



## Sniffer s6040 Hardware Platform

Assuring Optimal Network Performance and Security

### Product Overview

Optimal network performance is essential for success in today's hyper-competitive business environment. And assuring optimum performance requires a network core that functions smoothly to eliminate bottlenecks that impact end-user application performance—and your bottom line. To help you meet this complex challenge, you need the Sniffer Technology® s6040 appliance, a powerful and flexible network performance and security management solution that is easy to implement and maintain.

### Enhanced Sniffer Distributed Platform

As an extension to the existing instrumentation set offered by Network General™, the Sniffer Technology s6040 appliance is a modular, high performance hardware platform designed specifically for the high speeds and complex architectures that are present in the core of enterprise networks today. The Network General s6040 appliance is a platform for Sniffer Distributed software, the tool of choice for unsurpassed monitoring and troubleshooting. It builds on Sniffer Distributed's feature set by offering a robust, modular hardware platform that also provides additional functionality.



*The Network General s6040 provides Sniffer Distributed functionality for the network core.*

### Key Features and Benefits

#### Flexible Design

With its modular design, the s6040 can expand to accommodate four full-duplex Gigabit media modules for a total capacity of eight Gigabits per second. You only need to purchase the number of interfaces you currently require and add new modules when your capacity needs change.

#### Features and Benefits

- **Flexible design**
- **Powerful, modular hardware**
- **Aggregates data into a single view**
- **High performance monitoring**
- **Statistics based on VLAN activity**
- **Support for NetFlow statistical gathering**
- **All the features and benefits of Sniffer Distributed software**
- **Compatible with the nPO Solution**
- **Affordable core instrumentation**

**Network General™**, a privately-held company, is the leading developer and provider of award-winning solutions for network and application performance management. The Network General solutions portfolio consists of a family of integrated hardware and software products that enable the management of complex, high-speed networks covering virtually all wireless and wired network topologies and protocols, and the applications that traverse these networks



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### Powerful, Modular Hardware

The Network General s6040 offers purpose-built hardware that facilitates fast troubleshooting and precise monitoring in your network core:

- Captures four full-duplex Gigabit links simultaneously at line rate
- Delivers simultaneous capture and monitoring on a single four-channel aggregated trunk
- Aggregates multiple data streams into a single trace file
- Provides large buffer capacity (512MB) to increase the amount of data captured without packet loss
- Supports an extended RMON table size (up to 100,000 table entries) to ensure you retain the statistics you need

### Aggregates Data into a Single View

The Network General s6040 can aggregate data from any combination of the up to four full-duplex links it supports. Now you can easily monitor and troubleshoot asymmetric-routing or load-balancing links. Asymmetric routing sends packets of the same conversation over different paths to efficiently use all the links. Load balancing is a related technique that sends traffic from a single application or session over different paths to evenly distribute the overall system traffic load.

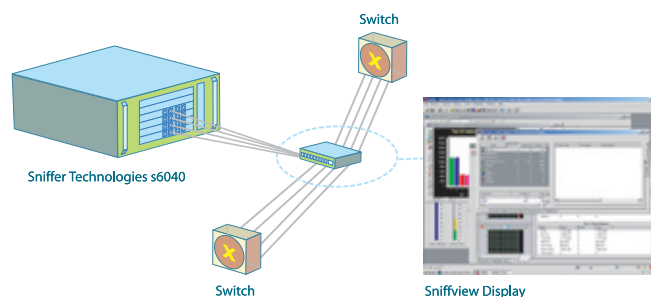
With the s6040's aggregation capabilities you can view an entire conversation as if it occurred on one link. You can also view both detailed trace files and higher-level traffic statistics in this manner, reducing the extensive time required to manually combine this data, as well as eliminating the potential for errors.

### High Performance Monitoring

High performance monitoring gives you accurate realtime performance and traffic pattern statistics on your Gigabit segments. With this best-in-class data collection, you can baseline your network performance for easier network anomaly identification and future growth planning.

### Provide Statistics Based on VLAN Activity

VLAN (802.1q) statistics monitoring and VLAN threshold alerting capability provide valuable link capacity information which administrators need to make intelligent decisions regarding the status of their VLAN configuration parameters.



*The s6040 simplifies core management and troubleshooting by aggregating traffic from multiple links into a consolidated view.*

### Support for NetFlow Statistical Gathering

NetFlow Exporter v5.0 support delivers data to NetFlow-compliant Collectors and provides an additional data source for network accounting that answers questions regarding overall IP traffic: who, what, where, when, and how.

### All the Features and Benefits of Sniffer Distributed Software

In addition to its unique attributes, the Network General s6040 supports the same software capabilities that allow you to monitor, validate, and evaluate your entire network infrastructure operations, from troubleshooting and baselining, to real-time and historical analysis. The Network General s6040 also supports the add-on functionality of Sniffer Voice, and Sniffer Mobile.

### Sniffer Voice

Sniffer Voice allows you to achieve higher-quality voice services by analyzing VoIP call setup configurations. In fact, Sniffer Voice enhances the quality of converged networks at every level and optimizes the management of voice, video, and data over a single network. It contains key protocol decodes and Expert systems for maintaining in-service packet voice networks.

### Sniffer Mobile

Providing a window into the mobile wireless production network, Sniffer Mobile supports Cellular/PCS networks and multiple network topologies (LAN, WAN, and ATM).



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### Assuring Optimal Network Performance and Security

By employing Sniffer Mobile, you can be confident you are offering high-quality, reliable data and voice services, such as mobile multi-media applications and greater call capacity, which are key to maintaining your competitive edge.

#### **Compatible with the Network Performance Orchestrator Solution**

The Network Performance Orchestrator™ (nPO™) solution is a comprehensive product suite that enables you to leverage the data collected by the Sniffer Distributed family of products to better manage and secure your network. The nPO solution delivers a high return on investment by enabling network professionals to reduce operating expenses, as well as defer and/or reduce capital expenditures. It also helps to reduce the average time required to resolve network faults and identify abnormal network activity that can indicate security or performance issues.

#### **Affordable Core Instrumentation**

The network core typically possesses a high degree of redundancy and a multi-tiered distribution. To see a complete view of traffic in this critical part of your network, you need multiple instrumentation points. The s6040 meets this goal by delivering a lower price per port when compared to multiple single- or dual-port solutions.

The Network General s6040 one-box-solution offers a compact form factor and high-port density. It can accommodate eight Gigabit ports in a single 4U platform, which means reduced space requirements and less complexity when compared to a traditional multi-box solution.

#### **World-Class Training, Consulting, and Support**

Sniffer University is a comprehensive resource for building and enhancing network professionals' skills in protocol analysis, application analysis and troubleshooting. Sniffer University has trained over 80,000 network professionals worldwide. The Sniffer Certified Professional Program provides your IT organization with industry-recognized accreditation as technical experts in the network management and protocol analysis disciplines.

The Network General Consulting Services group is dedicated to ensuring that policy becomes practice. Our consultants leverage their extensive experience in fault isolation, performance management, and protocol

and application analysis. They assist clients during all network growth stages from planning, design, and product deployment, through ongoing management and emergency response. They combine their expertise and an objective perspective to identify, prioritize, and resolve each client's individual performance and availability issues.

The Network General Customer Support Services group offers essential product knowledge and rapid, reliable technical solutions. Over 70 percent of our technical staff holds industry certifications and/or technical degrees and five-plus years of experience in the IT industry. The Support team of responsive, highly skilled support technicians delivers detailed technical assistance in managing the success of critical projects, with a range of service levels to meet the needs of the customer. Customer support is your key to maximizing processing uptime, revenue generation, and customer satisfaction.



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### Appliance Specifications

#### Platform:

- Custom 4U rack-mount chassis
- Weight: 37lbs. (16.78kg) with four media modules

#### Dimensions:

- Width: 17 inches (43.2 centimeters)—19 inches (48.26 centimeters) with rack-mount brackets
- Depth: 14.25 inches (36.19 centimeters)
- Height: 7 inches (17.78 centimeters)

#### System Controller:

- 1Ghz Pentium III CPU
- 1GB of RAM
- 80GB hard disk
- 10/100 Ethernet management port
- Serial port

#### Media Module:

- 700MHz PowerPC Processor
- 512MB capture buffer
- 512MB monitor buffer
- Full Duplex Gigabit Ethernet GBIC interface (two-port)
- Two Gigabit SX GBIC transceivers included
- Supports LX and 1000BaseT GBIC transceivers

#### Performance:

- Supports up to four Gigabit Ethernet media modules
- 2Gb/s line-rate capture performance per media module
- 100 percent line-rate capture with filtering
- Simultaneous capture across all media modules
- RMON monitoring in excess of 500,000 packets per second per media module

#### Operating Input Voltage Range:

- AC: 100V to 240V 60-50Hz AC (auto-sensing power supply)

#### Power Consumption:

- 275 watts (max); 228 watts typical

#### Thermal Dissipation:

- 938.5BTUs (max); 778.2BTUs typical

### Environmental Specs:

- Operating Temperature: +0°C to +45°C
- Storage Temperature: -20°C to +60°C
- Storage Humidity: 10% to 90% (non-condensing)
- Operating Humidity: 20% to 80% (non-condensing)

### Regulatory Compliance:

#### US Compliance

- EMC
  - FCC 15.107/109—Class B verification
- Product Safety
  - UL/cUL 60950
  - IEC 60950 (CB Scheme)

#### European Compliance

- 89/336/EEC Electromagnetic Compatibility Directive (EMC)
  - EN 550022—CISPR22: 1998 Class B ITE emissions standard
  - EN 550024—CISPR22: 1997 ITE immunity standard using:
  - EN 61000-4-2 Electrostatic Discharge (ESD) immunity
  - EN 61000-4-3 Radiated Susceptibility immunity
  - EN 61000-4-4 Electrical Fast Transient (EFT)/Burst immunity
  - EN 61000-4-5 Surge immunity
  - EN 61000-4-6 Conducted Radio Frequency immunity
  - EN 61000-4-8 50Hz Magnetic Field Susceptibility
  - EN 61000-4-11 Voltage dips/interruptions
  - EN 61000-3-2 Harmonic current emissions
  - EN 61000-3-3 Voltage fluctuations/flicker
  - CE EN 60950

#### Other Compliance

- VCCI emissions—Japan
- AS/NZS 3548 emissions—Australia

Network General  
178 E. Tasman Drive  
San Jose, CA 95134  
800.SNIFFER (800.764.3337)  
www.networkgeneral.com

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