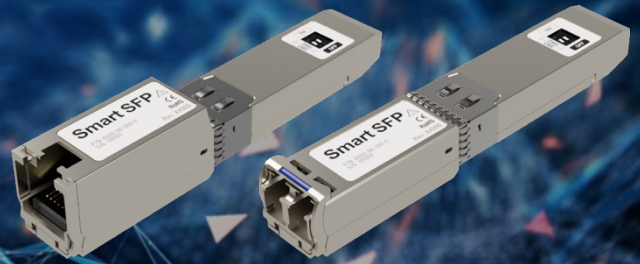


Smart SFP Loopback

Advanced network troubleshooting



Smart SFP Loopback is a device in SFP form factor for loopback traffic at the Data Link, Network and Transport layers of the OSI model.

Incoming traffic is looped back with MAC and IP addresses and TCP/UDP ports swapped if necessary.

Smart SFP is installed in any network device with an SFP slot and acts simultaneously as both a standard SFP module and Smart Loopback.

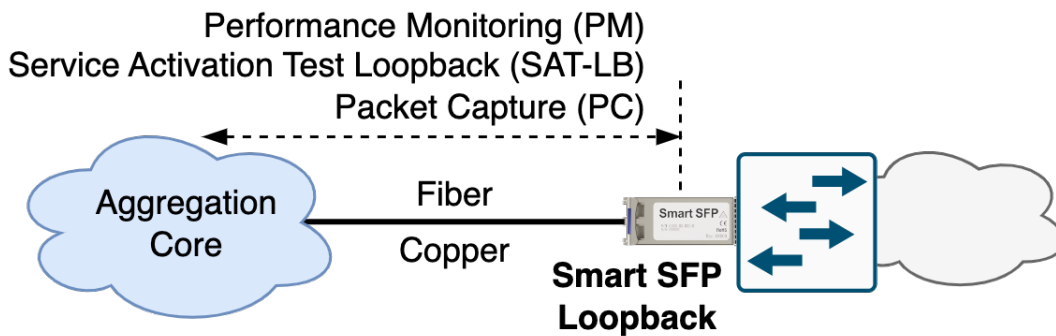
Smart SFP Loopback can be used as a remote loopback with Ethernet test and measurement equipment from any vendor.

Applications:

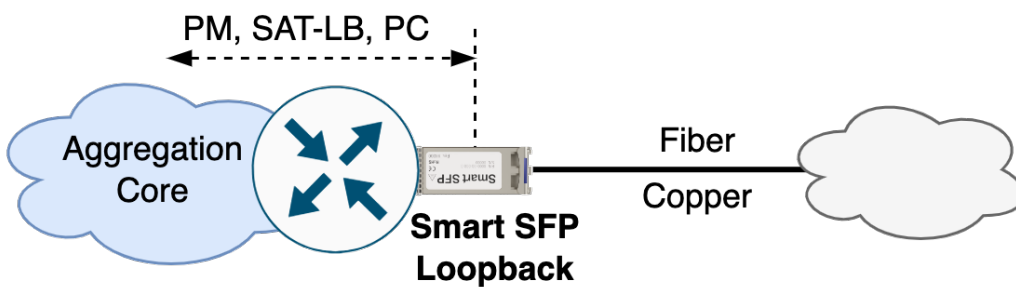
- Responder for Service Activation Tests
- Performance analytics
- Advanced network troubleshooting
- On-demand testing

Key features:

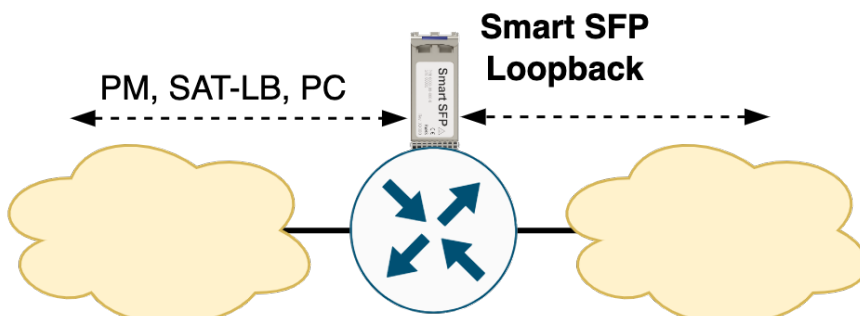
- Smart Loopback L2-L4
- Loopback by filters
- TWAMP
- Compatible with testers of any vendor
- Packet capture



In-line installation at remote site



In-line installation at aggregation/core site



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

Smart Loopback:

- MACs, IPs and TCP/UDP ports swap
- Persistent, on-demand
- Condition: own MAC dst or by filter
- Filter by fields: VLAN ID, IP src/dst, TCP/UDP src/dst ports
- 12 filters on each port
- Redirect packets to another MAC/IP (headers rewrite)
- TWAMP Light at line rate (HW offload)
- Smart Loopback and TWAMP Light on behalf of another device (another MAC dst)
- Statistics
- Compatible with testers of any vendor

Packet capture:

- Remote packet capturing via ERSPAN
- Capturing by direction: Tx, Rx, both
- Capturing by filter on Rx
- Rx filters fields: VLAN ID, protocol, IP src/dst, TCP/UDP src/dst ports, errored packets
- Sampling, policing
- Packet slicing
- Duration: secs/bytes/packets
- HW timestamping
- WireShark compatible
- Statistics

Performance monitoring:

- TWAMP sender and responder
- iPerf

Management:

- CLI over SSH, SNMP, REST API
- Static IP, DHCP
- IPv4, IPv6, VRF
- Loaned IP
- VLAN
- ACL, VPN
- PTP slave, NTP client
- Remote control from IP/Ethernet testers
- Remote software upgrade

General:

- 1/10 Gigabit Ethernet
- Max frame size 9600 bytes
- Up to 3 VLAN tags and MPLS labels
- Inline and out-of-line installation
- Digital Diagnostics Monitoring (DDM)
- SFP/SFP+ MSA compliant
- Multi-vendor compatibility
- Industrial temperature

Ordering information

Models:

Intelligent SFP module, ARM CPU, FPGA, Gigabit Ethernet, 1000BASE-LX, DDM, 1310 nm, 20 km, 2xSMF, LC

Intelligent SFP module, ARM CPU, FPGA, Gigabit Ethernet, 1000BASE-LX, DDM, Tx: 1310 nm, Rx: 1550 nm, 20 km, SMF, LC

Intelligent SFP module, ARM CPU, FPGA, Gigabit Ethernet, 1000BASE-LX, DDM, Tx: 1550 nm, Rx: 1310 nm, 20 km, SMF, LC

Intelligent SFP module, ARM CPU, FPGA, Gigabit Ethernet, 10/100/1000BASE-T, RJ-45

Intelligent SFP module, ARM CPU, FPGA, 1/10 Gigabit Ethernet, 10GBASE-LR, DDM, 1310 nm, 10 km, 2xSMF, LC

Feature sets:

Loaned IP, PTP, Smart Loopback, Packet capture

Find out more: plumspace.com, info@plumspace.com

We are open for partnership