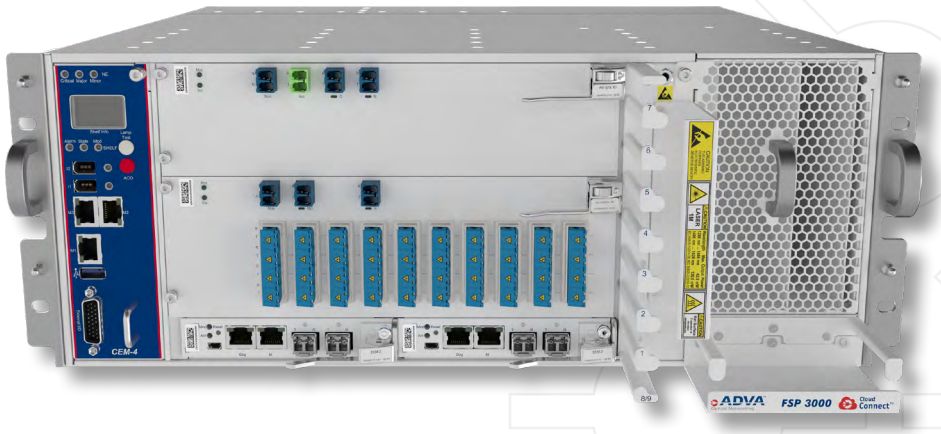
FSP 3000 SmartAmp™

FSP 3000 CloudConnect™ OLS for direct-detect metro DCI applications

Moving business-critical applications into the cloud has driven cloud service providers of all sizes to operate the bulk of their services from a cluster of data centers within a single metro. But clustering hyperscale facilities comes with significant challenges. Not only do these facilities need to be interconnected at the highest speed and lowest latency, but the immense amount of data traffic being transported between them also demands that cost per bit, power consumption and footprint be kept to a minimum.

Open and disaggregated architectures based on PAM4 modulation open a new era of metro data center interconnectivity (DCI). As part of our FSP 3000 CloudConnect™ platform, the FSP 3000 SmartAmp™ is a custom-designed open line system optimized for single-span, direct-detect 100Gbit/s PAM4 interconnects. Managed via open APIs, our SmartAmp™ comes as an open line system in a box, integrating optical amplification, wavelength multiplexing, automated dispersion management and dynamic power control in a compact chassis. Its compactness, lowest power consumption and true plug-and-play design make our SmartAmp™ a compelling choice for hyperscale direct-detect metro DCI across distances of up to 100km.



Your benefits

- **Ultimate optimization**
  Significant cost, space and power reductions compared to coherent solutions
- **Plug-and-play operation**
  Smart built-in optical power and chromatic dispersion controls for coherent-like operations
- **System-in-a-box**
  Fully equipped turn-key solution for up to 4Tbit/s transmission capacity
- **Programmability through open APIs**
  Seamless integration into data center and SDN environments
- **Open line system architecture**
  Supports aggregated and disaggregated network solutions
- **Unique single fiber working option**
  Minimizes fiber consumption, enabling dual-fiber protected operation

High-level specifications

General information

- 4RU chassis; 600mm rack and closed cabinet installation
- Intelligent dispersion compensation and power control
- Up to 4Tbit/s per fiber pair
- SFW configuration option

System-in-a-box

- Built-in 40ch mux/demux with LC connectors, automatic dispersion compensation and optical power management
- Redundant power, fans and controllers

Flexible architecture

- Simple two-card solution enabling flexible deployment scenarios
- Available as a disaggregated solution or aggregated solution with ColorZ PAM4 QSFP-28

Transmission performance

- Up to 100km with Corning SMF-28 ULL fiber
- Up to 80km with standard fiber in unidirectional configuration
- Up to 60km with standard fiber in bidirectional configuration

Management

- Open interfaces
- YANG-model based
- Support for CLI, REST, NETconf, RESTconf, SNMPv3 and WebGUI
- Streaming telemetry (gRPC)
- Secure software and configuration management

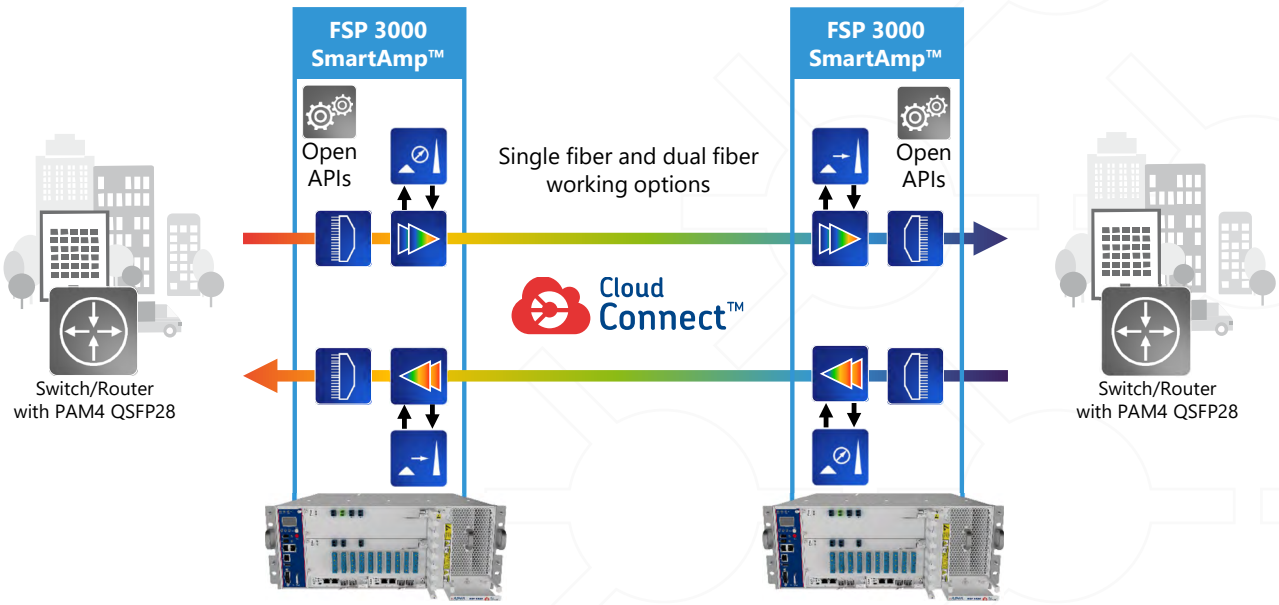
Operational simplicity

- Zero touch provisoning
- Script-based commissioning
- Linux-based containers for custom agent download and execution
- Simplified local provisioning options

Applications in your network

Cost-effective and compact data center interconnectivity in regional

- Point-to-point DWDM data center interconnect up to 100km and 4Tbit/s transmission capacity
- Metro network terminal over disaggregated, open line system
- Dual fiber and single fiber working options



For more information please visit us at www.advaoptical.com

Product specifications are subject to change without notice or obligation.

ADVA™ Optical Networking