



V14/V16

OLT System

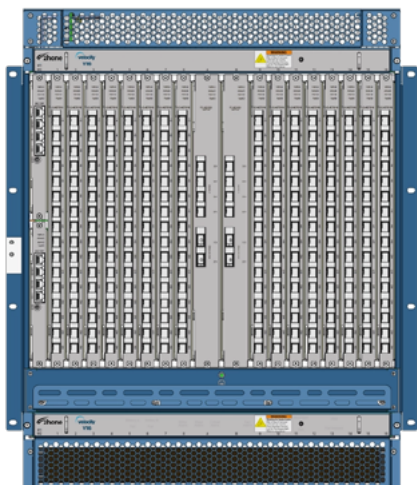
Highest Density 14 or 16 Slot Chassis for Hyper-Fast SDN Access Networks.

Features & Benefits

- + Any services – Residential or Business or Broadband, and Mobile xHaul
- + GPON, XGS-PON, GPON+XGS-PON (Combo), 1GigE, and 10GigE Active Ethernet fiber access
- + Meets ETSI EN 300 standard
- + Industrial temperature
- + sdNOS™ operating system software for modular software and cloud-based network functions
- + Intuitive, comprehensive management, with CLI, and Zhone Access Edge Domain Orchestrator.

Services today and scale up for future growth. It can be deployed as a Chassis OLT or as a Disaggregated OLT in SDN Access Networks. It utilizes the Xcelerate™ architecture for service cards and fabric cards for maximum flexibility and scalability. It supports GPON, XGS-PON, 1G, and 10Gb/s Ethernet access for residential triple play and high-bandwidth business as well as mobile xHaul transport services. The chassis is designed to support any service cards and fabric cards interchangeably with any other Velocity family OLTs.

The Velocity V14/V16 is fully compliant to ETSI EN 300 standard for indoor cabinets and remote outdoor cabinets. The chassis offer 14 or 16 service interface slots, and two Fabric Card/Network facing interface slots. The V14/V16 chassis is equipped with a cable management tray, easy fan access, and front-access redundant power feeds.



V14 and V16 OLTs:

Are part of Zhone Velocity platform – a high-density fiber-based service delivery platform to cost-effectively deliver 10G Broadband

Distributed Switching Architecture for Maximum Scalability

Demands on access networks continue to accelerate, and technologies change and evolve at light speed to cope with this growth. Zhone Distributed Switching Architecture is ideal for a broadband service delivery platform that can scale up over longer time horizons demanded by fiber network operators around the world. In the Zhone Velocity platform switching and aggregation function is distributed in both the service cards and the uplink or network facing cards. Each service card comes with a high capacity local switching function in addition to the Fabric Cards where traffic can be further aggregated and switched. The platform also provides the option of using the uplink interfaces in the XCELERATE™ service cards for maximum flexibility, scalability, and non-blocking aggregation. The high capacity Fabric Cards provide centralized traffic aggregation and come with 10G, 40G, and 100G uplink interfaces.

Disaggregation and SDN Support

The XCELERATE™ service cards allow any Velocity OLT to be deployed as a traditional chassis OLT or as Disaggregated OLTs. The unique XCELERATE™ architecture allows the service cards and fabric cards to operate as a “System-on-a-Card” for disaggregation and SDN Control. On-board switches in XCELERATE™ service cards provide traffic aggregation, QoS, and uplink interfaces for non-blocking performance. With a fully distributed database, both boot and upgrade times are exceedingly low for better customer experience. System upgrades are much simpler ensuring maximum reliability and availability.

Choice of Service Cards

In addition to the XCELERATE™ service cards for 10G Broadband, the Velocity OLT platform supports a variety of standards-based access service cards including 16-port GPON OLT service card with support of 2,048 2.5G/1.25G subscribers, 16-port two-channel CSFP Active Ethernet OLT service card with support of 32 1G AE subscribers, 16-port single-channel SFP/SFP+ Active Ethernet OLT service card with support of 16 1G and 10G AE subscribers.

sdNOS™

Velocity OLT portfolio utilizes sdNOS™ operating system – A Linux based open software platform for modular software functions. It provides common software functionality across all of the Zhone Velocity OLTs and enables comprehensive Layer 2 switching, aggregation, and traffic management feature functions for Broadband services of any type. It provides software functions critical to today’s networks for enhanced quality of experience, security, and management. Powered by sdNOSTM our Velocity OLT platform provides security features such as multicast control lists, secure bridging, broadcast storm detection and suppression, dynamic IP filtering, SSH and SFTP, and RADIUS authentication.

V14/16 Chassis

Product Specifications

V14 Interfaces

- 14-access multi-service subscriber slots
- 2-Fabric Card/Network facing slots
- 2-Management Card slots

V16 Interfaces

- 16-access multi-service subscriber slots
- 2-Network facing slots
- 2-Management Card slots

Power Interface

- Operating voltage: -43.75V to -59.9V DC
- Dual (A / B redundant) power feeds

Standards Support

- ETSI EN 300_119-3_v2.2.2_09-2009

Regulatory Compliance

- Safety
 - EN 62368-1
 - UL 62368-1
- EMC Emissions / Immunity
 - FCC Part 15 Class A
 - AEN 55022 Class A
 - ACES-003 Class A
 - EN 300 386

V14 PHYSICAL & ENVIRONMENTAL

Specification	Description
Dimensions (H x W x D)	24.49" (14U) x 17.38" x 11.02" (622mm x 441mm x 280mm)
Operating temperature	-40~131°F (-40~55°C)
Storage temperature	-40~149°F (-40~65°C)
Operating humidity	5 to 85% (non-condensing)
Altitude	-200ft to 16,500ft (-60m to 5,000m)
Power	92W nominal
Operating Voltage	-43.75V to -59.9V DC
Power Supplies	Dual (A / B redundant) power feeds

V16 PHYSICAL & ENVIRONMENTAL

Specification	Description
Dimensions (H x W x D)	24.49" (14U) x 19.25" x 11.02" (622mm x 489mm x 280mm)
Operating temperature	-40~131°F (-40~55°C)
Storage temperature	-40~149°F (-40~65°C)
Operating humidity	5 to 85% (non-condensing)
Altitude	-200ft to 16,500ft (-60m to 5,000m)
Power	115W nominal
Operating Voltage	-43.75V to -59.9V DC
Power Supplies	Dual (A / B redundant) power feeds

Ordering Information

Bases	Description
V-CHASSIS-V14	VELOCITY 14U, 19" CHASSIS (REQ 14U CARDS), 2 NETWORK-FACING, 14 ACCESS SERVICE SLOTS
V-CHASSIS-V16 V-CHASSIS-V16-CB	ROHS, VELOCITY 14U, 21in. ETSI CHASSIS(REQ 14U CARDS), 2 NTWK-FACING, 16 LINE CARD SLOTS
V-FANTRAY-V14	VELOCITY 14U, 19" FANTRAY ASSY, NOT REQUIRED WHEN PURCHASING CHASSIS
V-FANTRAY-V16 V-FANTRAY-V16-CB	VELOCITY 14U, 21" FANTRAY ASSY, NOT REQUIRED WHEN PURCHASING CHASSIS
V-CHASSIS-FILTER-V14	SPARE AIR FILTER FOR VELOCITY V14 CHASSIS
V-CHASSIS-FILTER-V16	SPARE AIR FILTER FOR VELOCITY V16 CHASSIS



Zhone Technologies, Inc