INNOS

SGPS-MP

Ultra precise & Versatile IEEE-1588 Grand Master

Key Features

* Multi Channel GPS Receiver
* Support IEEE-1588-2008(PTPv2)
  - Default PTP Profile
  - One step/Two step operation
  - Uni/Multi cast addressing
* Better than 1x10-12 Frequency accuracy(1 day)
* Up to 2,000 client capability
* Two Giga bit Ethernet Interface for redundant
* Two power module for redundant
* Temperature & OCXO aging compensation
* Standard Vacuum Fluorescent Display & Keyboard
* 10ns TimeStamp Resolution
* Telnet Remote Control
* Software Upgrade through Ethernet
* Provide 24Hr Holdover function

Key Benefits

* Cost-Effective Solution to Synchronize The Femto,Pico Base station 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 SGPS-MP provides the complete IEEE 1588-2008 PTPv2 sync solution for your local ethernet network.

By using an integrated, Multi 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 automatic, single satellite tracking mode provides accurate time from as few as on intermittent satellite.

The IEEE 1588v2 protocol enables very accurate synchronization over Ethernet LANs and offers the ability to synchronize clocks to better than 1us accuracy with only a network connection.

SGPS-MP Specifications

Mechanical/Environmental

* Height : 31 cm
* Width : 24cm
* Depth : 12cm
* Operation temperature : -10 to 50 ℃
* Storage temperature : -40 to 85 ℃
* Humidity :0 to 95%, non condensing

IEEE 1588 SUBSYSTEM

* Compliance : IEEE 1588-2008 PTPv2
  - Default PTP Profile
  - One/Two step clock operation
  - Uni/Multicast addressing
* IEEE 1588 port : GbE : RJ-45(2) for redundant
* Time Stamp Resolution : 10ns

GPS Antenna

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

GPS Receiver

* Multi channel parallel receiver
* GPS time traceable to UTC (USNO)
* Receiving Frequency 1575.42 Mhz
* Connector TNC Female

10MHz Output

* Number of ports : 1
* 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-10(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 > 10uS
* Signal Level : TTL into 50 Ω, rising edge defined
* Accuracy
  - Time Locked : < 100ns reference to UTC
  - Holdover: < 8us/day

Input Power

* Voltage range : DC -48V(Standard)
* Power : 35 watt Max
* Port: 2 port for redundant

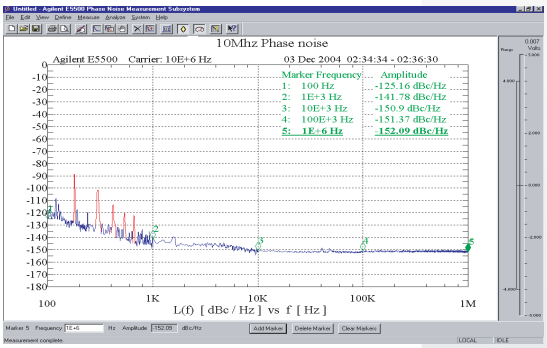
Indicators

* Power LED : Uni-color LED indicates power on
* Locked LED : Bi-color LED indicates lock to GPS
* Alarm LED : Uni-color LED indicates alarm

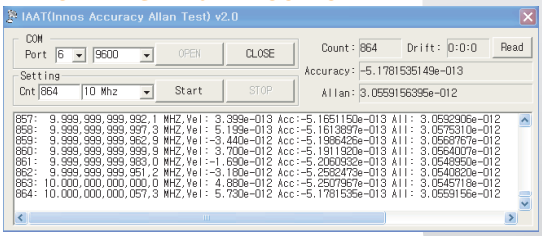
Options

* Connector type can be change by your requirement
* PP2S Output
* GPS/GLONASS combined receiver
* AC Input Power (100 ~ 240VAC)

PERFORMANCE - PHASE NOISE



PERFORMANCE - 10MHz OUTPUT



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