

10GE OPTICAL ETHERNET TRANSPORT SOLUTION

MSP-10GE Optical Model



MSP-10GE Copper Model



Models

- MSP-10GE-OP-DC
- MSP-10GE-CO-DC
- MSP-10GE-CO-AC

Key Features

- **Scalable protected capacity**
2x10GE trunk ports (XENPAK) & 24x1GE client ports (SFP or RJ-45)
- **IEEE-based Ethernet transport**
Open standard based transport ensures interoperability with 3rd-party Ethernet equipment. Protects your capital expenditure.
- **Integrates switching, aggregation and DWDM transport**
A networking solution in 1RU that traditionally is performed in multiple platforms with other vendor solutions.
- **VLAN-based forwarding**
Support of MEF-defined E-Line and L-LAN services for any topology
- **Extensive management**
CLI, WEB & SNMP-v2c support with in-band and out-of-band mgmt ensures easy provisioning and seamless integration with an NMS system
- **Extensive monitoring**
Optical layer measurements, detailed Ethernet statistics and ability to set threshold alert levels on each port
- **Hot-pluggable optics**
Enables true “pay-as-you-grow” as well as on-site upgrades.
- **Compact platform with low power consumption**
1RU with 80W power consumption ensures low operating costs at the CO and carrier hotel. 20Gbit/s capacity in 1RU!

Product Positioning

The MSP-10GE platform is based on next generation technology that integrates key networking functions into a compact 1RU footprint. This makes it a truly unique solution for the service provider who wants to expand or build metro network infrastructure for cost-effective delivery of residential and business services.

Target Applications	Key Benefits of the MSP-10GE
<p>Residential Services</p> <ul style="list-style-type: none"> • VoD applications raise the need for bandwidth efficient distribution of unicast, multicast and broadcast streams • New time sensitive services such as VoIP, on-line gaming and VoD require low latency, jitter and fast protection schemes • IP-based transport, which is needed in the core, is cost-prohibitive in the Metro and adds considerable system complexity 	<ul style="list-style-type: none"> • Drop & Continue operation means that only one stream needs to be sent for any multicast or broadcast transmission • Wire-speed processing ensures very low latency and jitter. Furthermore, less than 50ms switching time for point-to-point connections and less than 200ms in any ring topology is guaranteed. • VLAN-based forwarding is simple to provision and manage and world-wide adoption of Ethernet has driven price down significantly
<p>Business Services</p> <ul style="list-style-type: none"> • Poor bandwidth utilization typically encountered in legacy TDM systems and adapting to customer bandwidth needs is not straightforward due to coarse bandwidth granularity • Businesses have various traffic needs ranging from best effort Internet access to time-sensitive video conferencing. Traffic is treated with equal priority in TDM systems and overbooking is not possible. • More and more business cannot afford to be disconnected even for short durations and require that a protection scheme is used on their uplink 	<ul style="list-style-type: none"> • Statistical multiplexing ensures that all available bandwidth can be used to optimize revenue. • Using built-in bandwidth control on any port (in 0.15Mb/s steps) any customer needs can be met and ensures that the customer only gets what he pays for. Increasing the bandwidth for add-on services is easy and can be provisioned in a single step. • 4 Classes of Service for QoS control with strict scheduling allows overbooking with low priority traffic, while high-priority traffic is not affected • Using LACP on the link interfaces, 1+1 protection switching can be offered to protect against fiber breaks