



AccessWave25™

Seamless migration from 10G to 25G with DWDM tunability

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.

Your benefits

✓ 25G DWDM with up to 40km reach

Native transport of 25Gbit/s Ethernet and eCPRI services over DWDM links with up to 40km reach

Standards-compliant SFP28

Electrically and mechanically compliant to SFP28 standard cages

Network visibility

Health and status monitoring of remote-end plug through G.metro out-of-band communication channel

C-Band tunable with G.metro auto-tuning

G.metro wavelength auto-tuning technology eliminates set-up time and human errors

I-temp operation

Hardened designed for outdoor operation, for example in radio units

Compatible with 10G optical layer

Easily overlays over existing 10Gbit/s infrastructure offering a significant capacity increase with minimal investment

High-level 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	PAM4 25.8 Gbit/s (25G Ethernet)	
Reach	40km NDSF (KR4-FEC)	20km NDSF (No-FEC)	
Side mode suppression ration	35dB		
Optical reflectance	27dB		
Receiver input wavelength range	1260nm	1620nm	
Receiver sensitivity	-21dBm (KR4-FEC)	-15dBm (No-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-8	SFF-8402	
Optical connector	Duple	Duplex LC	
Mechanical compliance	SFF-8432	SFF-8432 Rev. 5.2a	
Management/electrical interfaces	SFF-8472 Rev 10.2, SFF-	8690 Rev 1.4, SFF-8431	
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Applications in your network

25Gbit/s DWDM connectivity with up to 40km reach from any device with an SFP28 port

