INFINITY ACCESS™ unlocks network capacity within an existing fiber plant to achieve economies of scale, reduce capital expenditures and lower operational costs by creating simple, integrated and future-proof optical access networks.

Key Features

- Patented INFINITY TUNABLE LASER™ simplifies WDM logistics and reduces inventory management cost
- Fully symmetric and dedicated connections without traffic sharing and complex bandwidth control
- Transparent WDM technology that is compatible with 3rd party equipment without causing interference
- Supports up to 192 wavelengths in expansion mode: GbE, 10GE, CPRI, eCPRI or mixed
- Service traffic distance up to 20 km without amplifiers
- Easy installation, simple commissioning, auto-provisioning for faster deployment
- Ultra-low latency supported by passive remote node for 5G
- Multiplex channel addition function using DWDM technology of 50 GHz (0.4 nm) and 100 GHz (0.8 nm) units
- Supports multiple network topologies such as PTP (MP), Linear, and protected Ring
- OTDR, OSU feature for real-time management, monitoring and service sustainability
- Passive option with management feature by adding simple management component
- Both tunable and passive option are available from a single platform

Note: 1. Number of available channels represents current release plan which is subject to change. Contact your SOLiD representative for further details.
Overview

Using the patented INFINITY TUNABLE LASER™ along with wavelength-division multiplexing (WDM), INFINITY ACCESS™, unlike other passive optical network (PON) solutions, provides independent channels of traffic while maintaining PON’s simplicity and cost-effectiveness through the use of fully passive remote nodes.

Each independent channel is capable of carrying Gigabit Ethernet (GbE) and/or 10Gbps (CPRI/eCPRI), which makes INFINITY ACCESS™ a perfect fit in today’s and tomorrow’s access infrastructure like HetNet, super broadband and 4G/5G mobile fronthaul.

Supplied with an Element Management System (EMS), Optical Switching Unit (OSU) and Optical Time-domain Reflectometer Unit (OTRU), INFINITY ACCESS™ allows easy and simple management as well as real time fault detection and diagnosis. The EMS provides effortless provisioning through automated path detection, and it supports a standard interface to existing operation and management systems.

INFINITY ACCESS™ has several unique options to support various protocols. Active and passive options enable the mobile operator to migrate 4G/5G mobile fronthaul seamlessly into the mobile solution. Passive options offer passive filtering, a fixed wavelength optical transceiver (SFP), and wavelength monitoring and switching capabilities within 50 ms.

INFINITY ACCESS™ supports multiple topologies including point-to-point, point-to-multipoint/star, linear chain and ring.

INFINITY ACCESS™ Central Office Terminal (COT)

- User Interface Card¹: CPRI (Option 8) / eCPRI / GbE (1G) / 10GE
- Hardware: 19’ x 6RU (excluding passive filter shelf), 20 slots
- Power: DC -48/+24V, 1+1 protection / Operating temp: -5 ℃ to +50 ℃

INFINITY ACCESS™ Remote Node (RN)

- Fully passive RN has two parts: Main RN (MRN) & Cell site RN (CRN)
- MRN groups CWDM bands, while CRN filters each group into individual channels towards customer premise
- Temperature rated for outdoor use; Indoor rack mount and outdoor pole/wall mount option available

INFINITY TUNABLE LASER™ for Customer Premise/RT

- Full MSA compliant SFP(+) form factor; Compatible with 3rd party products (RRHs, Switches, Home GWs and others)
- No additional power required; Temperature rated for outdoor use
- Fully managed through INFINITY ACCESS™ COT
- Remote Terminal (RT) hardened outdoor enclosure² to provide grey interface also available

INFINITY ACCESS™ EMS

- Graphic user interface for Client
- Server-client architecture (Server: Linux, Client: MS Windows);
- TL1 over TCP/IP
- Supports System management for FCAPS

Notes: 1. Ask SOLiD for part numbers and availability. 2. Ask SOLiD for detailed specifications and availability.
## System Specifications

<table>
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<tr>
<th>Option</th>
<th>Item</th>
<th>Specification</th>
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| **Active Option (Tunable)**   | System Capacity and Dimensions    | Capacity: 96 channels  
COT: 19’ x 8.5U  
RN Indoor: 19’ x 1U  
RN Outdoor: 247 (D) x 332 (W) x 95 (H) mm (Pole, wall mount enclosure for outdoor)  
Topology                                      Point-To-Point / Point-To-Multipoint / Protected Ring / Linear  
Wavelength Grid                  ITU-T G.694.2 CWDM grid  
Distance                           ~ 20 km  
Interfaces                        Protocol: CPRI (Option 8) / eCPRI / GbE (1G) / 10GE  
Tunability (T-SFP)                Tunable transmitter(16λ -Tunable per CWDM band)  
Up to 10.3125 Gb/s Optical Transceivers  
Link Protection Switching Time   Less than 50 ms  
Power                             -48V/+24V DC (redundant)  
Power Consumption                 Max 500 Watt per chassis (48 channels full configuration)  
Operation Environment            Temperature: -5 ℃ to +50 ℃ (for COT) / -30 ℃ to +85 ℃ (for RN)  
Humidity: 5% (RH) to 80% (RH)  
OAM&P                            System management with TL1 over TCP/IP  
                                      Channel status and operation monitoring / Remote DDM                                                                                                                                                                                                                          |
| **Passive Option with Management Feature** | System Capacity and Dimensions | Capacity: 8 channels  
COT: 19’ x 8.5U (For management feature)  
COT Passive: 19’ x 1U, 4 slot  
RN Passive: 247 (D) x 332 (W) x 95 (H) mm (Outdoor, installed cell-site)  
Topology                                      Point-To-Point / Protected Ring  
Wavelength grid                  ITU-T G.694.2 CWDM grid  
Distance                           ~ 10km  
Interfaces                        Protocol: CPRI (Option 8) / 10GE  
Link Protection Switching Time   Less than 50 ms  
Power                             -48V/+24V DC (redundant)  
Power Consumption                 Max 350 Watt per chassis (Full configuration)  
Operation Environment            Temperature: -5 ℃ to +50 ℃ (for COT) / -30 ℃ to +85 ℃ (for RN)  
Humidity: 5% (RH) to 80% (RH)  
OAM&P                            System management with TL1 over TCP/IP  
                                      Channel and wavelength monitoring and operation monitoring / Remote DDM                                                                                                                                                                                                 |