ENTRA

*The **Entra** DV-12 is a key element of the unified cable access solution that delivers significant performance gains and substantial savings on capital and operating expenses (CAPEX/OPEX) for operators, and allows for easy migration to an all-IP, all-fiber network.*

The Entra DV-12 is a 12-port rack server (1RU) designed to protect deployed Edge QAM (EQAM) investments and to enable a smooth migration to IP video. The DV-12 terminates RF video services in the hub, enabling Ethernet transport to Entra access nodes.

As part of a Distributed Access Architecture (DAA), the Video Engine seamlessly and transparently integrates into an operator's existing video distribution network and enables the operator to dramatically increase IP capacity without touching the existing QAM infrastructure.

As video encryption and signaling are transparent to the Video Engine, it can be deployed in any market regardless of the set-top box (STB) or encryption type.

Highlights

■ Digital and analog video services

· Innovative, patented mechanism transforms existing QAM video lineup and STB control to Ethernet

· Transparent to the video distribution infrastructure and Video EQAM

· Works with any channel lineup

· Works with any video encryption scheme (Cisco PowerKEY, Arris DigiCipher and Privacy Mode, DVB SimulCrypt, etc.)

· Supports transparent transport for STB out-of-band (OOB) control channel, as defined in SCTE-55-1, SCTE-55-2, SCTE 25-1 (HMS) via NDF/NDR services

· Preserves legacy analog and digital video services and EQAMs

· Retains the STB installed base

· Requires no manual intervention for STBs

· Requires no change to content protection and encryption schemes

Highlights

- **IP muticast efficiency**

  · Leverages standard IP multicast to create video streams once and replicate them for selected access nodes

  · Flexibly customizes the size of the video services group (SG)

  · Eliminates the need to manage and maintain the spce for a complex hierarchy of combiners, splitters and amplifiers

- **Superior RF performance**

  ·Transports video services to access nodes as IP multicast packets instead of QAM/RF carriers

  ·Dramatically improves signal-to-noise ratio (SNR) and carrier-to-noise ratio (CNR)

  ·Greatly increases RF performance resulting in fewer dropouts, improved end-user experience and reduced operator truck rolls

- **Simple centralized management**

  ·Centralized management from the Entra Access Controller

  ·Choice of command-line interface (CLI) or WebGUI for onboard system management, or use Simple Network Management Protocol (SNMP) or Netconf to configure and control the Video Engine from any third-party management application

  ·Allows for remote configuration and management of one or many Video Engines to increase operational agility reduced operator truck rolls

Technical Specifications

RF ports
12 (8 DS, 4 US) per server, MCX RF connectors, mini coxial cable

Operational frequency
RF ports (75 ohm)

RF output impedance
75 ohm

DS QAM constellations
ITU-T J.83 Annex A 64, 256 QAM ; Annex B 256 QAM

Modulation QAM
QPSK 16, 64, 128, 256 QAM

DS channel width
6 MHz (J.83 Annex B) or 8 MHz (J.83 Annex A)

Digital video QAM carriers
Up to 192 QAM carriers at 6 MHz, 144 QAM at 8 MHz

Analog video capture bandwidth
Up to 640 MHz

STB OOB
SCTE-55-1 and SCTE-55-2

Input power level
10 dBmV to 35 dBmV per channel, maximum difference end-to-end +/- 3 dB

Video services broadcast
Switched digital video (SDV), video on demand (VoD) and cloud digital video recorder (DVR)/network personal video recorder (nPVR)

Power requirement
VAC Ratings: 100 - 240 VAC / 6.1 - 2.6 A / 50-60 Hz
VDC Ratings: -42 to -72 VDC / 18 A - 11 A

Operating environment
Temperature: 0°C to 50°C (32°F to 122°F)
Relative humidity: 5% to 90% non-condensing
VAC Ratings: 100 - 240 VAC / 6.1 - 2.6 A / 50-60 Hz • VDC Ratings: -42 to -72 VDC / 18 A - 11 A
Dimensions : 17" (432 mm) W x 24.75" (629 mm) D x 1.75" (44.5 mm) H
Weight : ~ 25 lbs. (11.3 kg)

p: 1.306.955.7075
e: sales@vecima.com
w: www.vecima.com