TimeHub® 5500

NEBS Level 3 Certified Building Integrated Timing Supply for Carrier-Grade Networks

Key Features

- Next generation Building Integrated Timing Supply (BITS)
- Packet timing solutions for NGN applications
- Carrier-grade NTP integration
- IEEE 1588-2008 (PTP v2) grandmaster server cards IPv4 and IPv6
- Supports all physical layer synchronization requirements
- More than 1400 protected outputs per system
- Single output card generates CC and DS1 signals
- Full SSM support
- Master or remote shelf operation
- TL1 management
- TL 9000 quality certified
- NEBS level 3 certified

Key Benefits

- Single platform for TDM and packet network synchronization
- Ready to support LTE and residential small cell roll outs
- Supports migration to Ethernet transport and backhaul
- Redundancy protects client clocks and network elements from potential service outages
- Proven interoperability with wide range of network elements and synchronization clients
- Scalable: plug-in cards and expansion shelves allow easy incremental growth
- Advanced monitoring and management to support QoS and SLA requirements

Applications

- Carrier network synchronization: full service networks, wireline, wireless, backhaul, BSS/OSS networks, IMS

The Symmetricom® TimeHub® 5500 is the next generation Building Integrated Timing Supply (BITS) designed for communication service provider networks. TimeHub 5500 is an NGN-ready platform designed to meet all traditional central office synchronization and timing requirements. It provides next generation packet timing solutions critical to advanced service offerings such as IPTV and wireless network backhaul. Already deployed as the workhorse for major fiber networks in North America, the TimeHub 5500 is the platform of choice for delivery of carrier-grade NTP and IEEE 1588 Precision Time Protocol (PTP) required to assure high QoS delivery of packet-based applications and content.

The TimeHub 5500 System

Explosive growth in telecommunications traffic, especially in video and data, has led to new technologies and critical applications. Service providers are growing to meet this demand. As a result, the requirements for synchronization have changed dramatically.

Symmetricom's TimeHub 5500 is the next generation BITS. It is a modular, fully redundant timing distribution system that tracks incoming timing references and qualifies the signals against network timing standards. It then filters and distributes precise timing to all equipment in the central office.

The TimeHub 5500 main shelf provides up to 160 1+1 protected outputs. If more outputs are required, up to four expansion shelves can be connected to the main shelf, increasing the capacity to over 1,400 fully protected 1+1 ports per system.

The Time Hub 5500 systems offers NTP and PTP packet synchronization with cards in single server or 1:1 protected configurations. Additional server cards grow total client capacity. With these packet network synchronization capabilities, the TimeHub 5500 is a key element in the Symmetricom synchronization distribution architecture (SDA) for LTE networks, allowing it to supply PTP sync for the LTE macro and metro base stations as well as carrier-grade NTP sync for residential and enterprise small cells.

Management and Alarm Collection

The TimeHub 5500 system provides a new dimension in management by integrating and monitoring the performance of legacy equipment.

As an intelligent network element, TimeHub 5500 provides full visibility and manageability of all input and output ports and all cards on the main and expansion shelves. System parameters can be modified and controlled through any of its multiple interfaces—serial and Ethernet.

Symmetricom's TimePictra Element Management System is available to support