



ENTRA®

**EPM850 R-OLT
All-PON™
GAP Module**

Product Overview

The EPM850 GAP compatible module supports eight Tri-Mode 50G/10G/2.5G All-PON™ ports or up to 16 10G XGS-PON interfaces using dual-density optics. This flexibility allows operators to introduce 50G-PON where capacity demands it while continuing to support 10G services from the same platform.

Flexible 10G, 25G, 100G, and 400G network interfaces provide the capacity needed for premium residential, business, MDU, and other high-bandwidth services.

Combined with centralized provisioning & management through Entra® vPON Manager, the EPM850 delivers a scalable path to next-generation fiber access.



Product Features



Expand capacity efficiently
Support eight Tri-Mode All-PON™ or up to 16 10G interfaces



Unlock new revenue
Deliver premium residential, business, MDU, and high-bandwidth services



Protect network investments
Introduce 50G-PON while continuing to support existing 10G services



Scale where demand grows
Add capacity closer to subscribers without redesigning the access network

Technical Highlights

- Eight 50G-capable SFP-DD All-PON ports
- Multi-access All-PON™ architecture
- Fits within the EN9000 GAP node
- Managed through Entra vPON Manager
- Multivendor ONT/ONU interoperability
- Hardened for outside-plant deployments
- Field-replaceable modular design

Bring scalable **10G-PON** and **50G-PON** capacity closer to subscribers while protecting existing network investments.

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EPM850 R-OLT All-PON™ GAP Module

Specifications

Physical	
GAP Slots	4
Height	297 mm (11.7 in)
Width	527 mm (20.7 in)
Depth	238 mm (9.4 in)
Weight	18.22 kg (40.12 lbs.)
Operating Environment	
Temperature	-40 to 60 C (-40 to 140 F)
Relative Humidity	5% to 95%, noncondensing
Altitude	-60 m to 4000 m (-196.9 ft to 13,123.4 ft)
Storage Environment	
Temperature	-40 to 70 C (-40 to 158 F)
Relative Humidity	5% to 95%, noncondensing
Altitude	-60 m to 4000 m (-196.9 ft to 13,123.4 ft)
Installation	
Mounting Options	Horizontal strand or pedestal mounting EN9000 GAP node Wall or pole mounting with mounting bracket
Power Requirements	
Input Voltage	44 V to 100 V AC, nominal 90/60 V AC quasi-square wave
Power Consumption	75 W typical, 85 W maximum Coax line-powered using left or right power port and a pin connector with 5/8-24 housing
Interfaces	
Subscriber Ports	8 SFP-DD All-PON ports
Network Ports	2 SFP28 10/25 Gb/s ports 1 QSFP28 40/100 Gb/s port
Supported Optical Modules	
SFP-DD for Subscriber	Tri-Mode 50G/10G/2.5G ITU-PON 2x10G XGSPON
SFP28 Uplink	SR, LR, ER, ZR, DWDM-ZR
QSFP28 Uplink	LWDM Coarse wavelength division multiplexing (CWDM): ZR Dense wavelength division multiplexing (DWDM): 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 SFPs) EN 60825-2 (ONLY for SFPs)
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 2012/19/EU