

Diamond C10

Dense and Managed IP streaming Chassis



Diamond C10 delivers high-density, high-quality low-latency streaming for IPTV distribution, contribution and remote production

The Diamond C10 Chassis is a modular high-end managed frame supporting VITEC's OG cards. It is ideal for organizations looking for an easy, reliable and affordable way to create a digital IPTV head-end to stream a high number of channels.

The Diamond C10 uses a highly efficient integrated controller card that serves as the single point of interaction with the network, manages all hardware modules in the system and has automatic triggers for redundancy and failover.

The hot-swappable design allows cards with different interfaces, encoding or decoding capabilities to be mixed and matched as required.

The platform delivers reliability and performance for continuous operation, with adaptive cooling and redundant power supplies.

Supported VITEC OG cards

- MGW Diamond OG
- MGW Diamond-Hx OG
- MGW Ace Decoder OG
- MGW Diamond+ OG (limited support)



Features & Benefits

- Controller card consolidates all streaming and management traffic to a single network interface
- Hot-swappable components with built-in automatic failover for all critical components
- Mix-and-match inputs and outputs offers service diversity within each platform
- Supports both encoding and decoding cards
- Designed with highest level of availability for mission critical applications
- Network interface redundancy
- Encodes up to 36 video sources per platform to more than 72 streams in a 2RU
- Decodes up to nine channels per platform

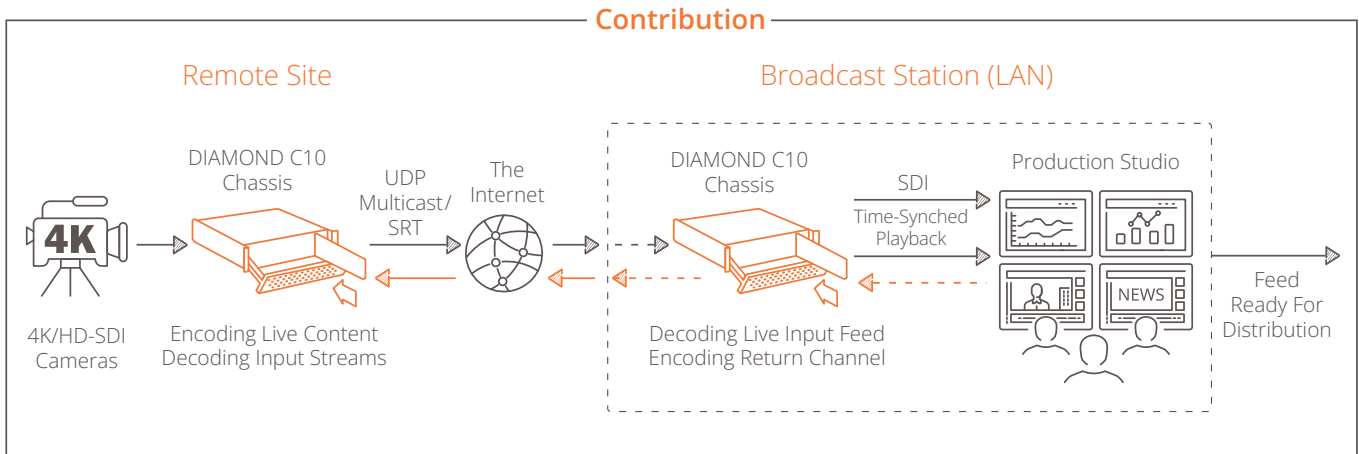
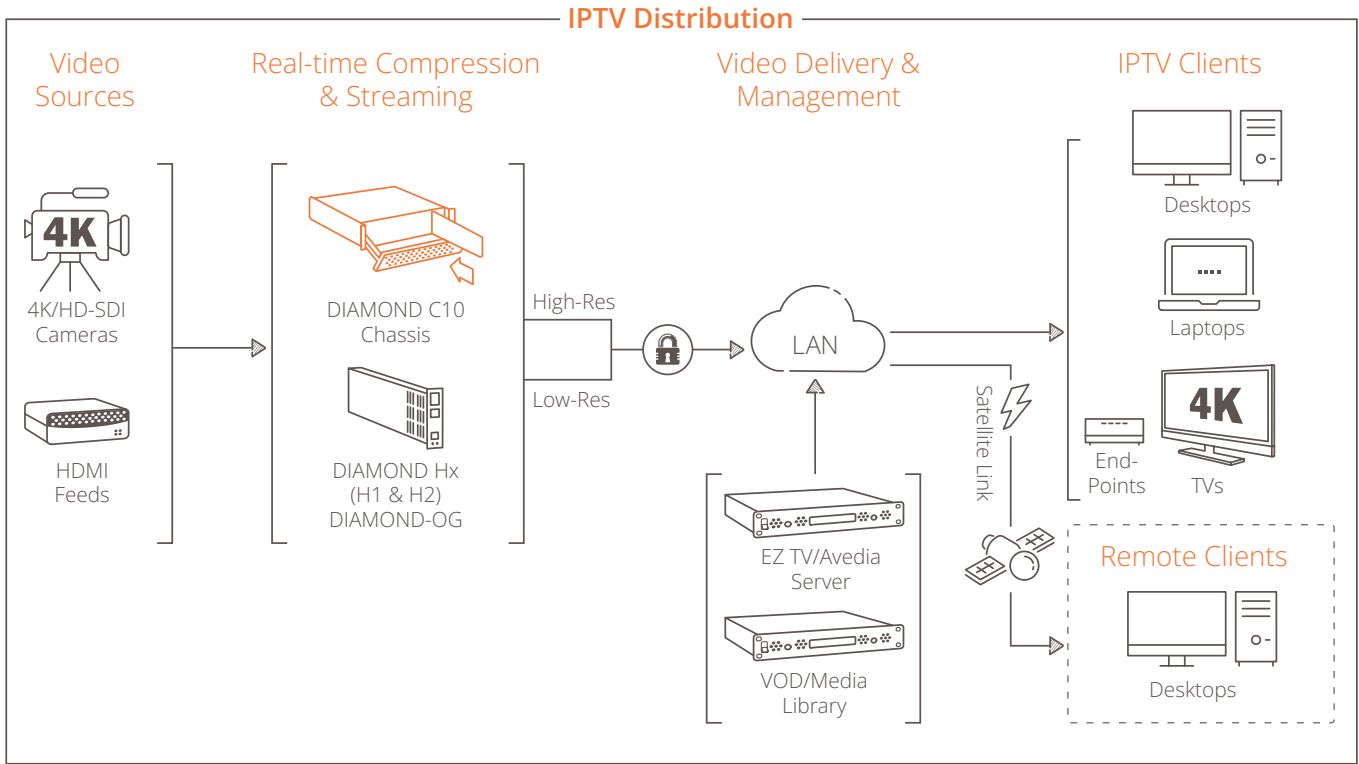
Applications

- IPTV distribution
- Provide live TV within digital signage or as part of an interactive IPTV portal
- Broadcast Contribution over IP
- Multi-site and/or multi-channel IP Video contribution
- Remote contribution
- Streaming video to desktop/laptop, TV and mobile devices
- Deliver video streams to mobile devices

Channel Density

Card Type	Function	Interface	#HD Channels	#4K Channels
MGW Diamond OG	Encoding	SDI	36	9
MGW Diamond-Hx OG	Encoding	HDMI/DVI/RGB	18	9
MGW Diamond+ OG	Encoding	SDI	36	9
MGW Ace Decoder OG	Decoding	SDI/HDMI	9	9

Applications



Technical Specification

Management

- Configurable using management tools:
 - HTTPS device web interface; recommended browser: Chrome®
- SSH

Network

- 3x SFP ports for Ethernet or Fiber
- Each port can be used for streaming or management
- 1000BASE-T (Gigabit Ethernet)
- IEEE 802.3ab

Network Protocols

- UDP TS: MPEG Transport Stream over UDP
- RTP TS: MPEG Transport Stream over RTP
- RTP ES (RTSP): Elementary stream over RTP
- SRT (Caller, Listener and RendezVous)
- Unicast and Multicast (IGMPv3) streaming

Physical Format

- Modular hot swap blade (supporting up to 9 VITEC OG cards)

Dimensions

- H: 90mm x W: 484mm x D: 427mm, (H:3.5" x W: 19" x D: 16.82")
- Weight: 9.07kg (20lbs) (two PS-OGX installed)

Environment

- Operating Temperature: 0 ...+40°C / +32 ... +104°F

Regulatory

- CE (LVD, EMC, RoHS):
 - IEC 62368-1:2014, EN62368-1:2014 + A11:2017
 - EN55032:2012 + corrigenda Aug 2012 & Dec 2012
 - EN55024:2010 + A1:2015, EN 61000-3-2:2014
 - EN 61000-3-3:2013
- FCC:
 - 47CFR:2011 Part 15, Sub Part B, Class A

Power

- Dual redundant PSU
- 600W maximum

Ordering Information (P/N)

- 18960 - Diamond C10 Chassis