

# NTP Stratum 1 Time Server using a GPS Receiver for Atomic Time [DC-NTP-GPS-Serv](#)



## Features

- Stratum 1 accuracy through GPS satellites data
- Web interface for configuration and to view satellite
- Supports NTPv4 (RFC5905), NTPv3 (RFC1306), and NTPv2 (RFC1119)
- Supports IPv4 and IPv6
- Accuracy: 30ns RMS
- 167 dBm navigation sensitivity
- System software: NBRRTOS, ANSI C/C++ compiler and linker
- Concurrent reception of up to 3 GNSS systems - GPS - Galileo - GLONASS - BeiDou
- GNSS chips are qualified according to AEC-Q100 - Manufactured in ISO/ TS 16949 certified sites
- Supports RFC1769/2030/4330 Simple Network Time Protocol (SNTP)
- Server Time Precision: Better than 5mS + network jitter
- Can service 1000 requests per second 10/100Mbps Ethernet interface
- LED indicators for power, lock, and error
- Time to first fix (TIFF) - Cold start: 30s at -147dBm - Warm start: 1s at -156 dBm
- Supports +3.3V active GPS antennas
- Faster positioning through augmentation of QZSS and IMES together with WAAS, EGNOS, MSAS, GAGAN
- Receiver type is a 72-channel u-blox M8 engine - GPS L1C/A - QZSS L1 SAIF - SBAS L1C/A - GLONASS L1OF - QZSS L1C/A - BeiDou B1I - Galileo E1B/C

## Specifications

- Performance and Memory 32-bit Freescale ColdFire 5270 CPU running at 147.5 MHz 8MB SDRAM 4MB Flash Connectors
- • DB9 for RS-232 console port - 115200 Max Baud Rate
- • RJ-45 Ethernet
- • SMA for GPS Antenna
- • Input Power: - 2.1 mm barrel jack - 2 pin terminal strip
- • SD/MMC flash card interface System 10/100 Mbps Ethernet SD/MMC Flash Card Interface with SDHC support - Requires exclusive use of SPI signals Power Input power range: 7VDC - 24VDC through barrel jack or terminal strip Includes 9V 600mA wall power supply Environmental Operations Operating Temperature: -40 to +85C Humidity: Up to 95% non-condensing Physical Dimensions 4.4" x 3.9" x 1.2" (inches) RoHS Compliance The Restriction of Hazardous Substances guidelines ensure that electronics are manufactured with fewer environment harming materials. Agency Approvals UL, C/UL, CE, FCC
- The server must be placed on a flat surface indoors and away from environmental hazards, or inside a weather resistant NEMA rated box. The GPS antenna must have a clear view of the sky, from either a window or a suitable location outside.