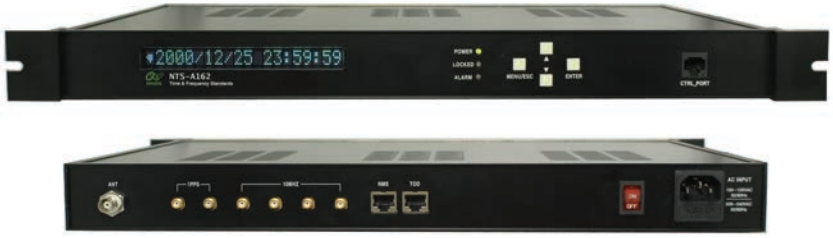
SGPS-N(NTS-A162)

Ultra precise & Versatile GPS Network Time Server



Key Features

* 16 Channel GPS Receiver
* Stratum 1 Network Time Server
* 10Base-T Ethernet Interface
* NTP Support
* Temperature & OCXO aging compensation
* 40 nano second Time Accuracy to UTC
* Telnet Remote Control
* Software Upgrade through Ethernet
* High-Resolution Vacuum Florescent Display
* TOD Data Output through RS-232C
* Space Efficient, rack optimized 1 RU design
* 19' or 12' rack type
* AC 100 ~ 240V Wide power input
* 1PPS Output
* 10 MHz Output

Key Benefits

* Cost-Effective Solution to Synchronize The Workstations, Server, Routers, etc on a Network
* Reliable and Secure Time is Acquired From Atomic Clocks Aboard the Global Position--ing System(GPS) Satellites
* High stable frequency out for the Radio Sub System & Communication Systems
* Easy to install Server Appliance

Innos's Stratum 1 level NTS-A162 derives accurate time directly from the atomic clocks aboard the GPS satellite system.

By using an integrated, 16-channel GPS receiver, every visible satellite can be tracked and used to maintain accurate and reliable time. Even in urban canyon environments where satellite visibility can be limited, the auto-matic, single satellite tracking mode provides accurate time from as few as on intermittent satellite.

The SGPS-N is a rack-mount unit that provides highly accurate timing and frequency output signals synchronized to UTC(Universal Time Coordi-nated).

The SGPS-N Network Time Server supports a wide variety of time and network protocols to seamlessly integrate into your network. A Display and keypad to quickly and easily review or configure the unit form front panel without having to communicate via the RS-232c port or telnet.

A Comprehensive RS-232/Telnet command set provides versatile control of the SGPS-N. An intuitive, Windows-based start-up program is provided to quickly configure the NTS-A162 for immediate use on your network. Telnet is supported for remote status and control over the network. The UTC time display shows full date information to the second for visual reference.

SGPS-N Specifications

Mechanical/Environmental
* Height : 44 mm (1U)
* Width : 420 mm (19' rack mount)
* Depth : 305 mm
* Weight : 4 Kg
* Operation temperature : 0 to 55 ℃
* Storage temperature : -40 to 85 ℃
* Rate of change : 10℃ / Hour
* Humidity :0 to 95%, non condensing
* Operation altitude : -60m to 4000m
* Storage Altitude : -60 to 9000m

Network (NMS port)
* 10Base-T Ethernet : RJ-45

Control (CTRL port)
* Serial(Debug) : Bidirectional RS-232,57600,N,8,1; RJ-45

TOD output
* Number of ports : 1
* Baud rate : 9600 bps
* Connector : RJ-45
* Protocol : 8data/1stop/no parity
* Signal level : RS-232

10MHz Output
* Number of ports : 4
* Connector : SMA or SMB (Depends on model ordered)
* Wave shape : Sine wave
* Amplitude : +13 dBm +/-2dB into 50 Ω
* Accuracy
  - Time Locked : < 1E-12 (one day average)
  - Holdover : < 1E-10 / day
* Allan variance : <= 1E-11(100sec)
* Phase noise(dBc/Hz)

100Hz	-135 dBc/Hz
1KHz	-145 dBc/Hz
10KHz ~ 1MHz	- 145 dBc/Hz

1PPS Output
* Number of ports : 2
* Connector : SMA or SMB (Depends on model ordered)
* Wave shape : Pulse > 2ms
* Signal Level : TTL into 50 Ω, rising edge defined
* Accuracy
  - Time Locked : < 100ns reference to UTC
  - Holdover: < 8us/day

GPS Antenna
* Supply voltage : +5 DC
* Current : Max 32mA
* Gain : Max 38dB
* Impedance : 50 ohm (TNC Female)

GPS Receiver
* 16 channel parallel receiver
* GPS time traceable to UTC (USNO)
* Receiving Frequency 1575.42 Mhz
* Connector TNC Female
* Acquisition time
  - Warm start : nominal < 5 min
  - Cold start : nominal < 10 min

Input Power
* Voltage range : 100 ~ 240 VAC(DC20 ~ 60V option)
* Power : 30 watt Max

Indicators
* VFD Display : 5x7 dots, 20 character VFD
* Power LED : Uni-color LED indicates power on
* Locked LED : Bi-color LED indicates lock to GPS
* Alarm LED : Uni-color LED indicates alarm

Supplied Accessories
* Rack-Mount Adapter
* L1 GPS Antenna kit
* RG-58 Cable(50 ft)

Options
* Connector type can be change by your requirement
* PP2S Output
* 8KHz Output
* GNSS receiver
* Lightning arrestor
* 12' Rack Mount

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