Optical Engines

AccessWave™ Series

Seamless upgrade of access networks capacity with auto-tunable DWDM plugs
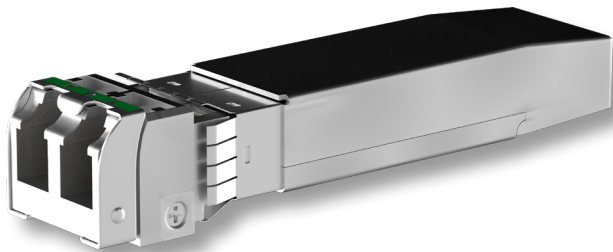
Benefits

- **Host independent**
  Native transport of services up to 25Gbit/s from any device with an SFP/SFP+/SFP28 port

- **1G/10G/25G DWDM wavelengths**
  Best performance with our turn-key FSP 3000 OLS optimized for pasive DWDM access networks

- **Remote plug visibility**
  Health and status monitoring of remote plugs 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

- **Standards-compliant SFP**
  Electrically and mechanically compliant with standard SFP cages, as well as variants for the new Smart Tunable MSA

Overview

The unceasing explosion in bandwidth consumption is forcing network operators to upgrade the capacity and speed of their access networks. Our AccessWave™ Series of pluggable devices boosts the capacity of fiber-based access networks without significant changes to existing hardware equipment. With a standardized small form-factor and G.metro wavelength auto-tuning technology, our AccessWave™ Series also reduces inventory and provisioning efforts to a minimum, and integrates seamlessly with existing Adtran or third-party hardware.

Our AccessWave™ series of self-tunable DWDM pluggable devices help network operators increase access network capacity without replacing existing demarcation or aggregation devices. With a standardized small form factor pluggable (SFP) design, our AccessWave™ can be plugged directly into any device's standard SFP ports (SFP, SFP+ or SFP28, according to the line rate). What's more, with G.metro self-tuning technology, our pluggable devices substantially reduce inventory sprawl and configuration efforts. Within seconds, each remote AccessWave™ plug on a DWDM optical link can self-tune to the wavelength determined by its physical connection to the passive filter without manual intervention. Furthermore, AccessWave™ plugs also feature an optional remote diagnostics capability through the G.metro out-of-band communication channel to monitor the operation status of the remote end, regardless of the data transmission protocol. Our AccessWave™ Series of pluggables support line-side rates from 1Gbit/s up to 25Gbit/s that can be transported over DWDM optical networks. Our turn-key FSP 3000 OLS optimized for greenfield passive DWDM access networks provides users with the highest performance at the lowest cost and operational complexity. With their robust industrial-temperature design, our AccessWave™ pluggable devices are suitable for both indoor and outdoor deployment and provide a solid foundation for next-generation optical access networks.

ACCESSWAVE™ SERIES

High-level technical specifications

Parameter	AccessWave1™ (ER)	AccessWave10™ (ER)	AccessWave10™ (ZR)	AccessWave25™ (LR)	AccessWave25™ (ER)
Type	Duplex	Duplex	Duplex	Duplex	Duplex
Line rate	1Gbit/s	1-11Gbit/s	1-11Gbit/s	1-25.8Gbit/s	PAM4 25.8 Gbit/s 25GbE
DWDM tuning range	C-band 9-channel	C-band 9-channel	Full C-Band	Full C-Band	Full C-Band
Reach	40km	40km	80km	15km	40km
Frequency grid	100GHz	100 GHz	50/100 GHz	100 GHz	100 GHz
G.metro auto-tuning	Yes	Yes	Yes	Yes	Yes
G.metro communication channel	Yes	Yes	No	Yes	Yes
Operating temperature range	I-temp	I-temp	I-temp	I-temp	I-temp
Form-factor	SFP	SFP+	SFP+	SFP28	SFP28
Maximum power consumption	1.5W	2W	2W	3W	3W

Applications in your network

AccessWave™ enables DWDM connectivity from any device with an SFP/SFP+/SFP28 port

Mobile networks and access aggregation

Fixed broadband access and enterprise networks

Adtran

TL9000
TL19.1270

ADTRAN Certified Supplier
ISO 9001
ISO 14001
TL 9000