

AccessWave25™

Seamless migration from 10G to 25G with DWDM tunability

Benefits

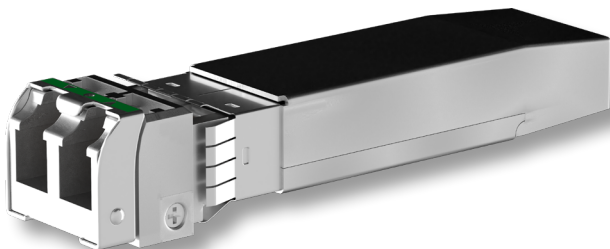
- Native transport of 25Gbit/s Ethernet and eCPRI services over DWDM links with up to 40km reach
- Electrically and mechanically compliant to SFP28 standard cages
- Health and status monitoring of remote-end plug through G.metro out-of-band communication channel
- G.metro wavelength auto-tuning technology eliminates set-up time and human errors
- Hardened designed for outdoor operation, for example in radio units
- Easily overlays over existing 10Gbit/s infrastructure offering a significant capacity increase with minimal investment

Overview

The growing demand for cable access and mobile fronthaul transport capacity creates the need for 25Gbit/s line rates at the edge.

Network operators are facing costly upgrades and disruptions in order to manage this upgrade. Our AccessWave25™ offers a simple and innovative solution to enable 25Gbit/s Ethernet (25GbE) DWDM connectivity with up to 40km reach from any device with an SFP28 port. What's more, its optical performance enables deployments using the same design rules of optical 10Gbit/s links.

With a standard-compliant SFP28 form factor, our AccessWave25™ pluggable transceiver offers a simple and innovative solution to easily migrate access networks to 25Gbit/s. With PAM4 modulation and direct detection technology, our AccessWave25™ provides a plug-and-play solution to connect devices with standard-based SFP28 ports, such as routers, switches or radio units to DWDM optical network infrastructure. And with our patent-pending distance optimization innovation, customers can deploy 25Gbit/s DWDM links stretching up to 40km. That means, AccessWave25™ is compatible with existing 10Gbit/s-based optical infrastructure, offering a seamless upgrade path from 10Gbit/s to 25Gbit/s without major changes in the existing network infrastructure. What's more, with its full C-band DWDM tunability and G.metro wavelength auto-tuning technology, our AccessWave25™ pluggable device further reduces complexity and operational costs. No commissioning or large spares pool are needed. Furthermore, through the G.metro out-of-band communication channel, users can monitor the operation status of remote-end pluggables, regardless of the data transmission protocol. Whether in cable access networks, mobile X-Haul wholesale applications or DWDM business services, our AccessWave25™ is the perfect solution for a cost-efficient migration to 25Gbit/s.



ACCESSWAVE25™

High-level technical specifications

Parameter	Minimum	Maximum
Operating wavelengths	1529.55nm	1567.5nm
Operating frequencies	191.25THz	196.0THz
Optical output power	-1dBm	3dBm
Line format/rate	PAM4 25.8 Gbit/s (25G Ethernet)	
Reach		20km NDSF (no FEC) 40km NDSF (with host-side FEC)
Side mode suppression ratio	35dB	
Optical reflectance	27dB	
Receiver input wavelength range	1260nm	1620nm
Receiver sensitivity		-15dBm (no FEC) -21dBm (with host-side KR4-FEC)
Receiver overload	-7dBm	
Receiver damage threshold		-4dBm
Optimum dispersion load	100ps/nm	800ps/nm
Maximum DGD tolerance		30ps
Clock accuracy	+/-100ppm	
Power consumption		3W
Case temperature range	-40°C	85°C
Interface compliance	SFF-8402	
Optical connector	Duplex LC	
Mechanical compliance	SFF-8432 Rev. 5.2a	
Management/electrical interfaces	SFF-8472 Rev 10.2, SFF-8690 Rev 1.4, SFF-8431	

