



Technology Brief:

IPv6 Next Generation Internet Protocol

What it Means to You:

- Supports new networking standard
- Seamless transition from IPv4

Spectracom 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
- DHCP6 — to support initial installation of the NTP server, which typically gets a static address

Introduction

Spectracom products typically provide timing services to various network elements. They also offer management over Ethernet. For years, the common network protocol for timing and management 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 was the only product of its kind to have been tested and approved at the University of New Hampshire's Interoperability Lab, the official North American test site for IPv6. All subsequent NetClock versions as well as SecureSync models make use of the same IPv6 functions as the approved 9200 Series.

