

OptiCop Converger[®] : P-Series

BENEFITS

- Load balancing to overcome tool limitations
- Interface conversions to leverage existing tools
- Multi-layer filtering to access only data of interest
- Remote monitoring and tool sharing to reduce CAPEX

OVERVIEW

NetQuest's P-Series OptiCop Converger products provide test and monitoring access for today's high-speed Packet Over SONET/SDH (POS) networks in Carrier, Government, and Enterprise applications. The non-intrusive access optimizes tool port usage and enables network operators to implement management and assurance strategies related to the overall performance of the services being delivered, without degrading the service or distorting the results.

As transport networks continue to break speed barriers and convergence of traffic migrates from circuit to packet, network operators face new challenges in monitoring the services being provided. While Packet Over SONET/SDH enables operators and users to more flexibly and efficiently utilize network bandwidth by converging services, each service needs to be measured independently relative to the expectations of the customer. OptiCop Converger and its advanced Hybrid Inspection Technology (HIT) provide a means to extract the traffic of interest and leverage existing investments in test and monitoring tools.

APPLICATIONS AND FEATURES

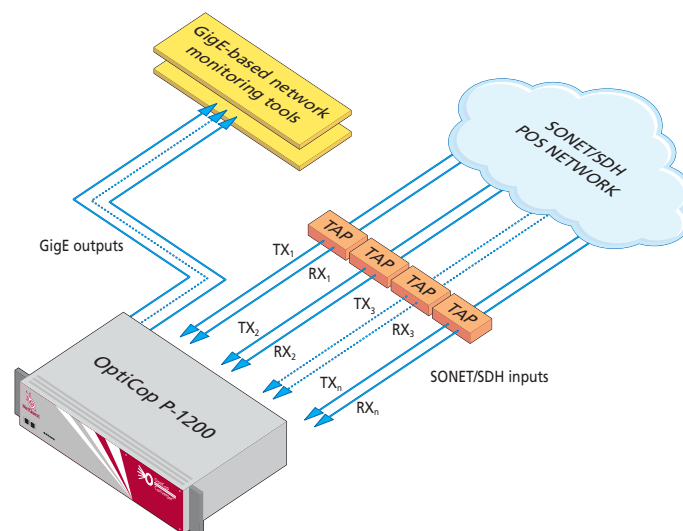
With OptiCop Converger deployed in a POS network, engineers can traffic manage circuits or flows of interest by sending them to the appropriate test and monitor tools. Everyday, network engineers are challenged with tool constraints like port and processing limitations, interface incompatibilities, protocol-specific testing, remote monitoring, and budget. Features like traffic aggregation, multicasting, load balancing, filtering, and routing of IP and non-IP

traffic make OptiCop Converger a powerful tool in the engineering of today's advanced networks.

By providing network interface conversions to GigE monitoring tools such as Sniffers, Performance Management Probes, Lawful Intercept Systems, Security/NAC Devices, Traffic Analyzers, and Bulk Data Recorders, OptiCop Converger provides real-time access to POS network traffic. The POS traffic can be translated into standard or proprietary Gigabit Ethernet traffic at full line rate without loss of data. OptiCop Converger's flexible interfaces, unique traffic handling capabilities, high port density, and powerful parallel processing functions set a new standard for monitoring access to converged IP networks.

MONITORING ACCESS

The P-Series OptiCop Converger systems can be configured to meet the most demanding applications, with the ability to monitor SONET/SDH POS circuits from OC3/STM-1 to OC12/STM-64. With up to 24 network/tool interfaces, the P-Series OptiCop Converger can monitor multiple circuits in either half or full duplex scenarios and will operate in conjunction with Automatic Protection Switching, ensuring monitoring applications always have the access they need.



The P-1200 OptiCop Converger in a SONET/SDH POS network

HYBRID INSPECTION TECHNOLOGY (HIT)

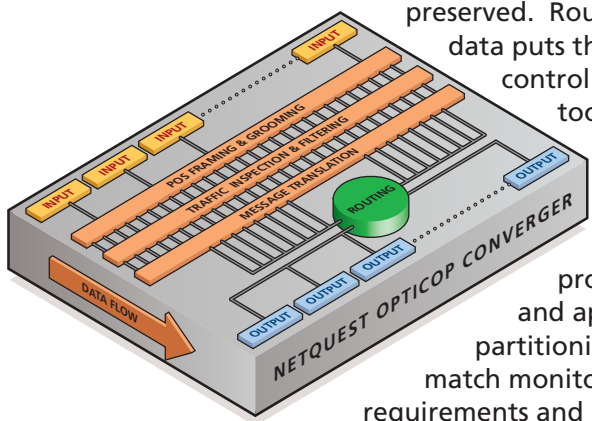
NetQuest has developed a powerful method to inspect traffic at line rate using its unique Hybrid Inspection Technology (HIT). HIT logic is based on highly parallel, pipelined hardware architecture with protocol-specific inspection algorithms defined by software and executed in specialized hardware. HIT is equally effective in processing high-speed concatenated Packet Over SONET/SDH traffic streams as it is in handling embedded low order SONET/SDH streams.

configurations available. (Note: In certain input to output aggregation configurations, traffic inspection, filtering, and/or load balancing are required to prevent oversubscription)

	MODELS	
	P-1200	P-2400
Total # SFPs (inputs + outputs)	12	24
Max # OC3/STM-1 input ports	8	16
Max # OC12/STM-4 input ports	8	16
Max # GigE output ports	8	16

FILTERING AND ROUTING

The OptiCop Converger leverages HIT technology by enabling the inspected data to be filtered and or routed based on user definable parameters. By filtering traffic, only the data of interest will be presented to the monitor system for processing, ensuring its valuable processing resources are preserved. Routing of the data puts the user in control of which tool interface will receive the data, and enables network, protocol, and application partitioning to match monitoring system requirements and limitations.



MANAGEMENT

OptiCop Converger can be managed locally or remotely using menu-driven screens via Telnet or a serial crafts person port. Both methods provide secure access through SSH and a multi-level password protection system that leverages Radius or TACACS+. OptiCop Converger has integral Syslog support along with a SNMP V1-V3 agent that supports TRAP functionality, making it possible to audit and manage configuration change and alarm notifications in a networked environment. For applications where a tight integration between the OptiCop Converger and the application is required, NetQuest has developed a machine-to-machine interface called GSCP, a proprietary UDP-based control protocol. Integrating GSCP with the application enables solution providers to present a unified solution at every level.

For more detailed technical specifications, please email NetQuest at info@netquestcorp.com

CONFIGURATIONS

The P-Series OptiCop Converger is available in two models, the P-1200 and the P-2400, supporting 12 and 24 optical/copper interfaces respectively. Both models are available with either a fixed relationship between network inputs and tool outputs or with optional traffic routing, where the input to output relationship becomes a user defined logical path. The P-Series packaging is a 2RU chassis that is rack mountable and may be ordered with single or redundant power supplies with independent inputs for AC or DC sources. The table below illustrates example port

TECHNICAL SPECIFICATIONS	
Size	2U rack mount or table top chassis: 3.5"H x 19"W x 17.25"D (8.9cm H x 48.3cm W x 43.8cm D)
Weight	16 pounds (7.27kg)
Power	140 W (110/220 VAC or 48 VDC)
Operating Temp	32° - 122° F (0° - 50° C)
Humidity	10-90% non-condensing
Compliance	FCC, UL, CE, RoHS
Management	Telnet, EIA232 Craft, SNMP V1-V3

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NetQuest Corporation designs, manufactures and markets innovative monitoring access products for applications in telecommunications service provider, government, and enterprise networks. Founded in 1987 and based in Mount Laurel, New Jersey, NetQuest is privately held and operates under the original management team. With more than a 20 year track record of providing cutting edge monitoring access solutions, NetQuest has developed a global customer base, marketing directly and through a network of value added resellers and representatives.