complete DOCSIS/EuroDOCSIS 1.1 features
 DOCSIS/EuroDOCSIS 2.0 A-TDMA (standard)
 PacketCable 2.0 compliant
 PacketCable MultiMedia (PCMM) 1.06
 DSG
 L2VPN

IP Features

OSPFv2, OSPFv3
 IS-IS (IPv4 & IPv6)
 RIPv2, 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

Management

RS232 serial port (RJ45)
 10/100BASE-T management port
 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

DOCSIS QAM Module (DQM)

DS8X96	1024 channels 128 channels/port
QAM modulation	Annex A, B & C
QAM constellations	64, 128 & 256 QAM
Data rates (DOCSIS)	27 Mbps @ 64 QAM 38 Mbps @ 256 QAM
Data rates	36 Mbps @ 64 QAM
(EuroDOCSIS)	51 Mbps @ 256 QAM
Frequency range (center)	48 to 1000 MHz
Frequency step size	5 kHz
Channel width	6 to 8 MHz (tunable)
Maximum output/ch	60 dBmV @ 1-ch/port 56 dBmV @ 2-ch/port 52 dBmV @ 4-ch/port 49 dBmV @ 8-ch/port
Output step size	0.1 dB
Output accuracy	± 3ppm
Return loss	14 dB
Modulation error rate	43 dB (equalized)
Wideband noise	-73 dBc

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DOCSIS Control and Upstream Module (DCU)

US16X8	128 channels, 8 channels/port 5-100Mhz
Modulation	QPSK, 8, 16, 32 & 64 QAM
Data rate/channel	0.32 - 30.72 Mbps
Input range	-10 to 29 dBmV

Switch and Management Modules (SMM)

SMM2X10G	Two 10 GigE interfaces Eight GigE interfaces GigE copper or fiber SFP Full line-rate support
SMM8X10G	Eight 10 GigE interfaces Two GigE interfaces GigE copper or fiber SFP Full line-rate support

RF I/O Downstream Module (RFD)

Number of ports	8 ports per module
Connector	F-type, 75 Ω

RF I/O Upstream Module (RFU)

Number of ports	16 ports per module
Connector	F-type, 75 Ω

Additional Features

Dynamic upstream & downstream load balancing
Spectrum Management
Software-defined MAC domains
Software channel licensing
Ingress cancellation filtering

Mechanical

Form factor	6RU
Height	10.5 in. / 266 mm
Width	19 in. / 482 mm
Depth	18.3 in. / 466 mm
Weight	60 lbs (fully loaded)
Mounting high	19 inch, 6 rack unit
Front panel LED	Power & 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) AC 90 to 264 V (dual)
Power consumption	< 1700 W (nominal)

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



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