VZ2

GPS TIME SERVER

COMMUNICATION
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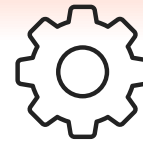
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POW LOCK SEC

Timing Accuracy Utilizing PTP Technology!

SYNCHRONIZED TIME

With a VZ2 PTP Network Time Server on the local network, synchronized time is assured no matter the state of your Internet connection. Time accuracy is greatly improved, when compared to Internet based time sources, because delay is reduced to that of the local LAN segment. Other systems that benefit from local time sources are voice and video logging systems, automation systems, and any isolated network with time requirements.

HOW IT WORKS

The VZ2 PTP Network Time Server represents a major step forward in technology. It supplies accurate time for computers and time keeping devices on the network. Supporting Precision Time Protocol (PTP), a Stratum 1/Clock Class 6 time source is available on a local network with no need for an internet connection. It uses an active GPS antenna to maintain the current time as broadcast by United States GPS satellites. In addition, a highly stable OCXO reference clock is included allowing it to serve time if GPS lock is lost for periods of time.

Connect both the included power supply and GPS antenna to base unit, then connect base unit to a local network.

Go to a computer on a network, point a browser to the device at its default ip address to enter the software setup within the web page.

Set parameters to match network, system then sends out time packets to any device on the system that asks for an update from it.

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APPLICATIONS and MARKETS:

Communication Systems Solutions' VZ2 Time Servers are suited to any application where coordination of events at multiple locations is required. The VZ2 has software specifically designed to authenticate and provide location information to Verizon's Enterprise Network Extender. Without coordinated network time, searching for problems across multiple system logs becomes much more difficult. Education, industrial facilities, military installations, public safety command rooms, government, broadcasting, and hospitals are all candidates for synchronized time systems. We also provide location information to eFemto cells for emergency services.

VZ2 TIME SERVER FEATURES and SPECIFICATIONS:

- Receive time information from GPS satellites anywhere on the surface of the earth.
- IEEE 1588 2008 PTP Protocol.
- Server Time Level: Stratum 1/Clock Class 6.
- PTP Server Time Precision: Better than +/- 1.5µs + network jitter.
- Holdover time: PTP: 15 minutes.
- 10M/100M auto sensing network interface.
- Compliant with FCC Part 15B and CE marked for radiated emissions and is a lead free product.
- Power Requirements: 5W at startup and 2.5W continuous at 12V DC.
- Environmental: Commercial temperature range, 0-70C, 95% humidity non-condensing. Altitude -304m to 18,000m.
- Networking: Static or DHCP IPv4 addressing. Standard browser interface for setup.
- Indications: Power, GPS Signal Lock, and 1PPS indications.
- Rear Connections: Power, Cat5 Ethernet, Serial, Dual USB, and GPS antenna via SMA connection.
- Supports +3.3V and 5V active GPS antennas with internal jumper setting.
- Mechanical Dimensions: 5″ x 4.2″ x 1.3″.

GPS SPECIFICATIONS:

- Based on MediaTek MT3339 Chipset.
- 22 channel low power receiver module.
- Sensitivity: -165dBm.
- GPS Time Precision: +/- 10ns RMS jitter.
- Antenna Connection: 1575.42MHz (L1 Band).
- TTFF (Time To First Fix).
- Cold start @-125dBm typically 33 seconds.
- Re-acquisition (<10s obstruction) typically 1 second.

ANTENNA SPECIFICATIONS:

- Active patch antenna with magnetic base.
- Size: 1.57″ x 1.89″ x 0.51″, 43 grams.
- Amplifier: LNA +20dB, Noise: 1.5dB, VSWR: 2.0, Voltage: 2.7-6.0V.
- Cable: RG174, 5m length, SMA male.
- Environmental: -40 to +85C.
- Waterproof to IPx6.

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MADE in the USA