

# Casa Systems

## Casa Video Gateway (CVG)



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Casa Systems has introduced the Casa Video Gateway (CVG) to streamline and optimize the introduction of the Converged Cable Access Platform (CCAP) and Distributed Access Architecture (DAA). The CVG 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 benefits<sup>1</sup> 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 CVG 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.

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

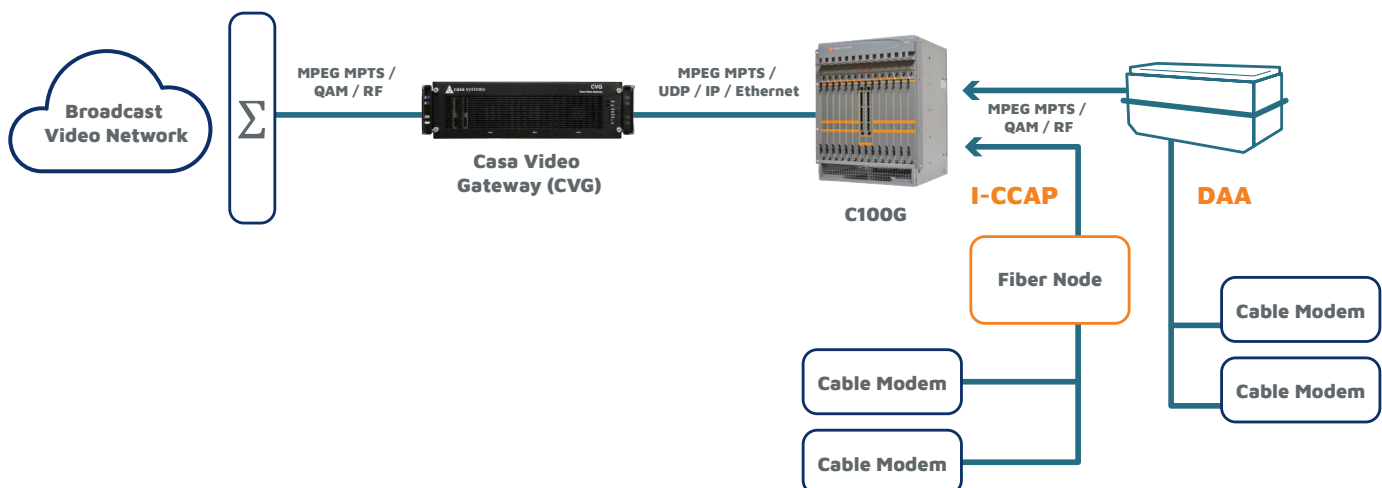
Up to 60 BC channels for each CVG

#### Size

3RU, 19 inch rack

#### Output Interface to C100G

MPEG/IP streams to the C100G through an existing Layer 2/3 network - 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>

## Technical Specifications

<b>INPUT</b>	
<b>Capacity</b>	Up to 60 channels (64 QAM and 256 QAM supported)
<b>RF QPSK</b>	Complies with ANSI/SCTE 55-1&2 2.048 Mbps & 1.544/3.088 Mbps ANSI /SCTE40
<b>Connector</b>	F Connector, Chassis Rear
<b>Adjacent QAM Channel Requirement</b>	None: All Tuners individually Agile
<b>RF Input</b>	+5 to +10 dBmV per Digital Carrier
<b>OUTPUT</b>	
<b>Ethernet</b>	IEEE 802.3-2002, GigE
<b>Connectors</b>	3 x RJ45, Chassis Rear
<b>Physical Port Address</b>	Static IP Address or DHCP Client Mode per Port
<b>Transport Layer Protocol</b>	UDP
<b>Transport Stream Support</b>	MPTS & SPTS
<b>Addressing</b>	IPv4 Multicast & Unicast, Supporting all Valid IP Port Numbers
<b>Encapsulation</b>	188 Bytes per TS Packet / 7 TS packets per IP packet
<b>DEVICE MANAGEMENT</b>	
<b>Management Interface</b>	Local or Remote via Integrated Secure Web Server. HTTPS based
<b>Management Interface Port</b>	RJ-45, 1 GigE, Static IP or DHCP
<b>PHYSICAL &amp; ENVIRONMENTAL</b>	
<b>Form Factor</b>	3 RU, 19" Rack Mount
<b>Weight</b>	45.9 lbs (20.8 kg)
<b>Input Power</b>	4 Amps @ 115 VAC or 2 Amps @ 230 VAC
<b>Power Redundancy</b>	Fully Redundant 520W Power Supply Modules
<b>Operating Temperature</b>	0° to 40°C