



ENTRA®

EN2112 ACCESS NODE

DOCSIS® 3.1, REMOTE PHY
COMPACT 2-PORT NODE

The Entra® EN2112 Access Node is a high-density, compact 2-port designed specifically for global markets and multi-dwelling unit (MDU) applications.

With a future-proofed network design with multiple node form variants, the EN2112 fits a wide range of deployment needs. It also leverages existing video QAM infrastructure to transition into DAA deployments.



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ENTRA



Independent R-PHY Node Vendor

Inter-operable and flexible design, supporting multiple vendors' cores

DOCSIS®
3.1

Full Spectrum DOCSIS 3.1

Delivers maximum DOCSIS 3.1 throughput with full spectrum support up to 1.2GHz downstream and 204 MHz upstream



A Truly Intelligent, Managed Device

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



Part of the Entra D3.1 Ecosystem

Part of Vecima R-PHY portfolio that enables DAA deployments including multiple nodes, monitoring and configuration tools and DAA video solutions



Highest Density Compact Design

Reduces installation cost, fits in all cabinets and mounts everywhere



Standards Compliant, CCAP Core Agnostic

A non-proprietary, no vendor "lock-in" solution

Specifications

RPD Module	
SFP+ Ports	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
Authentication	802.11x port-based EAP-TLS
DOCSIS Operation Mode	Remote PHY
DOCSIS 3.1 OFDM DS Channels	1 service group x 6 OFDM (192 MHz) each
DOCSIS 3.1 OFDMA US Channels	2 service groups x 2 OFDMA (96 MHz) each
DOCSIS 3.0 DS Channels	48 Annex A/B
Video QAM DS Channels	128 annex B/C, 96 Annex A
DOCSIS 3.0 US Channels	1 or 2 service groups x 12 ATDMA each
OOB DS	SCTE 55-1 & 55-2, 3 x Narrow & Wide NDF
OOB US	SCTE 55-1 & 55-2, 3 x NDR
AGC, Alignment, and Leakage Detection Tones	4x 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, Synchronous and Asynchronous mode support
Regulatory, Industry, and Standards Compliance	
EMC (Immunity/Emissions)	EN 55032, EN 55035, EN 6100-3-1, EN6100-3-3, KS C 9832, KS C 9835
Safety	IEC/EN 60950 -1, IEC/EN 62368-1, ANSI/UL 62368-1 CAN/CSA C22.2 No. 62368-1, CNS14336-1
Hazardous Substance	IEC/EN 63000: 2018, RoHS Directive 2011/65/EC
WEEE Directive	2012/19/EC
REACH	Regulation (EC) No 1907/2006

Ordering Information	
EN2112-XS-AC	Entra 1x2 Compact Node, 1xDS, 2xUS, 2RF, 100-240 VAC, USA plug, XS = LS/ES/MS/HS
EN2112-XS-NA	Entra 1x2 Compact Node, 1xDS, 2xUS, 2RF, 40-90 VAC QSW Supply, XS = LS/ES/MS/HS
EN2112-XS-EU	Entra 1x2 Compact Node, 1xDS, 2xUS, 2RF, 30-60 VAC QSW Supply, XS = LS/ES/MS/HS

Control & Management	
Primary Interface	CCAP Core, Aux Core(s)
Troubleshooting Interface	SSH
RF Features	
	5 – 42, 54 – 1218 MHz
Diplexer Options (field-replaceable)	5 – 65, 85 – 1218MHz 5 – 85, 102 – 1218 MHz 5 – 204, 258 – 1218 MHz
Upstream Ingress Switch (SW-controlled)	0, -6dB, -40dB per node RF port
Downstream Mute (SW-controlled)	>10W power reduction per node RF port
Downstream Service Groups	1
Upstream Service Groups	2
Service Group Configuration	1x1, 1x2
Local RF Injection	54-1006 MHz
3 rd RF Port	Local RF In / 3 rd RF Out
Chassis / Power / Environmental	
Dimensions (H x W x L) (Excludes mounting hardware and port connection)	245 x 204 x 160 mm (9.6 in x 8.0 in x 6.3 in)
Weight	<15 lb (7 kg)
External RF/Power Ports	75 Ω, 3 x 5/8-24 (F-type Stinger) AC/NA 75 Ω, 3 x PG11 (3.5/12F Stinger) EU
External Fiber Ports	1 x PG16 (4 x 3mm fiber)
Input Voltage Options	30-65 VAC (QSW) 50/60 Hz 40-90 VAC (QSW) 50/60 Hz 90-264 VAC (sine) 50/60 Hz
AC Current Passing	10A max
Temperature (operational)	-40 to 60°C (-40 to 140 °F)
Humidity (operational)	5 to 95%, noncondensing
Mounting Options	Wall, pedestal, or cabinet