

Trusted Time™ SyncServer™ S100

Time Your Systems Can Trust.

Your systems need to know what time it is. Business transactions, security controls, digital signatures, and system performance tools can't be trusted unless they all run on the same time, and unless that time is accurate and secure. Now there is a way to provide time that your systems can trust — SyncServer™ S100.

SyncServer S100 is a network time server. It acquires time either from a non-network source or from another SyncServer and delivers it to computers and other devices on a network. One SyncServer needs to acquire time from a known good source for all other SyncServers within the network to synchronize with that source.

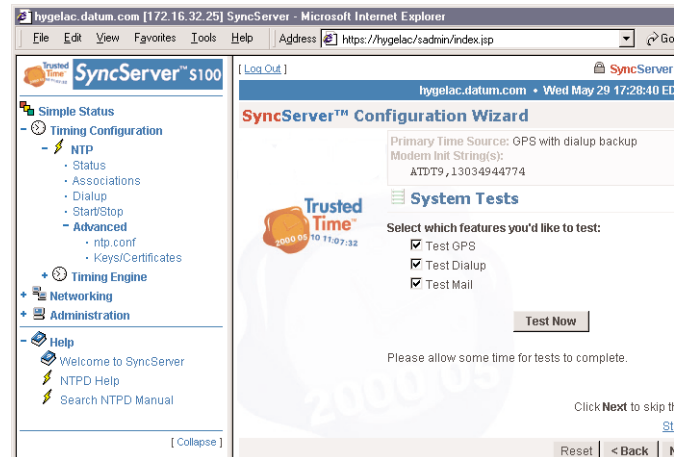
SyncServer S100 is accurate. It acquires UTC (Coordinated Universal Time) from GPS signals or by dial-up to the National Institute of Standards and Technology (U.S.) or other UTC source. Only one SyncServer S100 in your network need acquire UTC directly, although SyncServers are typically deployed in pairs for high reliability.

SyncServer S100 is secure. Computers on a network synchronize with an Internet-based time source, such as SyncServer, using NTP, the Network Time Protocol, to exchange packets of time. SyncServer implements NTP Version 4. This minimizes the ability of hackers to spoof time packets and use NTP to gain access to your systems. Unlike previous versions, NTP Version 4 implements asymmetric encryption — the same technique used by secure web sites to protect credit card numbers and other sensitive information from unintended interception.

SyncServer S100 management is web-based. Set up and configure all SyncServers from any point on the web using a standard, secure browser. SyncServer S100 also supports SNMP (Simple Network Management Protocol) for easy integration into your existing management hierarchy. For maximum flexibility, SyncServer S100 can also be set up, configured and managed using Secure Shell (SSH) or a RS-232 serial connection.

SyncServer S100 reduces network congestion. Network congestion can occur if all network devices attempt to synchronize with a single time server. With SyncServer S100, multiple time servers can be present to balance the network traffic.

SyncServer S100 is easy to set up. It's not always convenient or possible to receive GPS signals at each location. Not all SyncServers need to be connected to an external time source so multiple antennas are not necessary.

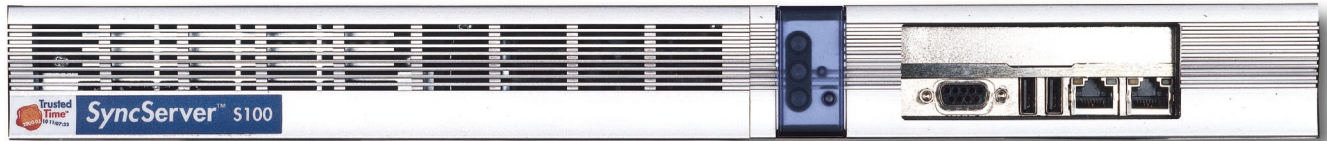


Set-up is straightforward with the Configuration Wizard.

Features

- Dedicated Secure NTP Time Server
- Supports NTP Versions 2 - 4
- Synchronizes with another SyncServer or an External Time Source
- Independent Time Acquisition from GPS or Dial-Up Service
- Secure Web-Based Setup and Management
- Secure Shell (SSH) and RS-232 Remote Interface
- Dual, Ethernet 10/100Base-T interface
- Supports SNMP
- 1U Height, Rack-Mountable Unit
- High Performance Oscillator
- Convenient Front Panel Connections
- Web-based Help
- Email alerts for alarms or errors

Trusted Time™ SyncServer™ S100 Specifications



Front Panel View

Front Panel

Input/Output Connections

Network: Dual, 10/100Base-T Ethernet
Serial Port: RS-232/DB9 DTE
Configuration and status

Indicators

Front LED Indicators: Power, HDD Activity,
Ethernet Link & Activity

Supported Network Features

TCP/IP

Network Time Protocol (NTP):
NTPv2 (RFC 1119)
NTPv3 (RFC 1305)
NTPv4 (IETF Draft Standard)

MD5 Authentication (NTP)
SNTP (RFC 2030)
Daytime Protocol (RFC 867)
Time Protocol (RFC 868)
SNMPv1 (RFC 1157)
DHCP (RFC 2131)
SSH (Secure Shell)
HTTP/HTML/HTTPS (RFC 2616)

Environment

Power: 100-240 VAC, Auto-switching 50-60 Hz

Size: Form Factor 1U; 1.75"H X 17"W X 18"D
(4.45cm H X 43.2cm W X 45.7cm)

Operating Temp/Humidity: 0° to +45°C/5-95% @ 40°C

Weight: 18 lbs. (8.2 kg.)

GPS Input

GPS Receiver: Eight Channel, C/A code
Antenna Size: 3.04"d X 2.94"h
(7.72cm X 7.47cm)
Antenna Operating Temp: -40° to +85°C
Acquisition: <5 minutes
Cable Type: 50ft; (15.25m)/RG58

Timing Accuracy

Network: 1-10 milliseconds, typical
GPS Receiver: <1 microsecond
(relative to UTC, GPS Tracking)
Dial-Up Service: <1-10 milliseconds, on sync
Oscillator: Rate Stability: 5x10⁻⁷

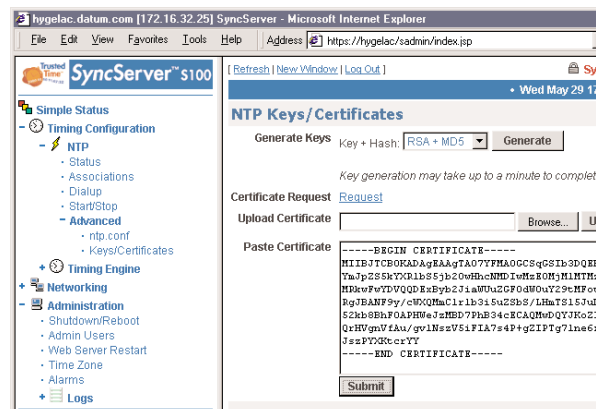
Options

Long Antenna Cable (Belden 9913) (GPS)
High Gain Antenna (GPS)
In-Line Amplifier (GPS)
Lightning Arrestor (GPS)
Rack Mount Slides

Software

MS Windows Time Utility: www.trusted-time.com

NTP Clients: www.ntp.org; www.trusted-time.com



Digitally-signed NTP packets enhance security.



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