BlueSky GNSS Firewall Dual-Power Supply Technology

AC Version

DC Version

Power is a key concern in modern data center design and management. While efficiency and cooling are high priorities, so is reliability—in particular, surviving power fluctuations or outages and returning to normal operations as fast as possible. GPS signal reception 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 re-establishing connection with both the GPS antenna and the downstream GPS receiver being protected. The BlueSky GNSS Firewall with dual-corded, dual-power supplies provides several levels of time service protection in these scenarios.
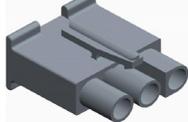
Dual-Corded, Dual-Power Supplies

In an ideal scenario, the critical infrastructure environment has dual-power circuits. The dual-corded BlueSky GNSS Firewall with hitless dual-power supplies connects to each circuit. The firewall 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.

AC

DC

All BlueSky GNSS Firewalls ship with an AC or DC 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 firewall, 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 critical infrastructure environments 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 BlueSky GNSS Firewall can be more subtle. To remedy this, each power supply in the BlueSky GNSS Firewall is continuously monitored. In the event of a power supply failure, notification is instantly provided to the network operator through SNMP trap, email, and LEDs on the front of the unit. This notification allows the operator time to schedule maintenance on the BlueSky GNSS Firewall at an appropriate or convenient time.

Assurance of Continued GPS Operations

The BlueSky GNSS Firewall is purposely built to deliver robust and resilient GPS signals to downstream GPS receivers. The unparalleled accuracy and security is rounded out with outstanding ease-of-use features for reliable GPS 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 in both AC and DC configurations of the BlueSky GNSS Firewall.

Specifications

Parameter	AC Power	DC Power
Connection	Dual IEC 60320 C14 connectors	Dual 03P UMNL V0 Molex power connector (P/N 0003121036)
Dual power supplies	88 VAC–264 VAC, 50 Hz–60 Hz, 65 W each	15 A/125 VDC
Load sharing	Yes	Yes
Hitless switching	Yes	Yes