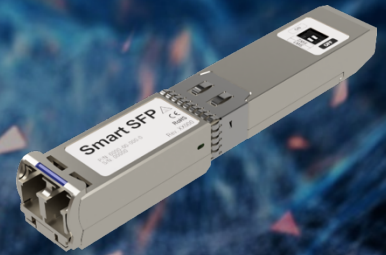# PlumSpace

Smart SFP NID

Network Interface Device, Ethernet demarcation

Smart SFP NID provides standards-based demarcation solution for delivering high-speed secure SLA-guaranteed Ethernet services with end-to-end lifecycle management – activation testing, continuous performance monitoring, remote troubleshooting and fault management.

The most important functions are implemented in hardware to ensure low latency and minimal packet jitter while supporting wire-speed packet processing. The ability to install standard Linux packages provides familiar diagnostic tools at any point on the network.
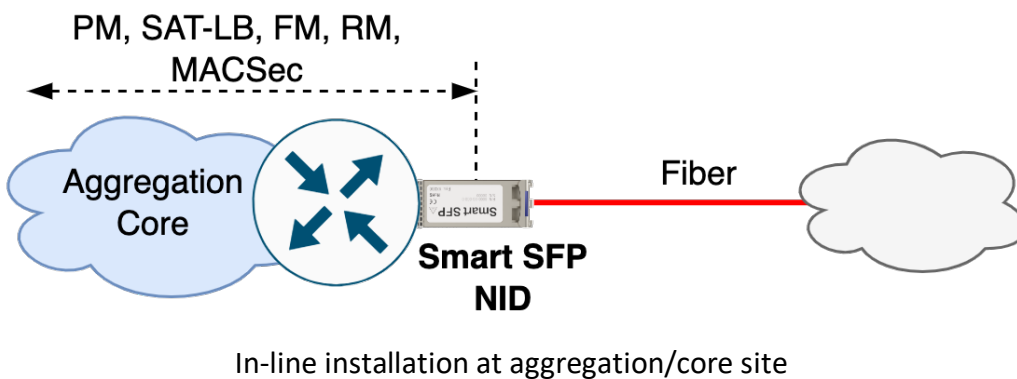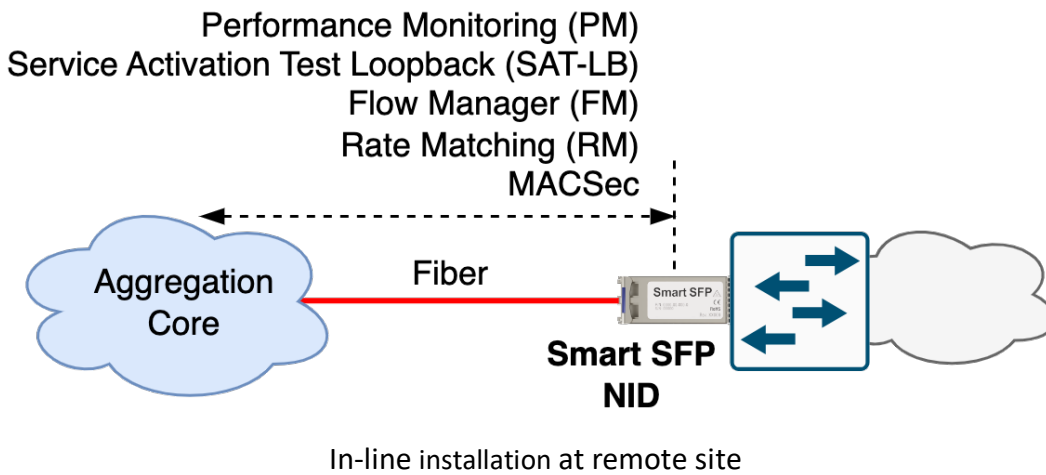
Smart SFP NID easily integrates with existing network equipment, requiring no additional rack space or power. By simply plugging into existing network equipment, Smart SFP NID adds SLA monitoring capabilities, enhancing service and improving the customer experience.
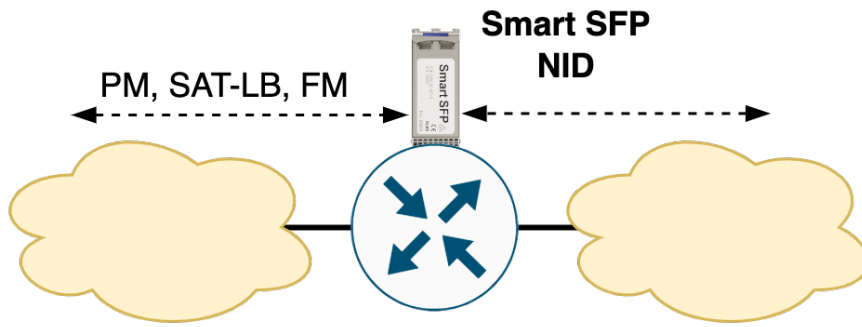
Applications:
- NID
- CPE
- IP SLA probe
- Demarcation device
- Network appliance

Key features:
- 10 Gbps packet processing
- Advanced traffic management with service mapping, policing and filtering
- Availability, loss, delay measurements
- Easy integration with 3rd party IP SLA agents and systems
- MACSec
- Service Activation Test loopback

Performance Monitoring (PM)
Service Activation Test Loopback (SAT-LB)
Flow Manager (FM)
Rate Matching (RM)
MACSec

In-line installation at remote site

PM, SAT-LB, FM, RM, MACSec

In-line installation at aggregation/core site

Out-of-line installation at any point in the network

Demarcation:
- Policing
- Filtering
- Statistics
- VLAN modification
- Flow classification based on L2/L3/L4 fields
- Up to 1024 classification rules
- VLAN, Q-in-Q, up to 3 VLAN tags

Assurance:
- Port and per-flow loopback with MACs swap
- Service Activation Test loopback (Y.1564, RFC 2544)
- TWAMP sender and responder
- Statistics

Security:
- MACSec linerate encryption and decryption
- IEEE 802.1AE/AEbn/AEbw
- GCM-AES 128 and 256 bit
- 16 SC and 32 SA in each direction

Management:
- CLI over SSH
- Static IP, DHCP
- IPv4, IPv6, VRF
- VLAN
- ACL, VPN
- PTP slave, NTP client
- LED status indicator
- Remote software upgrade

General:
- 1/10 Gigabit Ethernet
- Independent speeds at line and host interfaces
- Line to host rate matching 1GE to 10GE and 10GE to 1GE
- Max frame size 10000 bytes
- Digital Diagnostics Monitoring (DDM)
- Inline and out-of-line installation
- SFP/SFP+ MSA compliant
- Multi-vendor compatibility
- Industrial temperature

Ordering information

Intelligent SFP module, MIPS CPU, Ethernet switch, 1/10 Gigabit Ethernet, DDM, 1310 nm, 10 km, 2xSMF, LC

Find out more: plumspace.com, info@plumspace.com   We are open for partnership