

Today's optical transport demands are constantly changing. High-bandwidth services and cloud-based applications are booming and software-defined networking is evolving to the domain of transport networks. Network operators and enterprises need a flexible and scalable solution fit for this challenging environment.

The increasing need for bandwidth delivered to any location in the shortest possible time, together with the need for low latency and robust security, is transforming optical networks and how they are managed. Our FSP 3000 has been designed to efficiently deal with this new environment, lowering its complexity and minimizing cost-per-bit and operational efforts. Thanks to its modular design and latest technology, our FSP 3000 supports a wide range of services and applications, from data center interconnect (DCI) to carrier-optimized infrastructure solutions, including the newest modulation formats. Its low-latency data encryption capability enables secure optical network solutions that can scale, providing a solid foundation to accommodate tomorrow's needs.



Your Benefits

✓ **Unprecedented Scalability**

Up to 128 wavelengths for 25.6Tbit/s duplex capacity in a single rack

✓ **Best-in-Class Metrics**

High-density and energy-efficient design for smallest footprint, lowest power consumption and minimum material intake

✓ **ConnectGuard™ Technology**

Lowest latency data encryption for any service on the transport layer

✓ **Operational Simplicity**

Multitude of ROADM options for cost-effective and automated on-demand delivery of high-speed services

✓ **FSP Network Hypervisor**

Optical network abstraction for simple integration into SDN-based environments and multi-layer coordination

✓ **Guaranteed Storage Interoperability**

Optimized transponder modules for business continuity applications, qualified by all storage system and server vendors

Innovation

ConnectGuard™

- Robust, zero-latency, high-speed encryption with no additional overheads and 100% throughput for all transport services
- Highest security with key management, random number generation and integrity protection designed according to FIPS 140-2 and BSI

MicroConnect™

- Dynamic wavelength configuration with the minimum number of wavelength-selective devices in the network
- Automatic optical impairment management and completely passive chromatic dispersion compensation on minimal footprint

OpenFabric™

- Complete G.709 OTN metro cross connect system on a module which can directly connect to any OTN or Ethernet client
- Extended scalability by avoiding capacity lock-in in closed cross-connect architectures with electrical backplane

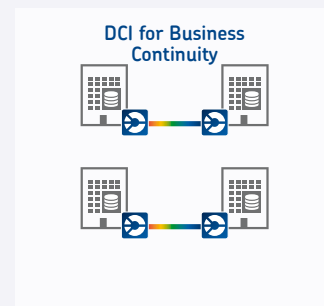
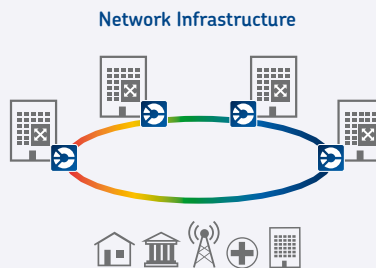
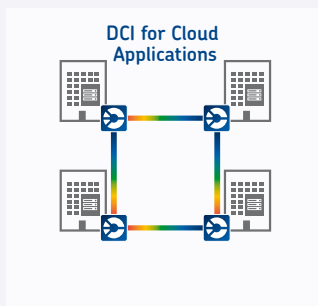
TrueTime™

- Dedicated optical timing channel providing phase and frequency delivery in accordance to IEEE 1588v2 and ITU-T G.8262 to all nodes in the network
- Time-sensitive OTN modules for minimum impact on short- and long-term delay variation

Applications in Your Network

Network Infrastructure

- Scalable system architecture for cost-effective metro and backbone optical network infrastructure
- Optimized to meet requirements when upgrading networks for ultra-high-speed service delivery



DCI for Cloud Applications

- Tera-scale DCI solution supporting coherent and direct detection based modulation formats
- Open Line System (OLS) architecture and open YANG-based software architecture

DCI for Business Continuity Applications

- Complete security suite including encryption, optical line monitoring, RADIUS, SSH and other tools for full data integrity
- Support of all open-systems and mainframe protocols including 32Gbit/s Fibre Channel



For more information please visit us at www.advaoptical.com
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ADVA™
Optical Networking