



ENTRA®

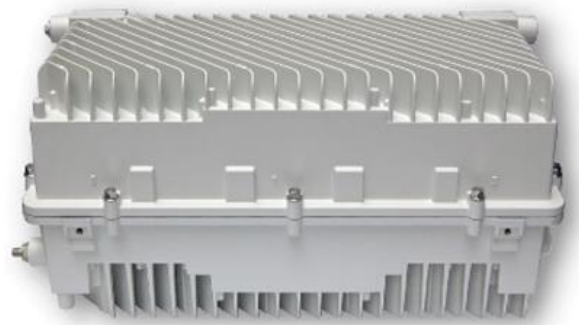
EN8800U

DOCSIS® 4.0
DAA Access Node

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.



**DOCSIS®
4.0**

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



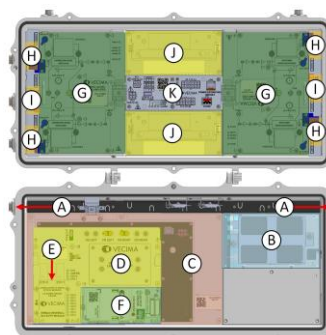
Investment Protection

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)

Specifications

Power		RF Amplifier	
Input Voltage	40-90 Vac. 50/60 Hz, Quasi-Square Wave	Supported Frequency Splits	
AC Current Passing	15A max	Mid-Split	5-85, 102-1792 MHz
Power Supply Output	5.2 VDC (20 A max)	High-Split	5-204, 258-1,792 MHz
	34 VDC (3 A max)	UHS-396	5-396, 468-1,792 MHz
Thermal Dissipation	155 W DC Wattage max	Unified Classic	5-85 US, 108-684 MHz FSD/FDX 804 – 1,794 MHz DS
	175 W max	Unified Shifted	5-204 US, 258-834 MHz FSD/FDX, 984-1,794 MHz DS
External Interfaces		RF Port Performance with ERM4 Installed	
RF / Power Ports	4x SCTE-91 (two per side, base)	Total Composite Power	Up to +70 dBmV Single 6 dB step at 1 GHz
Power Only Ports	2x SCTE-91 (one per side, base)	DS Linear Tilt (SW Controlled)	11 to 21 dB over 108 to 1794 MHz
DS RF Test Ports	4x (two per side, base)	US Nominal Set Point, DOCSIS	+6 to + 20 dBmV / 6.4 MHz FDD 0 to +7 dBmV / 6.4 MHz FDX
Fiber Ports	2x SCTE-91 (one per side, lid)	Power Accuracy	+/- 1.0 dB TCP (ambient)
Physical		Tilt Accuracy	+/- 0.5 dB average tilt relative to target tilt
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)	Port-Port Isolation	> 60dB
Weight	<50 lb (22.7 kg)	Hum Modulation	- 60dB
Mounting Options	Strand-mounted, Pedestal-mounted, Wall-mounted with accessory bracket Horizontal or vertical mounting	Regulatory, Industry, and Standards Compliance	
Operating Environment		EMC	EN 55032, EN 55035, ICES-003 (Immunity/Emissions)
Temperature	-40 to 60 °C (-40 to 140 °F)	Safety	IEC/EN 62368-1, ANSI/UL 62368-1, CAN/CSA C22.2 No. 62368-1
Relative Humidity	5 to 95%, noncondensing	Outdoor Use, IP Rating	IEC 60529, IP68
Altitude	-196 to 13,213 feet (-60 to 4,000 meters)	Hazardous Substance	IECD/EN 63000: 2018, RoHS Directive 2015/863/EU
Supported Modules		WEEE Directive	2012/19/EU
EN8800U-RFAM	1.8 GHz Unified RF Amplifier	REACH	Regulation (EC) No. 1907/2006
ERM412	D4.0 1x2 R-PHY Module	Industry Standards	ANSI/SCTE 81 2018, ANSI/SCTE 91 2022, ANSI/SCTE 92 2022
ERM422	D4.0 2x2 R-PHY Module		
PHM2000	Power Hold-up Module		
EN8800U-ECB	Entra Carrier Board		