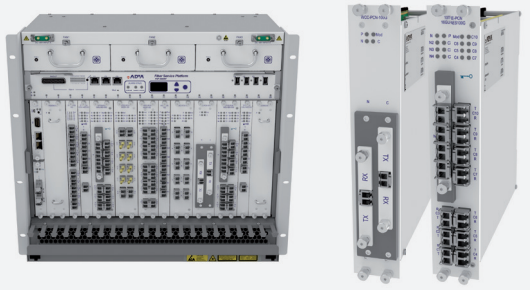
Efficient 100G Transport

FSP 3000 Modules

When Versatility Matters Most

Telecom service providers and enterprises have made it clear – they need 100G transport technology in their networks in order to handle increased data traffic and bandwidth consumption. While the industry has moved quickly with the development of 100G, speed isn't everything. Spectral efficiency, price, space and power dissipation metrics also have to be improved over today's 10G and 40G offerings. Our FSP 3000 100G modules are the most efficient and secure way to transport your data in all applications.



Highest Flexibility at Lowest Cost

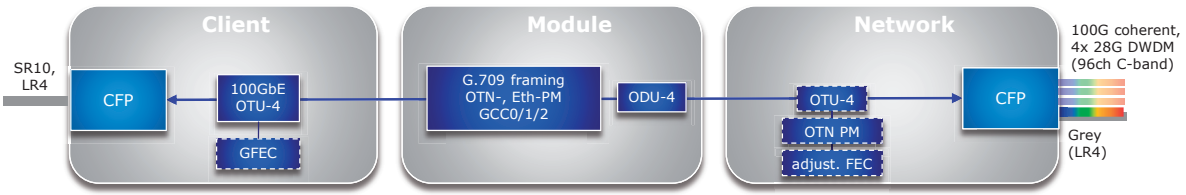
We recognize that there is no one-size-fits-all in optical transport. Enterprise, access, metro and long-haul networks all have different requirements. Our FSP 3000 therefore offers both a transponder and a G.709-compliant multiplexer variant, enabling you to transport a variety of protocols transparently and with the lowest latency. Ethernet, Fibre Channel, InfiniBand and SONET/SDH can all be transported efficiently and cost-effectively.

Our 100G modules are equipped with client and network pluggable interfaces. In accordance with the network requirements, you can choose between direct and coherent detection. Direct detection is optimized for enterprise and data center applications that typically consist of point-to-point networks bridging distances up to 200km. Coherent detection is optimized for long haul, new backbone and overlay networks, where reach, fiber impairment tolerance and network flexibility are the key.

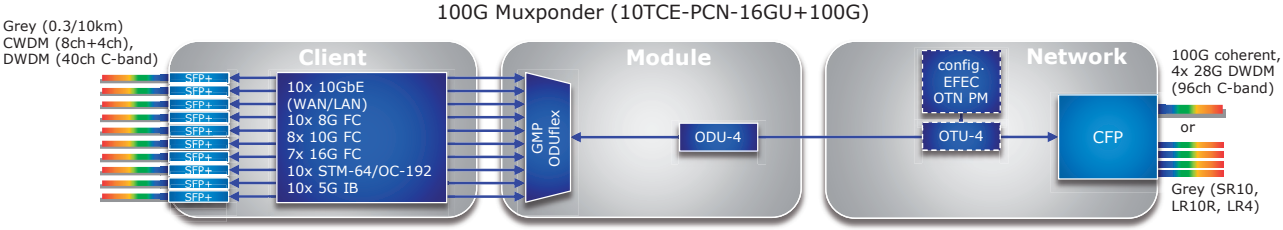
Key Benefits

- Lowest cost-per-bit transport available today
- Compact design for industry-leading space efficiency
- Low power consumption and minimum heat dissipation
- Wide selection of LAN, SAN and SONET/SDH client protocols
- Ultra-low latency for high-performance data mirroring
- ADVA ConnectGuard™ network encryption
- Pluggable client and network interfaces – coherent and direct detection

100G Transponder (WCC-PCN-100G)



100G Muxponder (10TCE-PCN-16GU+100G)



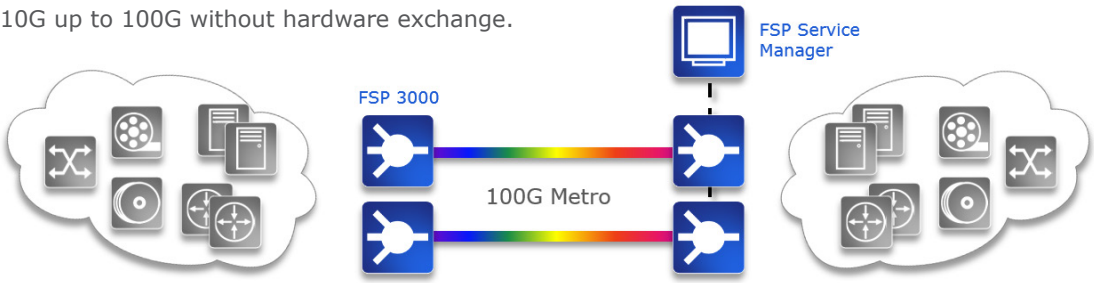
Scaling and Securing Data Center and IXP Connectivity

Data centers and Internet exchange points are experiencing an exponential increase in the amount of network traffic that they have to sustain due to cloud computing and emerging web applications. One of the most challenging issues in the design and deployment of a data center is power and space consumption. The energy consumption of the data center infrastructure and the Internet network topology mainly define the overall energy efficiency.

Our 100G modules provide industry-leading 100G density in a compact footprint with low power consumption and deliver wire-speed throughput at ultra-low latency. They are designed to respond instantly and efficiently to changing network conditions, ensuring mission-critical information is always available and always secure. Their flexible client architecture enables a seamless migration path from 10G up to 100G without hardware exchange.

With more and more data in the cloud, security is becoming vital. You need to ensure that your data is secure and intact. That's why we offer the most robust in-flight encryption available. In fact, we are the first in the industry to offer 100Gbit/s with built-in AES-256 encryption technology. We encrypt at the lowest network layer for 100% throughput regardless of packet size and our solution is completely protocol agnostic.

Reliable and secure data transport at the lowest possible cost per bit makes our 100G modules ideal for high-capacity LAN and SAN private-line services. They are the perfect solution for facilitating virtualization between data centers, business continuity and disaster recovery operations as well as cloud networking and Internet exchange applications.



Data Center / Internet Exchange

Data Center / Internet Exchange

Item Name	Muxponder 10TCE-PCN-16GU+ (AES) 100G	Transponder WCC-PCN-100G
System Requirements	FSP 3000 release 11.2 or later	FSP 3000 release 13.3 or later
Client Formats	10GbE LAN/WAN, 40GbE and 100GbE, 5G IB, 8G FC, 16G FC, OC-192/STM-64	100GbE, OTU-4
Line Interface	Direct detection (4x25G) CFP Coherent detection (1x100G) CFP	Direct detection (4x25G) CFP Coherent detection (1x100G) CFP
Protection	50ms line protection	50ms line protection
Wavelength Range	C-Band (50GHz)	C-Band (50GHz)
Mapping Process	Mapping into G.709 OTU-4	Mapping into G.709 OTU-4
Performance Monitoring	Physical Layer, EFEC, G.709 OTN	Physical Layer, EFEC, G.709 OTN
Power Consumption	100W	100W
Environmental Characteristics	+5°C … +40°C, 5% ... 85% relative humidity	+5°C … +40°C, 5% ... 85% relative humidity
Physical Dimensions	2 slots (W) x 5 height units (H)	2 slots (W) x 5 height units (H)

For more information please contact an ADVA Optical Networking consultant or visit us at www.advaoptical.com

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ADVA™ Optical Networking