

**TECHNOLOGY BRIEF****9200 Series – IPv6**

NetClock® Products

What it Means to You:

- Supports new networking standard
- Seamless transition from IPv4

NetClock IPv6 Capabilities:

- 128-bit IPv6 addresses
- Dual IPv4/IPv6 Protocol Stack — supports mixed networks or either network
- ICMPv6 — the IPv6 management protocol
- Neighbor Discovery (ND) Protocol — to support easy installation
- Auto-Configuration can be enabled for local-link addresses
- Local link definition
- Router advertisement
- DHCPv6 — to support initial installation of the NTP server, which typically gets a static address

Introduction

Spectracom NetClock® products are GPS-based, Network Time Protocol (NTP) time servers or master clocks. NetClocks typically provide timing services to various networking devices. For years, the common network protocol has been IPv4. The United States Department of Defense, however, as well as other nations (particularly Japan) require the implementation of IPv6 for several reasons:

- To provide additional IP addresses
- To allow smaller routing tables in routers
- To support simpler configuration of devices on the network
- To provide better quality of service (QoS) for real-time traffic processing

**IPv6 Ready**

Spectracom's 9200 Series NetClock has been tested and approved at the University of New Hampshire's Interoperability Lab, the official North American test site for IPv6. Permission to use the "IPv6READY" Phase 2 logo comes with this certification.

