

WBM™-20G/20G4

- LEVERAGE MORE FROM YOUR EXISTING INFRASTRUCTURE
- CREATE NEW REVENUE OPPORTUNITIES FOR HIGH-SPEED LAN AND SAN
- OFFER YOUR CUSTOMERS MORE ADVANCED SERVICES
- REDUCE THE NEED FOR COSTLY INSTALLATIONS
- EXPAND THE REACH AND VERSATILITY OF YOUR NETWORK APPLICATIONS
- TRANSPORT MULTIPLE FORMATS OF VIDEO, DATA, AND VOICE UP TO 80 KM

Description

WBM-20G and WBM-20G4 are CWDM/DWDM Multiplexer solutions that deliver up to 16 channels and up to 160 Gbps over a pair of SM fiber cables for a distance of up to 80Km. WBM-20G can be upgraded to provide 32 DWDM channels (via stacking).

WBM-20G's transparent fiber-in fiber-out transponder interfaces support all digital protocols in the range 30 Mbps to 2.67 Gbps and **10 Gbps** while performing 3R (Reshape, Regenerate and Retransmit) signal conditioning, including:

- Ethernet – Fast, Gigabit Ethernet SX & LX, 10 Gigabit Ethernet
- FDDI
- ESCON
- SONET/ATM (OC-3/STM-1, OC-12/STM-4, OC-48/STM-16 and OC-192/STM-64)
- FICON
- Fiber-Channel (1Gbps, 2Gbps)

Additional support is available for proprietary protocols operating within the specified data range. All features are available as hot-swappable modules.



The WBM-20G4 chassis is 19" (inch) rack-mountable (optional 23") and 2U in height. It supports up to 4 hot swappable modules.

Both products include an optional hot swappable FAN tray, optional two hot swappable power supplies (AC or DC), making it an affordable and scalable solution for small to large enterprises and service providers.

Management

WBM-20G is managed and controlled via WBM-20G-ICM, Intelligent Control card, which provides status indication and control of the WBM-20G system.

WBM-20G supports Field's management software download (via TFTP), local management via CLI port and Network-Management via SNMP.

WBM-20G does not require a specific Network Management System (NMS) and can operate with any SNMP browser.

To enhance the user experience we suggest using Olencom's Graphic Network Management (GUI) application - OlencomView to simplify the system's monitoring and controlling.

Topologies

WBM-20G systems can be configured as point-to-point direct, as point-to-point with intermediate units or as different rings in an OADM. This gives an opportunity for add and drop configuration from one to four channels per module in any places in the ring.



Specifications

Transport technology:	CWDM or DWDM
Number of backbone fibers:	1 (SO mode) or 2
Wavelengths/applications per backbone:	up to 16 (CWDM) , up to 8 (SO CWDM), up to 16 (DWDM & SO DWDM)
Topology:	Point-to-Point, Point-to-Point with intermediate units, Ring with OADM
Link distance:	up to 120 km (for < 2.67 Gbps in each channel) up to 80 km (for ~10 Gbps in each channel) Distance can be expanded by EDFA
Applications:	FDDI, ESCON; Ethernet: Fast, Gigabit, 10 Gigabit; ATM: STM1, STM4, STM16, STM64 SONET/SDH OC3, OC12, OC48, OC192 Fibre Channel 1X/2X
Frequency range of WBM-20G-TRL:	30 MHz – 2.67 GHz
Frequency range of WBM-20G-TRH:	10 GHz
Optical transceiver type of WBM-20G-TRL:	SFP
Optical transceiver type of WBM-20G-TRH:	XFP
Wavelengths:	EXT port: 850/1310/1550 nm WDM port: CWDM / DWDM grid
Power WBM-20G:	90 – 264 VAC; 300 W; full redundancy 36 – 72 VDC; 300 W; full redundancy
Power WBM-20G4:	90 – 264 VAC; 70 W; full redundancy 36 – 72 VDC; 70 W; full redundancy
Environmental:	Operating temperature: +0°C to +45°C Storage temperature: -40°C to +80°C Relative humidity: 10% to 90% (non-condensing)
Weight WBM-20G:	33-pounds/15 kg per shelf fully loaded
Weight WBM-20G4:	11-pounds/5 kg per shelf fully loaded
Dimensions WBM-20G	17.5" x 11.5" x 11" / 440mm x 280mm x 270mm (Width x Depth x Height); 19" / 23" rack, 6U high
Dimensions WBM-20G4	17.5" x 11.5" x 3.5" / 440mm x 280mm x 90mm (Width x Depth x Height); 19" / 23" rack, 2U high

Ordering Information – Components & Modules

Chassis

- WBM-20G – 14-places chassis 6U height;
- WBM-20G4 – 4-places chassis 2U height;

Active modules:

- WBM-20G -ICM – universal management module for both chassis;
- WBM-20G-2TRL – 2-ports transponder module for up to 2.67 Gbps traffic;
- WBM-20G-2TRH – 2-ports 10 GbE and OC-192/STM-64 transponder module;
- WBM-20G-1TRL – 1-ports transponder module for up to 2.67 Gbps traffic;
- WBM-20G-1TRH – 1-ports 10 GbE and OC-192/STM-64 transponder module;
- WBM-20G-AMP-L – in-line Erbium Doped Fiber Amplifier (EDFA);
- WBM-20G-AMP-B – buster EDFA;

Passive modules:

- WBM-20G-(C/D01/D02)-MUX-8 – 8-channel multiplexer;
- WBM020G-(C/D01/D02)-OADM-1/2/4 – 1/2/4-channel single side OADM;
- WBM-20G-(C/D01/D02)-DEMUX-8 – 8-channel demultiplexer;
- WBM020G-(C/D01/D02)-OADM-D-1/2/4 – 1/2/4-channel dual side OADM;
- WBM-20G-(C/D01/D02)-MD-CE-4 – 4-channel Single Optic CE-multiplexer;
- WBM020G-(C/D01/D02)-OADM-SO-1/2/4 – 1/2/4-channel Single Optic OADM;
- WBM-20G-(C/D01/D02)-MD-CO-4 – 4-channel Single Optic CO-multiplexer;