



**ENTRA®**

FPXT-B OLT Line Card

The Entra® FPXT-B OLT Line Card allows cable multiple system operators (MSOs) to provision and support the greater scale required for fiber-based service offerings. DOCSIS® provisioning of EPON (DPoE™) reduces operating expenses by allowing MSOs to integrate and manage the line card as they do their DOCSIS networks. By deploying these technologies, MSOs can position themselves to deliver higher bit rates (10 GB/s symmetrical services), use their fiber more efficiently, and capture a greater share of the lucrative commercial and residential services markets.



Vecima sells the 7360 ISAM FX platform, augmenting it with Vecima's FPXT-B and DPoE capabilities, so that cable operators have an industry-proven 10G EPON service delivery system. Operators can choose from two shelf sizes that can be mounted in the headend, hub, or outside plant – a 4-slot version or an 8-slot version, known as FX-4 and FX-8. ANSI and ETSI versions of the chassis are available.

These flexible equipment options ensure that MSOs can address any deployment scenario cost-effectively.





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## Highlights

- High-capacity nonblocking backplane.
- High-capacity 1.28 Tb/s controller card (network termination [NT]) with 360 Gb/s network capacity (can be used as uplink, downlink, or direct user link).
- Full NT redundancy with active/active and load-sharing options.
- 4-slot (FX-4) and 8-slot (FX-8) shelf options.
- DPoE 2.0 feature set.
- Simultaneously supports multiple line card symmetric and asymmetric rates, including 10/10, 10/1, 2/1, and 1/1 Gb/s.
- Supports IPv4 + IPv6 IP high-speed data (IPHSD service, IPTV/multicast, and DPoE 2.0 MEF service on a single platform).
- Internet Group Management Protocol (IGMP) and high-bandwidth capabilities enable customers to deploy unicast and multicast video.
- IP/Ethernet access platform supports multiprotocol label switching (MPLS).
- Added resilience with support for MPLS and link aggregation.
- Shelf size options to support any network size or deployment model in a headend, hub, or outside plant.
- Enables a smooth migration from DOCSIS to fiber-based DPoE-based services.
- Advanced traffic management capabilities for premium video delivery.
- Automatic configuration and transparent optical network unit (ONU) management with DPoE.
- Leverages existing DOCSIS provisioning system with DPoE support.
- Supports current practices with proven ISAM technology.

## Specifications

Physical	
FX-4	
Height	222 mm (8.7 in)
Width	446.5 mm (17.6 in), can be used in 19-in rack
Depth	278.3 mm (11 in)
FX-8	
Height	355 mm (14 in)
Width	446.5 mm (17.6 in), can be used in 19-in rack
Depth	278.3 mm (11 in)
Rack mounting pitch	25 mm (1 in)
Operating Environment	
Temperature	-40 to 65 °C (-40 to 149 °F)
Relative Humidity	5% to 95%, noncondensing
Over-temperature sensors and shutdown	
Power Requirements	
Input	48 V DC/60 V DC nominal Fully redundant power feeding (branch A and B)
Full-Service Platforms	
Multi-service access support	IPTV services Multimedia service High-speed internet access Business access Cell site backhaul
Line Terminal (LT) Card Support	High-density 8-port 10 Gb/s line card with high-capacity, non-blocking backplane ISAM FANT-G
NT Support	1.28 Tb/s switching matrix (bidirectional) Active/active redundancy in the data plan and active/standby in the control and management plane 360 Gb/s uplink capacity C-form factor pluggable (CFP4)
Network Termination Input Output (NTIO) Support	FNIO-A Eight configurable 10 GB/s or 1 Gb/s network links SFP+ cages Used as uplink, downlink, or direct user link

Management	
DOCSIS provisioning of line card with existing DOCSIS operations support systems (OSS)	
ECO-sustainability (European Telecommunications Standards Institute (ETSI))	
Product lifetime maximized by modular, shelf-based concept and by implementing new features and functionalities through remote software download	
Power consumption targets Code of Conduct (CoC) power consumption limits	
Compliant with the European Directive 2002/95/EC on the restriction of hazardous substances (RoHS)	
Product collection and treatment under Vecima responsibility complies with the national laws on product treatment applied at the end of life for Waste Electrical and electronic Equipment (WEEE), implementing the European Directive (2002/96/EC)	
Product packaging materials are free from hydrochlorofluorocarbons (HCFCs)	
Plastic product packaging material is marked according to ISO 11469, referring to ISO 1043 (97/129/EEC)	