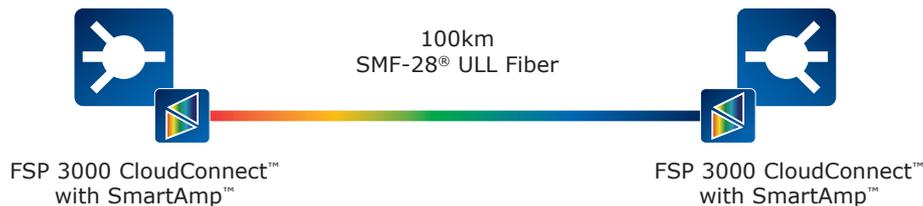


100G Direct-Detect Transmission for Cost-Optimized DCI

ADVA FSP 3000 CloudConnect™ and Corning® SMF-28® ULL Optical Fiber Drive New Efficiencies

Current data center interconnect (DCI) networks are proving to be bottlenecks and severely limiting growth. For ICPs and CSPs to continue meeting customer expectations and increasing efficiencies, they need to build optimized DCI infrastructures that deliver lowest cost per bit.

Corning and ADVA Optical Networking’s demonstration shows how the FSP 3000 CloudConnect™ solution can be augmented with SMF-28 ULL fiber to extend the reach of 100G PAM4 direct-detect transmission. The more stringent OSNR requirements of PAM4 compared to NRZ can serve to limit reach and restrict the selection of data center locations. The ultra-low loss inherent to SMF-28 ULL fiber serves to deliver enhanced OSNR at longer reach, making this an excellent option to extend PAM4 in metro DCI deployments. The increased range provides data center operators with more options to select locations where land costs are cheaper. In combination with the FSP 3000 CloudConnect™, which has been engineered to drive PAM4 wavelengths as efficiently as possible, lowest cost-per-bit 100G direct-detect transmission is achieved error-free over a distance of 100km.



ADVA FSP 3000 CloudConnect™

- Ultra-high density, lowest energy consumption and maximum security
- Direct-detect PAM4 optical layer based on SmartAmp™ technology
- MicroMux™ for client port flexibility without compromise
- Open line system (OLS) concept for network disaggregation
- Network Hypervisor enabling simple integration into SDN-controlled environments

Corning® SMF-28® ULL Optical Fiber

- Lowest attenuation of any terrestrial optical fiber, typically $\leq 0.16\text{dB/km}$ at 1550nm
- Fully compliant with ITU-T Recommendation G.652
- Enables extended reach and fewer amplifier huts
- Provides greater operational margin and increased upgrade capability
- Deployed globally in some of the most challenging network environments

FSP 3000 CloudConnect™



FSP 3000 SmartAmp™



Corning® SMF-28® ULL Optical Fiber

