

Wharf Switch (DAAS)

DISTRIBUTED ACCESS ARCHITECTURE



The Wharf is a high-performance, multi-function router that provides enhanced connectivity for residential broadband, enterprise-class data services, and long-range optical transport.

Wharf simplifies planning, design, implementation, and operation of complex outside plant optical distribution networks used by broadband providers. The multi-purpose device functions as an aggregation point within the network for fiber-to-the-anything (FTTx) applications, business-service internet, backhaul for cell towers, and extension of distributed access architecture networks that link to nodes for cable broadband.

Wharf is qualified for an extended temperature range to enable operators to leverage outdoor cabinets and indoor closets traditionally unsuitable for critical network equipment. Long-haul coherent optics and OpenZR+ provide connectivity at ranges up to 300km/184mi, extending an operator's reach without building construction.

The Wharf is integrated into Harmonic's cOS ecosystem as both a Distributed Access Architecture Switch (DAAS) and Top of Rack (TOR) switch. Wharf offers 1.6 Terabits of packet processing power and a wide array of interface types and speeds, including two 100/400G long-range ports, two 40/100G flexible-use ports, and 24 10/25G high-speed ports. Each 10/25G interface can connect Harmonic's Fin Remote Optical Line Terminals (R-OLT) or Harmonic's Pebble Remote PHY Devices (RPD) further extending network reach another 80 km to deliver high-speed broadband services to tens of thousands of end users.

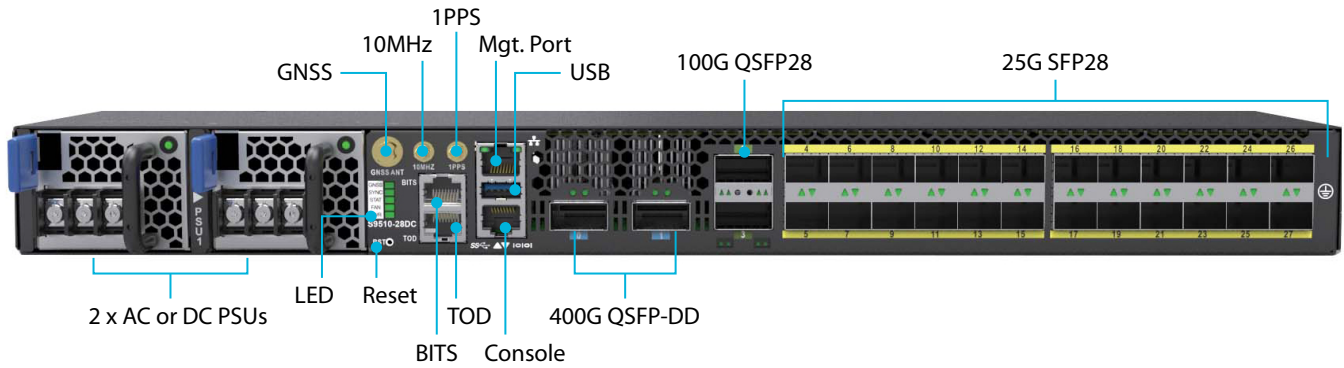
FlexE provides more efficient LAG implementation and reduced latency for latency sensitive applications. The Wharf also supports full timing features of IEEE 1588v2 and Synchronous Ethernet (SyncE) and is compliant with Time-Sensitive Networking (TSN) to ensure efficient, Class C timing accuracy with standards-based reliability.

Key Benefits

- Compatible with open networking standards for highly reliable composable networks.
- Future-proof for 5G with ultra-low forwarding latency, high precision frequency and phase timing synchronizations.
- Temperature hardened to offer more flexibility to deploy outside plant cabinets for cell site backhauls.
- Suitable for WAN and long-haul applications, supports OpenZR+ for metro and regional aggregation.
- Simplified maintenance operations with redundant, hot-swappable components.

- Supports full SyncE and IEEE 1558v2 (T-GM, T-BC/OC, T-TC)
- Integrated Stratum 3E OCXO with optional hold over performances
- Supports Time Sensitive Networking (TSN) for low packet loss and low delay variation
- Supports FlexE for flexible bandwidth utilization
- Class C timing accuracy support
- Rich timing interfaces: 10MHz, 1PPS, ToD, and BITS
- Internal GNSS receiver for master clock implementations
- Supports 10/25/40/100/200/400G
- Hot swappable power supplies with 1+1 redundancy support
- Hot swappable fan modules with 4+1 redundancy support
- OIF FlexE version 1.1 and 2.0 compliant and support 400G total bandwidth

HIGHLIGHTS



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