

Features & Benefits

- Protocol and bandwidth independent
- Remotely-provisionable multi-rate ports
- Redundant and scalable
- Supports up to 20 channels
- SNMP and browser-based GUI network management
- Single wavelength and WDM links supported
- NEBS Level 3 compliant
- Instant, automatic provisioning for remote sites
- Bridge between voice and data-centric architectures
- Enables new, ultra-high speed services
- Software upgradable
- Multiple application links over common fiber infrastructure
- Provides new, high-margin, ultra-high speed services
- Supports hub and spoke, point-to-point, multi-drop and ring configurations

DWDM / CWDM Device GM 3234



The GM 3234, the carrier facilities component of Sorrento's GigaMux System, collects and manages optical traffic from the end users' equipment via the GM 1602, GM 3217 and the GM 1608. The GM 3234 allows rapid deployment of high-bandwidth data and voice services on a simple, flexible and intelligent platform. Sorrento delivers a product that is designed to free carriers from restrictive transport technologies and provide system flexibility to accommodate changing end user demands.

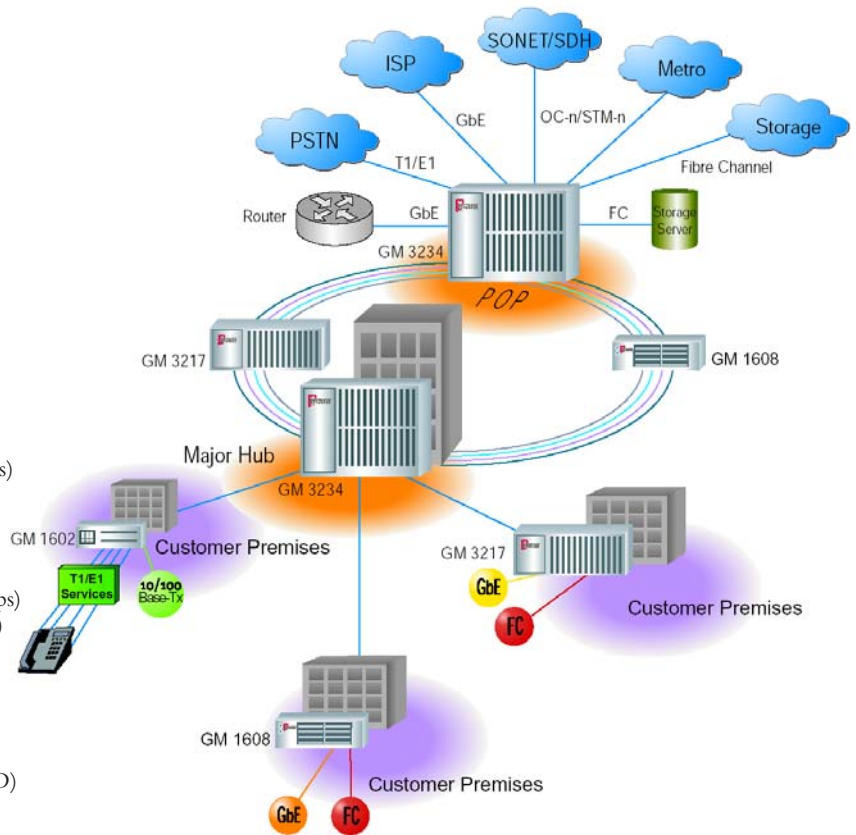
With a bandwidth protocol independent platform, the GM 3234 delivers OC-n/STM-n, Gigabit Ethernet, Fast Ethernet, Fibre Channel or traditional voice traffic over T1. The GM 3234 has a capacity of 160 Gbps; up to 20 full-duplex optical ports can be bundled in one chassis.

To meet customers' changing network requirements, the platform offers carriers flexibility and scalability. The GM 3234 can support a variety of simultaneous single-wavelength and WDM architectures with dissimilar end user interfaces. These architectures include hub and spoke, point-to-point, multi-drop and ring configurations; supporting distances up to 600 km. A protocol independent design allows the GM 3234 to hand off traffic to

SONET/SDH, layer 2/3, and metropolitan optical and storage networks. By utilizing 3R (reshaping, regeneration and retiming) technology, the GM 3234 ensures that optical signals from the customer's equipment are fully replicated at the POP, essentially creating a virtual local connection—as if the customer's equipment was co-located at the service provider's POP. The GM 3234 complies with NEBS/ETSI standards, allowing for co-location in a carrier environment.

By utilizing Sorrento's unique Optical Service Level Management System (OSLM), the GM 3234 provides a complete set of provisioning, performance monitoring and network management tools. ColorValve allows service providers to remotely adjust bandwidth on a per-wavelength basis. ColorSIM™ (Patented) is a per-wavelength, protocol independent, non-intrusive monitoring technique that allows a carrier to offer Service Level Agreements (SLAs) for any protocol. In-Wavelength Management (IWM) enables signaling information to flow through all network elements without a separate optical supervisory channel, saving on cost and complexity. These functions are all managed by a powerful client-server based Network Management System (NMS), allowing easy access for system administration functions.

Application



Technical Data

Per Port Data Rate: Gigabit Ethernet
Fibre Channel (1.06 and 2.1 Gbps)
OC-3/STM-1 (155 Mbps)
OC-12/STM-4 (622 Mbps)
OC-48/STM-16 (2.488 Gbps)
OC-192/STM-64 (9.953 Gbps)
10 GbE LAN PHY (10.3125 Gbps)
10 GbE WAN PHY (9.953 Gbps)
10/100 Base-Tx
T1

Per Wavelength BER $\leq 10^{-12}$ (-5° C to +55° C)

Physical:

Dimensions 17.45" (W) x 15.75" (H) x 12" (D)
443 mm (W) x 400 mm (H)
x 305 mm (D)
Weight (fully loaded) 91.6 lbs.
41.6 kg

Management Alarms:

Management Protocols SNMP, TL1, HTTP, CORBA
Terminal Interface VT-100 compatible RS-232
Configurable alarms, Terminal port

Power Requirement:

Voltage 100-240 VAC, -42 to -57 VDC
Protection Redundant Supplies (2)
Power Consumption 519 Watts max.

End User Interface Modules:

Optical Channel Module Gigabit Ethernet,
Fibre Channel (1.06 and 2.1 Gbps)
OC-3/STM-1
OC-12/STM-4
OC-48/STM-16
OC-192/STM-64
10 GbE LAN/WAN PHY

Integrated Voice/Data 4xT1, Ethernet/Fast Ethernet

Environmental:

Operating Temperature 41-104° F/5-40° C
Relative Humidity 5% to 85% operating, non-condensing

Regulatory/Industry Approvals:

CE
Telcordia NEBS Level 3 Compliant
OSMINE TIRKS and NMA
Safety UL 1950, 3rd Edition
IEC 60950, 3rd Edition
(according to CB Scheme)
EMC FCC Part 15 Class A (USA)
EN 55022 Class A (Europe)
VCCI Class A (Japan)
EN61000-3-2/3
Harmonics/Flicker
Immunity EN61000-4-2/3/4/5/6/11
ESD/EI/EFT/Surge/LFCI/VDS
ENV50140-RI
Telecom FCC Part 68 (USA)