DZS Velocity V6

Reimagine Your Edge

DZS Velocity V6 OLT System

Industry's Highest Performance 6-Slot System for Hyper-Fast, Low Latency, Software Defined Access Networks.

Features & Benefits

+ Extraordinary Performance and Capacity - Scalable to 800 Gbps per slot for non-blocking support of future 50G/ 100G PON line cards.
+ Multi-Service: GPON, XGSPON, GPON+XGS-PON (Combo), 1GigE, and 10GigE Active Ethernet fiber access
+ Meets ETSI EN 300 standard
+ Industrial temperature
+ sdNOSTM operating system software for modular software and cloud-based network functions
+ Intuitive, comprehensive management, with CLI, and DZS Cloud Access Edge Domain Orchestrator.

The V6 OLT system marks a significant expansion to the DZS Velocity portfolio – a high-density fiber-based service delivery platform to costeffectively deliver 10G Broadband services today with architectural headroom to provide non-blocking support for 50Gbps PON and beyond. It can be deployed as a Chassis OLT or as a Disaggregated OLT in SDN Access Networks. It utilizes the DZS XCelerateTM architecture for service cards and fabric cards for maximum flexibility and scalability. The V6 supports GPON, XGS-PON, 1G, and 10Gbps Ethernet access for residential triple play and high-bandwidth business as well as mobile xHaul transport services. The system chassis is designed to support any service cards and fabric cards interchangeably with any other Velocity family OLTs.

The Velocity V6 is fully compliant to ETSI EN 300 standard for indoor cabinets and remote outdoor cabinets. The chassis offers six service interface slots and two Fabric Card/Network facing interface slots, with a replaceable fan module and front-access redundant power feeds.

V6 System

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. DZS 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 DZS Velocity systems 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 DZS XCelerateTM 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 DZS XCelerateTM service cards allow any Velocity OLT to be deployed as a traditional chassis OLT or as Disaggregated OLTs. The unique XCelerateTM 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 XCelerateTM 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 XCelerateTM 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

The DZS Velocity OLT portfolio utilizes sdNOSTM operating system – A Linux based open software platform for modular software functions. It provides common software functionality across all of the DZS 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 systems provide security features such as multicast control lists, secure bridging, broadcast storm detection and suppression, dynamic IP filtering, SSH and SFTP, and RADIUS

V6 System

Product Specifications

V6 Interfaces

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

Power Interface

- Operating voltage: -42V to -65V 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
  - EN 55022 Class A
  - CES-003 Class A
  - EN 300 386

V6 Physical & Environmental Specifications

Dimensions (H x W x D)	10.48″ (6U) x 19″ x 8.79″ (266.2mm x 482.6mm x 223.5mm)
Operating temperature	-40~149°F (-40~65°C)
Storage temperature	-40~185°F (-40~85°C)
Operating humidity	5 to 85% (non-condensing)

Altitude:	-200ft to 16,500ft (-60m to 5,000m)
Max Power	2,564.1 W (All cards running at max capacity)
Operating Voltage	-42V to -65V DC
Power Supplies	Dual (A/B redundant) power feeds

Ordering Information

Bases	Description
V-CHASSIS-V6	VELOCITY 6U, 19” CHASSIS, 2 NETWORK-FACING SLOTS, 6 ACCESS SERVICE SLOTS
V-FANTRAY-V6	VELOCITY 6U REPLACEMENT “ FANTRAY ASSY, NOT REQUIRED WHEN PURCHASING CHASSIS

info@DZSi.com
www.DZSi.com/contact-us

Contact DZS today
www.DZSi.com
support@DZSi.com

Product Source International Datacomm
330 Franklin Turnpike
Mahwah, NJ 07430 US
Tel: 201.488.6000
www.psitec.com / sales@psitec.com