

The NTP100-GPS is an NTP (Network Time Protocol) server that synchronizes to GPS satellites and distributes NTP reference signals via Ethernet. When synchronized to the atomic clocks in GPS and GLONASS satellites, the long-term accuracy of the device is the same as the atomic clock of the GNSS. An internal TCXO (temperature-compensated crystal oscillator) provides holdover stability of  $\pm 1$  min/year during GPS signals loss. An optional OCXO (oven-controlled crystal oscillator) increases holdover stability to  $\pm 250$ ms/year.



## Standard Features

- Compact NTP client / server
- Synchronizes to GNSS satellites for Stratum 1 accuracy
- NTP output accuracy of  $\pm 2$  milliseconds
- 6-digit clock display (red)
- Adjustable time display brightness
- NMEA 0183 via RS232 or Ethernet

## Specifications

### HOLDOVER ACCURACY

- With loss of power, device reverts to an internal precision TCXO temperature-compensated crystal oscillator with accuracy of  $\pm 1$ min/year or  $< 165$ ms per day
- High-stability option with OCXO provides typical stability of 1 ppb/ day ( $\pm 250$ ms/year) after 30 days of aging

### NETWORK COMPATIBILITY

- Supports NTP, DHCPv4, DHCPv6 for auto acquisition of network address, name servers, timeserver configuration
- Telnet/SSH communication
- IPv4/IPv6 compatible

### CONFIGURATION

- Configure devices through provided WinDiscovery or SSH
- Configuration is saved to nonvolatile memory and survives power losses
- Authenticated network messages prevent unauthorized tampering of clock configuration

### ANTENNA

- Optional weather-proof, pre-amplified antenna included with 16 ft (5 m) of coaxial cable
- Optional antenna kit is available with antenna, 50 ft (15 m) cable and antenna

### CONNECTORS

- RJ45 - 10/100MB Ethernet
- DC input - 2.1mm male jack
- RS-232 - 9 pin male
- Antenna - SMA
- USB for configuration

### POWER

- DC input (9-28 VDC)
- Power consumption:  $< 7.5$ W
- Includes external 24 VDC wall-mount power supply with locking DC plug (UL and CE listed)

### OPERATING PARAMETERS

- Temperature: 0 to 60°C
- Humidity: Up to 90% (non-condensing)
- MTBF: 625,979 hours  
(Calculated using Fixed/Ground Mil HDBK 217F assumptions)
- IP Rating: IP30

### PHYSICAL

- Size: 6.44 x 4.06 x 1.44 in (16.35 x 10.32 x 3.65 cm)
- Weight: 16 oz (453.6 g)

### COMPLIANCE

- FCC, ROHS, CE Marked, ANSI



Mount multiple units with the RM4 rack mount

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