

# Waveserver 5



Waveserver® 5 compact interconnect platform, optimized for 100GbE and 400GbE applications, provides the industry's highest capacity and lowest cost per bit for any distance. Its server-like operational model, with open API programmability, simplifies back-office integration and facilitates volume deployments.

Waveserver 5 provides the best transport economics for high-capacity, high-growth applications. It combines the industry's most advanced coherent technology with a simple, server-like operational model to drive down cost per bit and reduce energy consumption. Its industry-leading density, scale, and capacity per wavelength allow Internet Content Providers (ICPs), Data Center Operators (DCOs), and Communications Service Providers (CSPs) to deliver a high-performance, quality experience to their end-user customers.

Supporting a mix of 100GbE and 400GbE services across any distance, Waveserver 5 leverages Ciena's WaveLogic™ 5 Extreme, the latest in coherent technology innovation, bringing to market the industry's first single-wavelength 800 Gb/s solution. Waveserver 5 provides industry-leading density, with up to 12.8 Tb/s of capacity in two rack-units. It is highly programmable, enabling rapid scalability with tunable coherent optics that help providers adapt to changing bandwidth requirements. Waveserver 5 offers tunable capacity, from 200 Gb/s to 800 Gb/s in 50 Gb/s increments, so providers can match system capacity to available network margin for any network application, including single-span DCI, metro ROADM networks, long-haul routes, and subsea links. By enabling higher line rates at any distance, Waveserver 5 improves spectral efficiency and increases overall fiber capacity up to 38.4 Tb/s in the C-band. It can also operate across fixed-grid networks, as well as third-party line systems. By removing constraints on scalability, Waveserver 5 satisfies the capacity requirements of the most demanding data services and applications.

Waveserver 5 provides pay-as-you-grow benefits through a modular, stackable architecture, allowing service modules to be added as bandwidth demands dictate. Waveserver 5 can be customized for different applications, with flexible traffic modules, including the double-width module supporting up to 1.6 Tb/s of line capacity and

## Features and Benefits

- Delivers more 100GbE and 400GbE across any distance, from metro to long-haul and subsea
- Enables higher capacity, with up to 800 Gb/s per wavelength
- Supports high-growth applications in an ultra-dense, compact platform
- Recognized simplicity and programmability – proven worldwide