100G AGGREGATION MODULE

- Efficient 10G and 40G services aggregation to 100G line
- SFP+ client ports with multiprotocol support:
 - 10GbE; OTU2/OTU2e; 8G/10G/16G Fibre Channel; OC-192/STM-64
- OTU4 line output simplifies higher order aggregation to 200G
- Increased bandwidth utilization
- Applications:
 - o Carrier managed services
 - Ethernet business services
 - Campus connectivity
 - SAN-based backup and recovery
 - o High speed backhaul



OVERVIEW

The MICROSENS 100G Aggregation module allows network operators to deliver a wide range of connectivity and managed services.

Designed as a companion card to the MICROSENS FlexRate Transponder/Muxponder (see separate data sheet), it aggregates both 10G and 40G services on to a single 100G optical carrier for greater bandwidth and spectral efficiency.

The combination of the two modules provides extensive service flexibility to the network by providing a low cost on-ramp for lower speed services to a high speed 100G or 200G link.

The 100G line is G.709 OTU4-framed and allows the signal to be handed off natively as a client either to the MICROSENS FlexRate module to be further aggregated to a 200G coherent line or, alternately, to an OTN switched core.

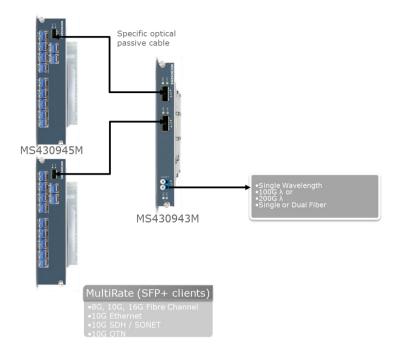
This approach is designed to provide a modular, cost-efficient approach to multiplexing 10G and 40G services onto a 200G wavelength.

It also allows the operator to add services quickly by simply plugging in a new client optic without having to turn up a new wavelength. The MICROSENS 100G Aggregation module provides ten SFP+ client interfaces supporting 10GbE, OTU2/OTU2e, 8G/10G/16G Fibre Channel, OC-192/STM-64.

It also comes in a 40G variant that supports a combination of 10GbE and 40GbE clients. Occupying two slots, up to two modules can be co-located with their companion FlexRate module in a single 2RU shelf.

MANAGEMENT

Encryption modules can be managed through SNMP or via the MICROSENS standard element level management interfaces, which include a CLI (Command Line Interface) and MICROSENS java-based GUI (Graphical User Interface) or MICROSENS Network Management Platform.



Order Information		
Article no.	Description	
MS430945M	10G to 100G aggregator module, 10 Multiprotocol clients Ports , 1 Line Port , SFP+ Clients and QSFP28 OTU4 Line Interface (SFP+s and QSFP28 Not Included). Compatible with MS430504M and MS430501/3M chassis.	
MS430945M-40	2 x 10GbE & 2 x 40GbE to 100G aggregator module, 10 client ports, 1 line port, SFP+ clients and QSFP28 OTU4 line interface (SFP+s and QSFP28 not included).	

Technical specifications

Type

100G Aggregation Module

Protocols

40GbE; 10GbE; OTU2/OTU2e; 8G/10G/16G Fibre Channel; OC-192/STM-64

Line - OTU4

Optical Interface

Client – 10xSFP+ Line – 1xQSFP28

Management

MIB - SNMP V2c private MIB

Remote Management – 10Mb Ethernet DCC

Module Size

2 slots

Operating Temperature 0°C to +50°C

Storage Temperature

-20°C to +85°C

Indicators

Status: HW ready, SW ready Alarm: Port Down (Client and Line)

Performance

Power: 75W includes client optics

Reference standards

ITU-T G707 12/2003 edition; ITU-T G709; IEEE 802.3-2002; IEEE 803.3ae-2002; IEEE 802.3ba

MICROSENS GmbH & Co. KG Kueferstr. 16 D-59067 Hamm Germany

Tel.: +49 2381/9452-0 Fax: +49 2381/9452-100 E-Mail: info@microsens.com Web: <u>www.microsens.com</u>

MICROSENS reserves the right to make any changes without further notice to any product to improve reliability, function or design. MICROSENS does not assume any liability arising out of the application or use of any product. pp/2418