Data Sheet

Casa Systems Video Gateway 10 (CVG10)

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Casa Systems has introduced a new version of the Casa Video Gateway (CVG), the CVG10, to streamline and optimize the introduction of the Converged Cable Access Platform (CCAP) and Distributed Access Architecture (DAA). The CVG10 allows the cable service provider to keep all their existing video infrastructure in place, avoiding the challenge of reconfiguring their video headend while achieving the space and energy savings provided by CCAP.

CCAP combines the functions of legacy CMTSs and Edge QAMs onto a single CCAP port. CCAP delivers the long desired convergence of video and data services and, as a result, significant benefits1 can be realized:

- 90% more capacity while providing a 30% reduction in rack space.
- 67% energy savings achieved compared to a traditional deployment.

As shown in the diagram below, the CVG10 converts all of the MPEG / QAM / RF video from existing EQAMs to MPEG / IP multicast. The resulting IP video can then be combined onto a single CCAP port. The CVG10 introduces a 10 GigE interface for greater capacity, ease of configuration and more efficiency.

As service providers move to Distributed Access Architecture (DAA), CCAP eliminates the requirement for any analog forward components in the DAA nodes. Eliminating the use of an analog fiber for video itself and the associated analog components result in a higher MER and higher order modulation profiles being achieved. Overall, subscriber throughput can be increased by up to 50% achieving the full bandwidth potential of DAA.

Highlights

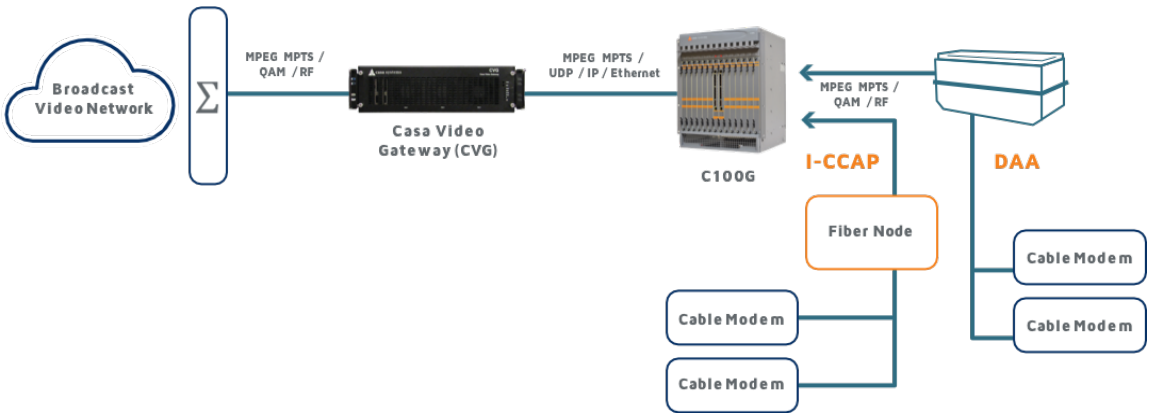
Support for an optimized implementation of CCAP and DAA Cable service providers no longer have to reconfigure their video headend to achieve the benefits of CCAP. Implementing CCAP with DAA eliminates analog components and maximizes customer throughput.

Video Conversion Converts MPEG/ QAM/RF from existing EQAM(s) to MPEG/IP

Capacity Up to 87 BC channels for each CVG10

Size 3RU, 19 inch rack

Output Interface to C100G MPEG/ IP streams to the C100G through an existing Layer 2/3 network - 10 GigE



Note

1. "Big Benefits from a Full CCAP Deployment – A Big Apple Case Study" http://www.casasystems.com/assets/Casa-Case-Study-CCAP-TWC-Casa.pdf

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Technical Specifications

INPUT	
Capacity	Up to 78 channels - 64 QAM and 256 QAM supported - Annex A, B, C
RF QPSK	Complies with ANSI/SCTE 55-1&2 2.048 Mbps & 1.544/3.088 Mbps ANSI /SCTE40
Connector	F Connector, Chassis Rear
Adjacent QAM Channel Requirement	None: All Tuners individually Agile
RF Input	+5 to +10 dBmV per Digital Carrier
OUTPUT	
Ethernet	IEEE 802.3-2002, GigE and 10 Gigabit Ethernet over SFP+
Connectors	3 x RJ45 & 1 optical SFP+, Chassis Rear
Physical Port Address	Static IP Address or DHCP Client Mode per Port
Transport Layer Protocol	UDP
Transport Stream Support	MPTS & SPTS
Addressing	IPv4 Multicast & Unicast, Supporting all Valid IP Port Numbers
Encapsulation	188 Bytes per TS Packet / 7 TS packets per IP packet
DEVICE MANAGEMENT	
Management Interface	Local or Remote via Integrated Secure Web Server. HTTPS based
Management Interface Port	RJ-45, 1 GigE, Static IP or DHCP
PHYSICAL & ENVIRONMENTAL	
Form Factor	3 RU, 19" Rack Mount
Dimensions	5.25"H x 19.0"W x 23.96"D (13.34H x 48.26W x 60.86D cm)
Weight	45.9 lbs (20.8 kg)
Input Power	4 Amps @ 115 VAC or 2 Amps @ 230 VAC
Power Redundancy	Fully Redundant 520W Power Supply Modules
Operating Temperature	0° to 40°C

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