Product Overview

100G Transponder/Muxponder

Description

The new 100G muxponder/transponder by MICROSENS enables carriers to extend existing 10G networks in a flexible and cost-effective manner. The installed basic configuration is completely maintained. A redesign of the network is not required. The muxponder/transponder uses an existing wavelength in the DWDM network either for the transmission of 10x 10G or as a 100G transmission channel. In spite of the double function, the system only takes up one height unit. In comparison with other solutions, the 100G muxponder, thus, saves considerable space and, as a result, costs for space and energy.

For many carriers, 10 Gbps will continue to be the most important transmission rate in the near future. The call for bandwidth, however, is continuously increasing and the demand for connections with a transmission rate of 100 Gbps is growing. MICROSENS enable their customers to immediately use the 100G technology by means of the combination of a 100G transponder and muxponder. The operating mode is exclusively determined by the corresponding firmware. Service providers will benefit in even two respects: The existing networks are completely maintained. At the same time, the providers can now also fulfil the individual demands of their customers for fast Ethernet connections in the short term.

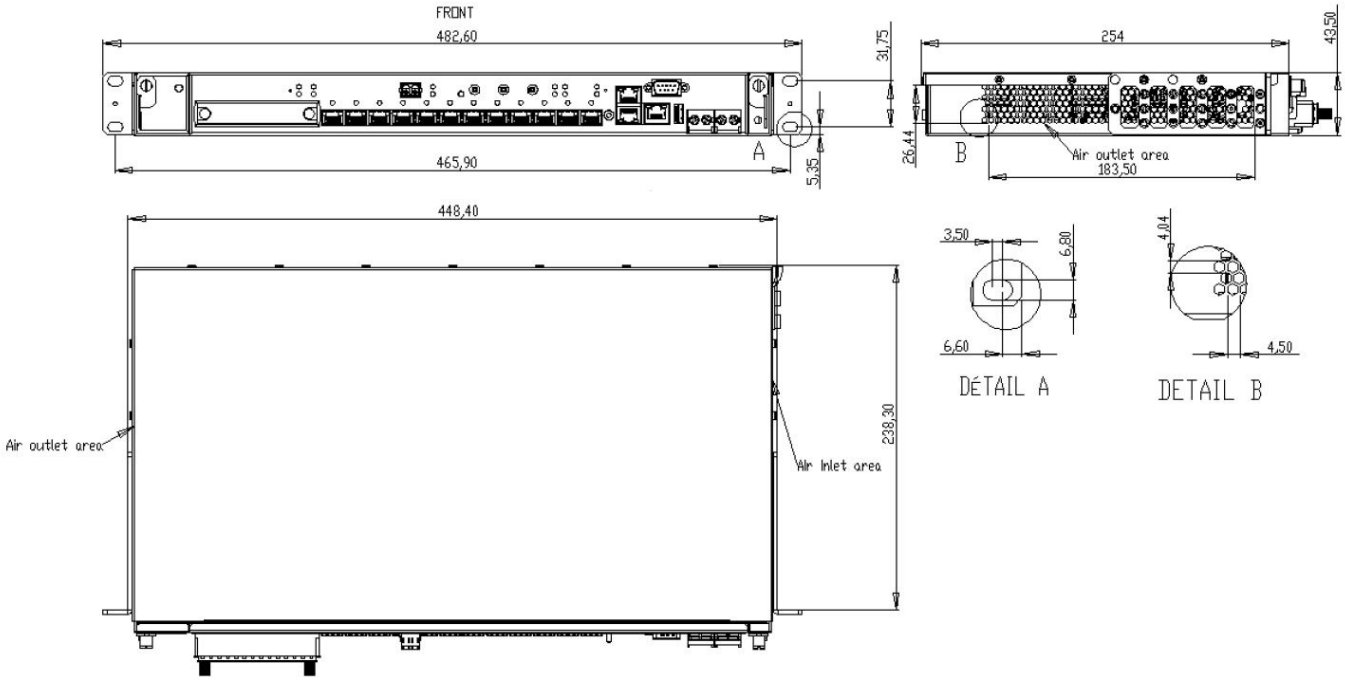
If the system is used as a 100G muxponder, the 10 independent channels can be used to transfer different protocols, such as 8G Fibre Channel, OTU2, OC-192/STM-64, 10GbE, 10G Fibre Channel or 40G Ethernet. When being employed as a transponder, the MICROSENS 100G solution again proves to be a convincing one due to its sophisticated functions, which protect investment in the long term and increase the quality level at the same time. On demand, a programmable chip permits an update of the MICROSENS Next Generation Fast Error Correction (NG FEC). This allows the carrier to benefit in the short term from the new findings on error correction in 100G networks. In total, the optical signal-noise ratio, i.e. the OSNR performance, is in the range of 14 dB. The transponder uses DP-QPSK with a coherent receiver as a digital modulation procedure. It ensures the compatibility to the ITU grids with 50 and 100 GHz.

The MICROSENS 100G solution can be monitored via SNMP or a standardized management interface, including a Command Line Interface (CLI). Moreover, Digital Diagnostics Management (DDM) can be used via the SFP+ interfaces. At the line end, a 10-Mb data communications channel is provided for remote management. The management via the MICROSENS Network Management System is also supported.

Properties

- 100G Transponder and Muxponderin one device (firmware dependent)
- Unique 1 U 100G solution for spacelimited applications
- Lower cost of spare parts for 100G applications
- MICROSENS NG FEC for extended distances
- Flexible aggregation allowing multiplexing of services other than 10G
- Applications:
  - Backhaul for Business Ethernet Services
  - Data Center interconnect
  - Disaster Recovery
  - Triple or Quadruple Play
  - Wireless Backhaul
  - IP DLC/DSLAM Backhaul
  - Transport Infrastructure

Dimensions


FRONT
482,60
465,90
31,75
5,35
A
254
43,50
26,44
B
Air outlet area
183,50
448,40
238,30
Air outlet area
Air inlet area
3,50
6,80
6,60
DÉTAIL A
4,04
4,50
DETAIL B

Order Information

Description	Article Number
100GbE Transponder, 100GbE client port, Line Port – 100G with DCC and FEC, CFP Client and Tunable FFI Line Interface (CFPs Not Included, DWDM FFI Included)	**MS430894M**
Aggregation and Transport Unit, 10x10GbE into 100G, 10 Access Ports, 1 Line Port – 10GbE with DCC and FEC, SFP+ Clients and Tunable FFI Line Interface (SFP+s Not Included, DWDM FFI Included)	**MS430895M**
Aggregation and Transport Unit, Multi-Protocol, 10 Local Ports, 1 Line Port, 8G FC, 10G FC, OC-192/STM-64,OTU2, OTU2e, 10GigE with DCC, 1 100G Line Port, SFP+ Clients and Tunable FFI Line Interface (SFP+s Not Included, DWDM FFI Included)	**MS430896M**
Aggregation and Transport Unit, Multi-Protocol, 10 Local Ports, 1 Line Ports, 40 GigE and 10GigE with DCC, 1 100G Line Port, SFP+ Clients and Tunable FFI Line Interface (SFP+s Not Included, DWDM FFI Included)	**MS430897M**
100GbE Transponder , one 100GbE client port, 1 Line Port – 100G with DCC and FEC, QSFP28 Client and Tunable Line Interface QSFP28 not Included, Tunable Line Interface included, Includes Fans, 19" brackets, DC power cables and ground cables.	**MS430898M**
100GE Multi-Protocol Muxponder, 10 Access Ports, 1 Line Ports - 8G FC, 10G FC, OC-192/STM-64,OTU2, OTU2e, 10GigE with DCC, 1 100G Line Port, SFP+ Clients and Tunable Line Interface (SFP+s Not Included, Tunable Line Interface included). Includes Fans, 19" brackets, DC power cables and ground cables.	**MS430899M**