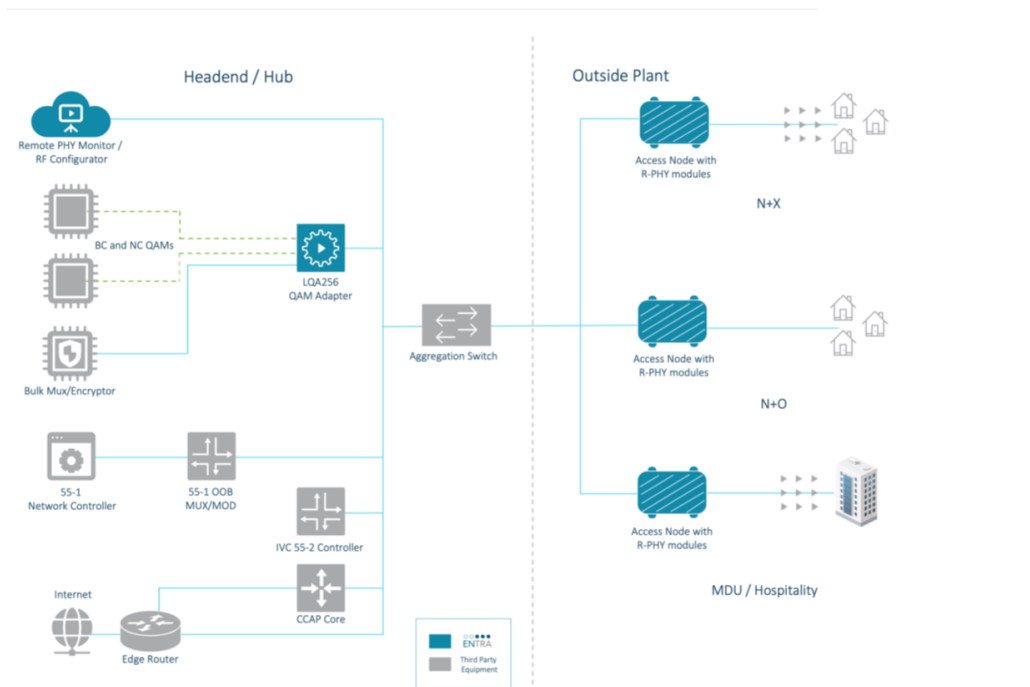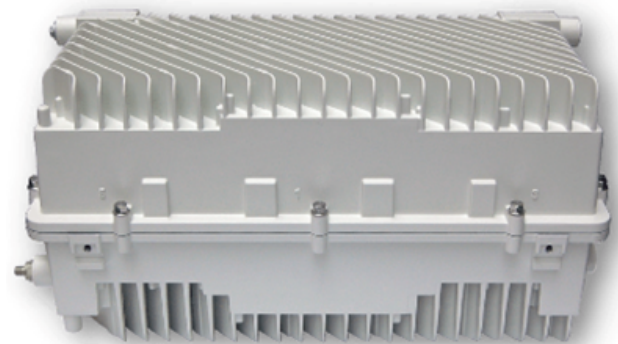# ENTRA
Entra® EN8100, EN8400
DOCSIS 3.1 and 4.0 DAA Access Nodes

VECIMA

Entra® EN8100 and EN8400 are Vecima's realization of the next generation of hybrid fiber-coax nodes that are purpose-built to support R-PHY and deployments.

Highlights

- A truly intelligent, remote monitored and managed RF device (tilt, level, per-channel attenuation, U.S. wink, etc.).
- Core-neutral RPD implementation integrates with any standards-compliant CCAP or vCCAP core.
- Evolve CCAP core without any concerns of future distributed access node compatibility.
- Supports DOCSIS® and video services.
- Legacy digital video support, including all OOB (QAM and native 55-1 and 55-2).
- Support for future PON and D4.0 access modules.

(A) Fiber Entry Ports (2)

(B) Fiber Management Tray (1)

(C) Lid Distribution Module (1)

(D) 10 GbE SFP+ Ports (2)

(E) Access Modules (1 or 2)

(F) Dual Port RF Amplifier Modules (2)

(G) Port Entry Module – RF Enabled (4)

(H) Port Entry Module – AC Power Only (2)

(I) Power Supplies (1 or 2)

(J) Forward Injection Module (0 or 1)

(K) Power Distribution Module (1)

Lid Distribution Module

SFP + Ports	1 x 10GE
	2 x 10 GE
Timing Support	IEEE 1588v2 PTP ordinary clock slave
Multicast Support	IGMP v2/v3 and MLD v1/v2
Fiber Redundancy	Hot and cold standby support
Node Daisy Chaining	Supported on secondary port
Authentication	802.1X port-based EAP-TLS

Lid Distribution Module

DOCSIS 3.0 DS Channels	48 annex B
Video QAM DS Channels	128 annex B
DOCSIS 3.1 OFDM DS Channels	6 x 192 MHz
DOCSIS 3.0 U.S. Channels	1 or 2 service groups x 12 ATDMA each
DOCSIS 3.1 OFDMA U.S. Channels	2 service groups x 2 OFDMA (96 MHz) each
DOCSIS Operation Mode	Remote PHY
OOB DS	1 x SCTE 55-1, 1 x SCTE 55-2 (native)
	Narrow and wide NDF
OOB U.S.	3 x SCTE 55-1, 1 x SCTE 55-2 (native)
	NDR
AGC, Alignment, and Leakage Detection Tones	4 x Dedicated CW (54 MHz to 1218 MHz)
	158 x SC-QAM as CW (54 MHz to 1002 MHz)
Video QAM Input Support	MPTS over L2TPv3 (R-DEPI)
	10ms dejitter, PCR restamping,
	NULL insertion/deletion

Control & Management

Primary Interface	Connected CCAP Core(s)
Troubleshooting Interface	SSH

RF Features

Diplexer Options (field-replaceable)	5-85, 102-1218 MHz
	5-42, 54-1218 MHz
	5-65, 85-1218 MHz
	5-204, 258-1218 MHz
Upstream Ingress Switch (SW-controlled)	<-40 dBc, settable per node RF port
Downstream Mute (SW-controlled)	>10W power reduction per node RF

Chassis / Power / Environmental

Dimensions (H x W x L)	11.3" x 11.0" x 23.9"
(Length excludes port plugs; height measured from the bottom of the strand)	(28.8 cm x 28.1 cm x 60.7 cm)
Weight	<50 lb (22.7 kg)
External RF/Power Ports	4 x SCTE-91 (two per side)
External Power-Only Ports	2 x SCTE-91 (one per side)
External Fiber Ports	2 x SCTE-91 (one per side)
Input Voltage	45-90 VAC,50/60 Hz
AC Current Passing	15A max
Temperature (operational)	40 to 60 C (-40 to 140 F)
Humidity (operational)	5 to 95%
Mounting	Strand, pedestal, wall

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