

DATA SHEET

Waveserver



Ciena's Waveserver® stackable interconnect system combines a best-in-class coherent chipset with a data center operations model for cost-effective, web-scale Data Center Interconnect (DCI) applications.

Web-scale DCI requires new solutions designed from the ground up to provide high-capacity metro, regional, and long-haul interconnect with a web-scale operations toolset. Waveserver was created to provide a server-like experience for web-scale applications. It provides simple, scalable metro DCI in a rack-and-stack 1RU form-factor (the smallest rack increment).

Waveserver is powerful but easy to use. Its design combines two key principles: best-in-class coherent technology and web-scale IT. Waveserver incorporates Ciena's WaveLogic 3 Extreme coherent optical processors to increase transport capacity and scalability. It addresses the massive bandwidth requirements of DCI while providing power and space efficiency, and its web-scale IT operations model provides easier integration and operations through programmable, open APIs.

Raising DCI to Web-scale Proportions
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Waveserver is designed for web-scale traffic demands. It's flexible on the line side, powered by Ciena's WaveLogic 3 Extreme chipset, supporting flexible modulation formats such as: QPSK, 8QAM, or 16QAM. This enables Waveserver to drive the highest possible capacity, whatever the distance, by leveraging current net system margin. Waveserver's advanced coherent chipset, WaveLogic 3 Extreme, incorporates technologies such as: spectral shaping, soft Forward Error correction, and Ciena's own analog-to-digital conversion techniques to provide more performance than competing

Features and Benefits

- Enables massive capacity and density—400 Gb/s of line capacity plus 400 Gb/s of client Ethernet ports in a compact, 1RU form-factor—powered by WaveLogic 3 Extreme technology
- Supports flexible modulation: QPSK, 8QAM, and 16QAM for the highest capacity at any distance, from metro and regional to long-haul requirements
- Reduces recurring costs with low power consumption and small footprint requirements
- Features rack-and-stack simplicity and up to 24 Tb/s of capacity per fiber
- Offers an ultra-low-latency, AES-256 wire-speed encryption solution for highly secure in-flight data protection
- Provides a new business and operational experience for deploying web-scale DCI solutions— with simplified planning, ordering, installation, operation, and maintenance
- Provides open APIs for automation, provisioning, and management programmability
- Offers a test and development environment to create, test, and fine-tune applications
- Features easy data center installation—no heavy manuals to read or long hours on the phone with technical support