Frequency and Timing

Dual-Power Supply Technology
SyncServer S600/S650 Series

Summary
Power is a key concern in modern data center design and management. While efficiency and cooling are high priorities, so is reliability—particularly, surviving power fluctuations or outages and returning to normal operations as fast as possible. Accurate time is a key element in bringing a mission critical data center back online quickly in the event of a power service interruption. As systems restart, one of the initial activities is often synchronizing the time to an accurate network time server. A time server with dual-corded, dual-power supplies provides several levels of time service protection in these scenarios.

Dual-Corded, Dual-Power Supplies
In an ideal scenario, the data center has dual-power circuits. The dual-corded SyncServer S600 Series Network Time Server with hitless dual-power supplies connects to each circuit. The SyncServer power supplies load share equally, which improves overall reliability, and an active power management system constantly monitors the operation. If the power to one cord is lost or if one power supply fails, the entire load is instantly picked up by the remaining energized power supply with no interruption in time services to the network.

All SyncServers ship with a locking power cable connector as an extra measure of physical reliability.

In the event there is only a single source of power available to the SyncServer, having each power supply connected to the same circuit provides protection against a single power supply failure. Just as in the dual-corded scenario, if a power supply fails the other instantly picks up the entire load.

Power Supply Monitoring and Alarming
Power in a data center is a closely monitored resource, so it is usually obvious when an outage occurs. However, failure of a single power supply in a dual-power supply time server can be more subtle. To remedy this, each power supply in the SyncServer is continuously monitored. In the event of a power supply failure, notification is instantly provided to the network operator through SNMP trap, email, alarm relay, or LEDs on the front of the unit. This notification allows the operator time to schedule maintenance on the SyncServer at an appropriate or convenient time.

Assurance of Continued Time Service Operations
The SyncServer S600 Series network time servers are purposely built to deliver exact hardware based on Network Time Protocol (NTP) time stamps. The unparalleled accuracy and security is rounded out with outstanding ease-of-use features for reliable network time services ready to meet the needs of the user network and business operations today and in the future.

The dual-power supply option is available for the SyncServer S600 and SyncServer S650 configurations.

Specifications
- Dual IEC 60320 C14 connectors
- Dual power supplies: 88 VAC–264 VAC, 50 Hz–60 Hz, 65 W each
- Load sharing
- Hitless switching

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