

Digital Transport

Prisma IP™ Ethernet 10/100 Line Card Metro Optical Access Interface for Ethernet Services

Ethernet Interface Solution for Multiple Services

Scientific-Atlanta's Prisma IP™ optical access switches deliver a new level of carrier-class reliability and performance to Metropolitan Area Networks (MANs). This packet-based platform provides full support for legacy voice and circuit services, while delivering a range of new differentiated data services.

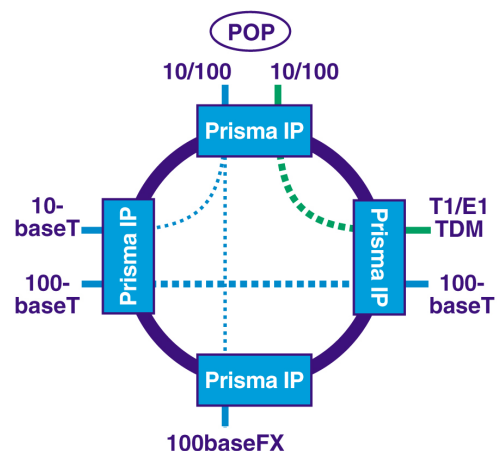
Ethernet has emerged as the dominant LAN technology worldwide. The Prisma IP Ethernet 10/100 line card provides carriers with a flexible interface to support applications such as Virtual LAN (VLAN), Ethernet, and IP services. This standards-based interface offers auto-sensing support for 10 or 100 Mbps services with complete rate-limiting capabilities for superior bandwidth management. Prisma IP is based on Resilient Packet Transport (RPT), a superset of the emerging Resilient Packet Ring (RPR) protocol (IEEE 802.17). Prisma IP provides carrier-class service for metropolitan optical networks requiring the highest level of availability, survivability, and scalability to 80 Gbps.

Features

- IEEE 802.3 compliant
- Auto-sensing and auto-negotiating ports
- Hot swappable without service interruption
- Forwarding and queuing
- High packet throughput for line-rate forwarding
- Individual port assignment to wire or routing modes
- Rate-limiting of bandwidth per individual port
- Per-port configuration for speed and duplex settings
- Compatible with both M-Series and C-Series Prisma IP chassis

Metro Ethernet Transport

The Prisma IP Ethernet 10/100 line card is optimized for IP/Ethernet transport and provides Layer 2/3 support for switching and routing. User ports can be configured for wire transport or for dynamic routing within the Prisma IP network. Bandwidth provisioning in 64 Kbps increments is provided for each individual user port or VLAN. Classification of packets per DiffServ is provided for up to three different classes. The 10/100 line card supports both copper and fiber interfaces and offers 10 or 100 Mbps auto-sensing ports. Intra-card routing and switching is provided via an internal routing table and switch fabric located on each individual card. The card also is capable of reading the IP TOS bits if required for Quality of Service classification.



Wire Model or Dynamic Routing

Prisma IP Ethernet 10/100 Line Card

Specifications

Prisma IP Ethernet 10/100 Line Card Specifications	
Width	Single slot
Operating temperature	0° to 50°C / 32° to 122°F <i>(extended operation above 40°C / 104°F not recommended)</i>
Storage temperature	-40°C to 70°C / -40°F to 158°F
Humidity	5% to 85% (non-condensing)
Power	40 watts
Number of ports per card	8 ports per card
Specifications	- 10/100 Mbps data rate, autonegotiation
	- 10/100baseT
	- 100baseFX
	- Auto-sensing ports
Protocols	802.1 p/Q, OSPF, MPLS
Standards	IEEE 802.3
Connectors	RJ-45 connectors (T)
	MT-RJ 850 nm (FX)
Performance parameters	Packet loss statistic
	Errored packets
	Conforms to statistics RFC2665
Provision parameters (per port)	- Maximum burst rate
	- Committed bandwidth
	- Full duplex or half duplex
	- Protected or unprotected service
	- Class of Service
Port classifications	Per DiffServ model
	- Express forwarding (toll-quality)
	- Assured forwarding
	- Best effort
Non-conformance options (per port)	- No action
	- Discard excessive packets
	- Mark down to next class
Agency compliance	Safety: UL, CUL & TÜV
	Emissions: FCC Part 15B & CE
	Telecom requirements: