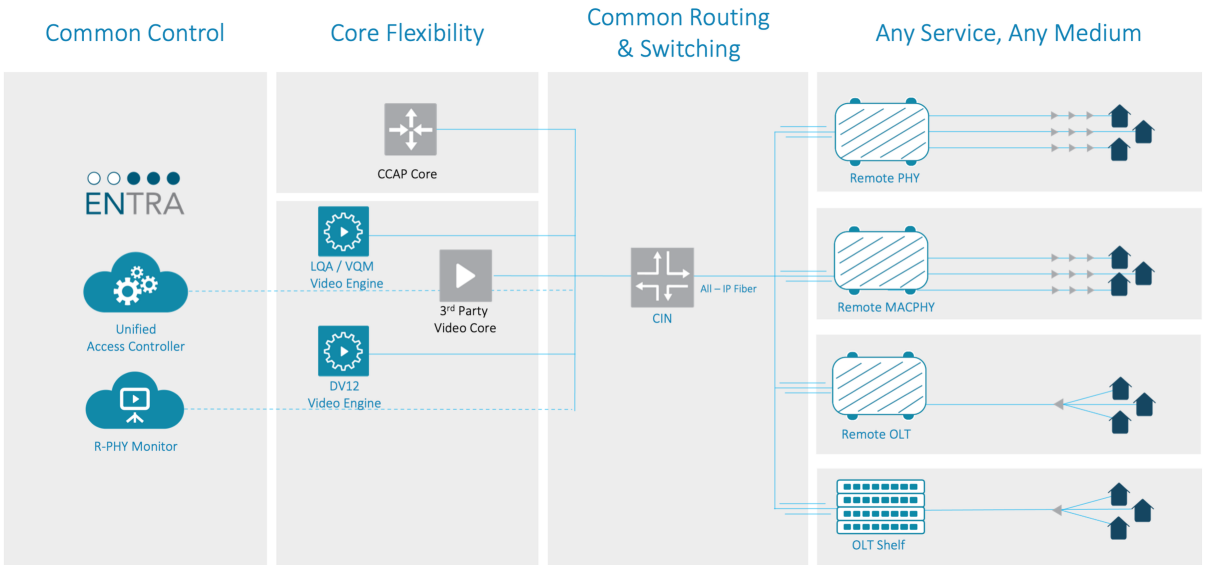
SF-4X Access Node

The **Entra**® Access Platform is Vecima's realization of the next generation of cable access products as optical transport moves away from analog RF distribution to all-digital Ethernet. Entra is optimized to support all distributed access architectures and facilitate the delivery of existing video and data services over hybrid fiber coax (HFC) and direct fiber connections.



SF-4X Access Node is a sealed remote optical line terminal (R-OLT) with four 10 Gb/s Ethernet Passive Optical Network (EPON) ports and up to four 10 Gb/s Ethernet uplinks. With support for DOCSIS® Provisioning over EPON (DPoE™), the SF-4X Access Node provides cable operators with a fiber to the home (FTTH) solution and is an essential component of the Entra unified cable access solution.

The SF-4X Access Node is a passively cooled R-OLT with an integrated line terminal (LT) card.

The SF-4X Access Node is managed by the Entra Access Controller as part of Vecima's virtualized Distributed Access Architecture (vDAA).

Sealed in a hardened clamshell enclosure, the node is designed to be placed in an outside plant environment and is suitable for directly exposed or pedestal outdoor installations.

Entra SF-4X Access Node

SF-4X Access Node

Highlights

- 4 ports of 10 Gb/s EPON
- Up to 4 ports of 10 Gb/s Ethernet uplinks
- Integrates into a unified cable access solution and vDAA
- Field-replaceable components, including optical modules, EPON Line Card, and power supply modules
- Hardened for an outside plant (OSP) enclosure and line powered with strand, wall, and pedestal mount options
- Easily managed by Entra Access Controller as part of the Vecima unified cable access solution
- Support for DPoE enables easy integration with existing networks and systems
- High downstream and upstream capacity enables delivery of up to 10 Gb/s of symmetrical services
- Point-to-multipoint architecture reduces fiber costs
- Outstanding suitability for residential greenfield, commercial services, multiple dwelling units (MDUs), hybrid fiber-coaxial (HFC) black spot infill, long lines, and network spurs

SF-4X Access Node Specifications

Physical
Height: 297 mm (11.7 in)
Width: 527 mm (20.7 in)
Depth: 238 mm (9.4 in)
Weight: 18.22 kg (40.12 lb)
Operating Environment
Temperature: -40 °C to 60 °C (-40 °F to 140 °F)
Relative humidity: 5% to 95%, non-condensing
Altitude: -60 m to 4000 m (-196.9 ft to 13,123.4 ft)
Storage Environment
Temperature: -40 °C to 70 °C (-40 °F to 158 °F)
Relative humidity: 5% to 95%, non-condensing
Altitude: -60 m to 4000 m (-196.9 ft to 13,123.4 ft)
Installation
Horizontal strand or pedestal mounting
Wall or pole mounting with mounting bracket
Power Requirements
44 V to 100 V AC, nominal 90/60 V AC quasi-square wave
75 W typical, 85 W maximum
Coax line powered using either left or right power port and a pin connector with 5/8-24 housing
Interfaces
4 ports of 10 Gb/s EPON for subscriber access
4 ports of 10 Gb/s for uplinks
Supported XFP Optical Modules for PON
10 G EPON Type 4 which supports 10/10, 10/1, 2 (Turbo)/1 or 1/1 EPON line rates
Supported SFP+ Optical Modules for Uplinks
ER, LR, BX-U, BX-D, ZR
Coarse wavelength division multiplexing (CWDM): ZR
Dense wavelength division multiplexing (DWDM): ZR, optical Ethernet ZR
Reliability
Mean time between failure (MTBF): 101,295 hr at 60 °C (140°F) and 439,318 hr at 25 °C (77 °F) per Telcordia SR-332 Issue 3 methodology

Regulatory Standards Compliance
EMC (Immunity/Emissions)
EN 55024
EN 55032
EN 55035
EN 61000-3-2
EN 61000-3-3
FCC PART 15 SUBPART B
VCCI CISPR 32
Safety
IEC/EN 60950-1
ANSI/UL 60950-1
CAN/CSA C22.2 No. 60950-1-07
IEC/EN 62368-1
ANSI/UL 62368-1
CAN/CSA C22.2 No. 62368-1
EN 60825-1 (ONLY for SFP's)
EN 60825-2 (ONLY for SFP's)
Outdoor Use
IEC 60950-22
Corrosion Resistance
GR-2873-CORE
ASTM B117
IP Rating
IP67
Surge
ANSI/SCTE 81
IEEE C61.42
IEEE C62.41
Environmental
IEC/EN 63000
Hazardous Substances: RoHS Directive 2011/65/EC
Waste Electrical and Electronic Equipment: WEEE Directive 2012/95/EC

Publish Date: 2022 - December

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