Lab Testing Summary Report

March 2012

Report SR120122

Product Category:

Carrier-Class Ethernet Chassis Switch

Vendor Tested:

HUAWEI

Product Tested:

S9306 Switch

Miercom PERFORMANCE VERIFIED™

This is an excerpt, full report available at miercom.com/huawei

Key findings and conclusions:

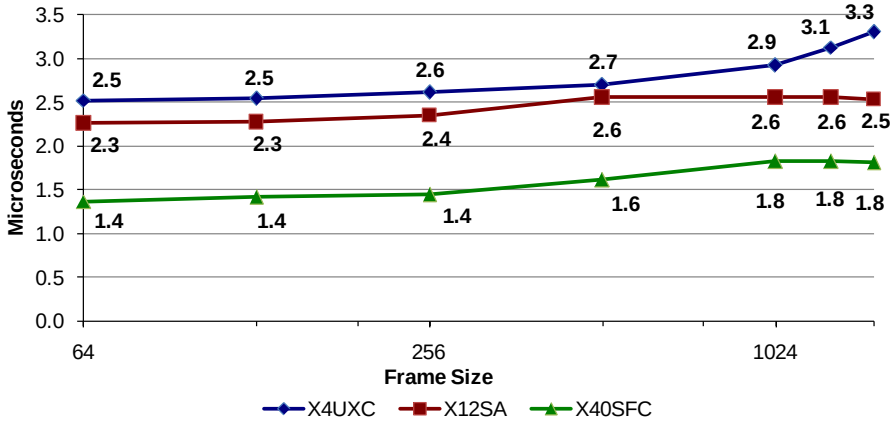
- **Huawei S9306 switch supports patented Cluster Switching System (CSS) technology for high availability**
- **Smart Ethernet Protection (SEP) protocol is supported with highly advanced capabilities**
- **Low forwarding latency of 10G port at full load**
- **Proven interoperability in tests with Cisco switches**
- **Supports hot swapping for power and fan modules as well as backup routing units**

Huawei Technologies engaged Miercom to evaluate the S9300 Series of terabit routing switches. The S9306 is a carrier-class chassis switch with six service slots. It is highly redundant to meet carrier class requirements for High Availability.

Miercom testing focused on the redundancy, latency, and throughput capabilities for three different blade types. The 12-port 10GE optical LPU is called the X12SA. The X4UXC blade is a 4-Port 10GBASE-X interface card. The high density 40-port 10GE optical interface blade is called the X40SFC. The X12SA, X4UXC, and X40SFC blades were all tested, along with testing of the backplane chassis. Feature testing was performed to show interoperability and extensive capability of the switch and the blades installed.

In addition to proving the switch chassis and installed blades are capable of achieving benchmarks and standards expected of a carrier class system, the S9306 proved itself to be more resilient and redundant than other switches of its grade.

Figure 1: Huawei S9300 Series Carrier-Class Switch
RFC 2544 Latency of Huawei S9306 Cards



Source: Miercom, March 2012

Huawei S9300 Series switch had low latency at line rate. The X4UXC cards displayed a minimum latency of 2.44 microseconds. Average latency of 2.82 microseconds was seen across all frame sizes.

Miercom Performance Verified

The performance of Huawei S9306 Terabit routing switch was verified by Miercom. In hands-on testing, Huawei demonstrated advanced performance features such as:

- Competitively low latency on all cards
- Interoperability with other vendor products
- Highly redundant and diverse SEP configurations, including unique semi rings and stacking rings
- Extensive BFD feature functionality and clustering capability

S9306 Switch

Huawei Technologies, Co., Ltd.
http://www.huawei.com/enterprise

About Miercom's Product Testing Services

Miercom has hundreds of product-comparison analyses published over the years in leading network trade periodicals including Network World, Business Communications Review, Tech Web - NoJitter, Communications News, xchange, Internet Telephony and other leading publications. Miercom's reputation as the leading, independent product test center is unquestioned.

Miercom's private test services include competitive product analyses, as well as individual product evaluations. Miercom features comprehensive certification and test programs including: Certified Interoperable, Certified Reliable, Certified Secure and Certified Green. Products may also be evaluated under the NetWORKS As Advertised program, the industry's most thorough and trusted assessment for product usability and performance.