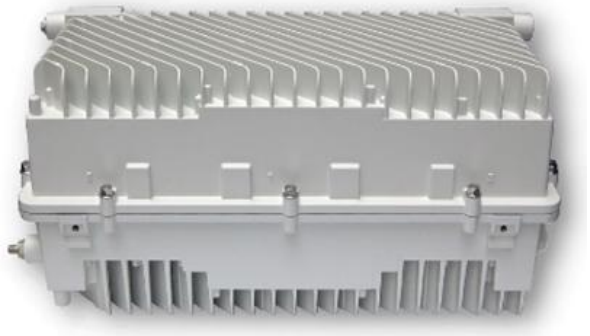
ENTRA®

EN8800U

DOCSIS® 4.0
DAA Access Node



ENTRA

Reliable. Flexible. Simplified

The Entra® EN8800U is Vecima's realization of the next generation of hybrid fiber-coax (HFC) nodes that are purpose-built to support DOCSIS® 4.0 Remote PHY (R-PHY) deployments.

The EN8800U provides a multigigabit, multi-access platform to support ongoing DOCSIS evolution, PON, and wireless technologies with a foundation of interoperability.

Full Spectrum DOCSIS 4.0

Delivers maximum DOCSIS 4.0 throughput with full spectrum support up to 1.8 GHz downstream and multiple upstream options

Future-Proof "Forever Node"

Supports DOCSIS 4.0 R-PHY today and future technologies, including Remote PON OLT, Wireless, and Carrier Ethernet

Truly Intelligent, Managed Node

Accelerates and automates installation, configuration and drives ongoing in-service time and quality

Modular Design

4-port access node with field-replaceable amplifier modules, power supplies, and RPD module

Turnkey R-PHY Solution

Complete R-PHY solution that enables DAA deployments including Entra vCMTS, Nodes, and RPDs

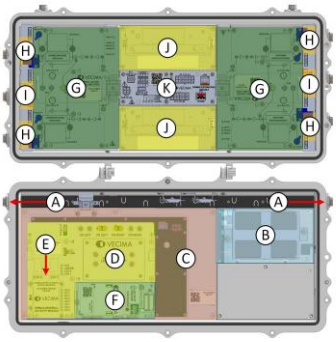
Investment Protection

Enables operators to standardize their networks on a single future-proof node platform with a multivendor ecosystem

Component Layout

The Entra EN8800U features a modular design that organizes key functional blocks into field-replaceable components.

This layout provides direct access to RF, digital and power modules, streamlining service, upgrades and lifecycle management.



- (A) Fiber Entry Ports (2)
- (B) Fiber Management Tray with MDM Cassette (1)
- (C) Entra Carrier Board (1)
- (D) Entra DOCSIS 4.0 R-PHY Module (1)
- (E) 10 / 25 GbE SFP+ Ports (2)
- (F) Power Holdover Module or Forward Injection Module (1)
- (G) Dual Port RF Amplifier Modules (2)
- (H) Port Entry Module – RF Enabled (4)
- (I) Port Entry Module – AC Power Only (2)
- (J) Power Supplies (1 or 2)
- (K) Power Distribution Module (1)

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Specifications

Power	
Input Voltage	40-90 Vac. 50/60 Hz, Quasi-Square Wave
AC Current Passing	15A max
Power Supply Output	5.2 VDC (20 A max) 34 VDC (3 A max) 155 W DC Wattage max
Thermal Dissipation	175 W max
External Interfaces	
RF / Power Ports	4x SCTE-91 (two per side, base)
Power Only Ports	2x SCTE-91 (one per side, base)
DS RF Test Ports	4x (two per side, base)
Fiber Ports	2x SCTE-91 (one per side, lid)
Physical	
Height, Width, Depth	11.3 in x 11.0 in x 23.9 in (28.8 cm x 28.1 cm x 60.7 cm)
Weight	<50 lb (22.7 kg)
Mounting Options	Strand-mounted, Pedestal-mounted, Wall-mounted with accessory bracket Horizontal or vertical mounting
Operating Environment	
Temperature	-40 to 60 °C (-40 to 140 °F)
Relative Humidity	5 to 95%, noncondensing
Altitude	-196 to 13,213 feet (-60 to 4,000 meters)
Supported Modules	
EN8800U-RFAM	1.8 GHz Unified RF Amplifier
ERM412	D4.0 1x2 R-PHY Module
ERM422	D4.0 2x2 R-PHY Module
PHM2000	Power Hold-up Module
EN8800U-ECB	Entra Carrier Board

RF Amplifier	
Supported Frequency Splits	
Mid-Split	5-85, 102-1792 MHz
High-Split	5-204, 258-1,792 MHz
UHS-396	5-396, 468-1,792 MHz
Unified Classic	5-85 US, 108-684 MHz FSD/FDX 804 – 1,794 MHz DS
Unified Shifted	5-204 US, 258-834 MHz FSD/FDX, 984-1,794 MHz DS
RF Port Performance with ERM4 Installed	
Total Composite Power	Up to +70 dBmV Single 6 dB step at 1 GHz
DS Linear Tilt (SW Controlled)	11 to 21 dB over 108 to 1794 MHz
US Nominal Set Point, DOCSIS	+6 to + 20 dBmV / 6.4 MHz FDD 0 to +7 dBmV / 6.4 MHz FDX
Power Accuracy	+/- 1.0 dB TCP (ambient)
Tilt Accuracy	+/- 0.5 dB average tilt relative to target tilt
Port-Port Isolation	> 60dB
Hum Modulation	- 60dB
Regulatory, Industry, and Standards Compliance	
EMC (Immunity/Emissions)	EN 55032, EN 55035, ICES-003 FCC PART 15 SUBPART B, (AS/NZS) CISPR 32
Safety	IEC/EN 62368-1, ANSI/UL 62368-1, CAN/CSA C22.2 No. 62368-1
Outdoor Use, IP Rating	IEC 60529, IP68
Hazardous Substance	IECD/EN 63000: 2018, RoHS Directive 2015/863/EU
WEEE Directive	2012/19/EU
REACH	Regulation (EC) No. 1907/2006
Industry Standards	ANSI/SCTE 81 2018, ANSI/SCTE 91 2022, ANSI/SCTE 92 2022

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