**SOLUTION OVERVIEW**

- Distributed architecture: platform optimized for handling high volume IP traffic
- Store-to-Disk (S2D) capabilities: support packet capture at rates up to 10 Gbps

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**GeoProbe G10**

High Performance Support for High Capacity, High Bandwidth Networks

**Hardware Platform Addresses Dynamic Changes in Network Traffic Composition**

With a proven track record and worldwide deployment by Tier 1 operators, the GeoProbe® family remains at the center of NETSCOUT’s network monitoring portfolio. In keeping with the pace of network technology changes and dynamic market conditions, NETSCOUT® has evolved its hardware to meet changing customer needs.

Designed specifically to address high bandwidth interfaces and data center applications, the NEBS-compliant GeoProbe G10 platform features a distributed architecture optimized to handle high volume IP traffic with native support for both IPv4 and IPv6.

The G10 serves as a primary collection and correlation agent for NETSCOUT’s Service Assurance solution. Used to feed Iris applications, the G10 may be deployed in combination with existing SpIprobes to provide a comprehensive view of the network.
Networking Requirements
Three connections and associated IP addresses.

Interface Support
- 10G: 10Gbase-SR (850nm, multi-mode) and 10Gbase-LR (1310nm, single-mode)
- 1G: 1000base-SX (850nm, multi-mode) and 1000base-LX (1310nm, multi-mode or single mode), and 1000base-T (RJ-45, cat5)
- All optical ports are LC-type connectors

Protocol Support
- Mobile data and data center protocols: Gn/Gi, IuBC
- Next-generation 4G network protocols: LTE/EPC
- Multimedia and convergence protocols: VoIP/IMS

Rackmount Requirements
With a 3U footprint, the chassis is available for 4-post and center-post (19- or 23-inch) rack type mounting with supplied hardware.

Power Consumption
600W max, -40 to -72 VDC (15A max), 430W typical.

Storage Subsystem
The storage subsystem enables the storage of packets and associated application data. Storage duration can be engineered based on bandwidth and storage type.

Default settings enable the storage of all packets, for all protocols. To provide maximum utility and efficient use of disk capacity, users have full control in limiting packet storage by specific protocols. Users can also define whether those selected packets will be stored with or without truncation.

Subsystem Components
- 900 GB SAS technology
- 4 TB Nearline SAS technology
- 2U controller and expansion enclosures

Power Consumption*
500W max, -40 to -72 VDC (15A max).

Recommended Cabling
12 AWG or larger cable for power and chassis ground (applies to both disk array and G10).

GeoProbe G10
The G10 is comprised of purpose-specific connection, processing and application boards and I/O ports. G10 supports 8 physical Ethernet connections (10G or 1G), up to four of which may be 10G. An uplink port on the application blade serves as the primary network interface while Operations, Administration and Maintenance (OAM) interfaces provide connectivity to Shelf Management Modules.

Productivity Features
Store-to-Disk (S2D)
G10 streams traffic directly to disk at configurable raw packet capture rates of up to 10 Gbps.

Low-Touch Installation, Configuration and Maintenance
G10 supports automated workflows to facilitate installation and configuration tasks. Scheduled group downloads streamline maintenance windows and ensure upgrade integrity with built-in reversibility commands. All configuration changes are logged with user ID, machine ID and relevant timestamps.

Stability Statistics
G10’s throughput, disk utilization/health and disk wrap times are proactively monitored with threshold alarms for early notification and system administrator intervention.

Administrative Tools
G10 identifies unknown IP addresses not already configured in OAM topology. Log file information includes reporting interval, instrumentation name, IP address, protocol and total number of times a packet was sent or received by the IP address.

*Actual power consumption will be affected by the number of disks used.