

Sorrento GigaEdge 820™ Network Interface Modules

FEATURES AND BENEFITS

- Hot swappable for cost-effective reconfiguration
- Up to 30 dB link budget
- Plug and Play WDM™
- No external system fiber cables required
- Advanced thermal design for -40°C to +65°C operation
- 3R transmission — Re-amplify, Reshape, Retime
- Less than 20 W power consumption per NIM
- Cross-connect switch provides flexible networking
- 10 Gb/s capacity on a single fiber
- Support for OC-1 to OC-48, STM-1 to STM-16, GbE, 100BASE-FX, Fibre Channel, 2G Fibre Channel, ESCON, FICON, DVB ASI video
- Alarm contact closures
- Craft and EMS ports

The Sorrento GigaEdge 820 Network Interface Module (NIM) provides the WDM interface to a metro ring, bus or point-point link. There are two types of NIM: the four channel east NIM and four channel west NIM which plug into the east and west sides of the Sorrento GigaEdge 820 enclosure. A NIM provides the interface to 4 independent bidirectional channels on the network fibre. The four pairs of wavelengths are WDM multiplexed onto a single fiber strand.



Both east and west NIMs come in standard reach (20 dB link budget) and extended reach (30 dB link budget) versions.

For unprotected point-point applications, a single NIM (eg, NIM-4W) is installed in an Sorrento GigaEdge 820 enclosure and a NIM-4E is installed in another enclosure at the other end of the link. For path-protected applications, such as rings, two NIMs are installed in each Sorrento GigaEdge 820 enclosure and each Tributary Interface Module (TIM) is internally connected to both NIMs.

Each NIM provides full 3R regeneration of all 4 channels, with each channel able to transport a wide range of popular network standards, such as OC-1 to OC-48, Gigabit Ethernet and Fibre Channel. Each channel is fully reconfigurable and can be connected to any or all TIMs and to any other NIM channel, thus supporting drop & continue applications such as digital video multicasting.

The Plug and Play WDM™ benefits of the Sorrento GigaEdge 820 are enabled by the NIM's 3R regeneration capabilities. In contrast to all-optical solutions, carriers no longer have to worry about accumulated optical losses through each OADM. Instead, each NIM-NIM link is installed in much the same way as a SONET link.

Each NIM supports end-end network management with a serial RS-232 or Ethernet interface for connecting to a craft terminal, EMS or the Sorrento GigaCraft 120. Two NIMs provide dual redundant management capability of all Sorrento GigaEdge 820 node functions and in conjunction with the dual power feeds guarantee no single point of failure that could disrupt all four services at a node.

OPTICAL

Link budget: 20 dB standard reach, 30 dB extended reach

Connector: SC

WDM Channels: 8 wavelengths / 4 bi-directional channels on 1 fiber

Wavelengths: 1470 nm to 1610 nm, 20 nm spacing as per ITU-T G.694.2

Safety: Class 1 laser product

ELECTRICAL

Power: 20 W (above 0°C)

LEDS

Network: Active/Inactive, EOC

Module: Status, Power A+B

System: Status

ENVIRONMENTAL

COMPLIANCE

Compliant with: UL 1950, CSA C22.2 No. 950, IEC 60950:1991 with amendments 1-4, FCC Part 15, Class A, EN 300 386:2001 (Class A), SR-3580 NEBS Criteria level 3, GR-63-CORE Criteria [74], GR-63-CORE Criteria [76], GR-63-CORE Criteria [110-111], GR-63-CORE Criteria [114-115], GR-63-CORE Criteria [125], GR-63-CORE Criteria [126-7], GR-63-CORE Criteria [128], GR-63-CORE Section 4.4.1.1 Outside plant hardened (-40 °C to +65 °C)

MAINTENANCE

Craft User Interface port: RS-232 DB-9 DTE

EMS Port: 10BASE-T

CLI: TL1

Management: TL1/Telnet, Sorrento GigaCraft 120, SNMP*

Alarms: Dry contact closures for Critical, Major and Minor

** Please contact Sorrento Networks for additional product information.*



Sorrento Networks
9137 East Mineral Circle
Suite 340
Centennial, CO 80112

Sorrento Networks is a global provider of metro optical access solutions, offering an edge-to-regional CWDM, DWDM and ROADM product portfolio to carriers and enterprises. Sorrento Networks' GigaMux and GigaEdge optical transport products efficiently add bandwidth to clients' networks, and transport mission-critical services and applications across the network infrastructure. The company is headquartered in Denver, Colo., with offices in Oakland, Calif. and Stuttgart, Germany. For more information, visit www.sorrentonet.com. Sorrento, the Sorrento Networks logos and all other Sorrento Networks product or service names are trademarks or registered trademarks of Sorrento Networks, Inc. All other trademarks are property of their respective owners. Copyright 2008 Sorrento Networks. All rights reserved.