

AddPac GPS NTP Server



GNSS Signal Status Display Command

(GNSS : Global Navigation Satellite System)

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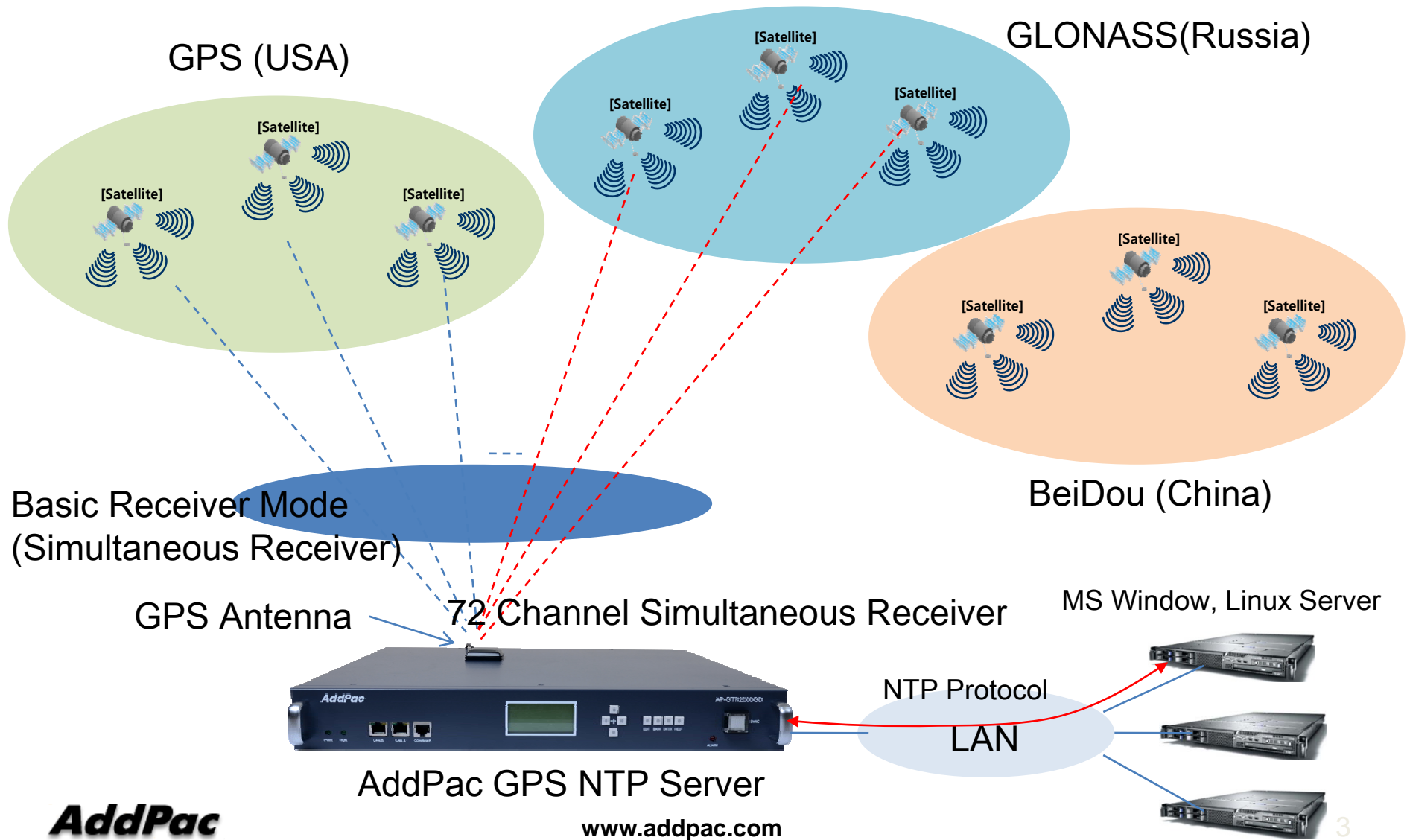
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GNSS Network Diagram



GNSS Hardware Module Service Features

- Simultaneous reception of two GNSS systems (eg GPS (USA), GLONASS (Russia), BeiDou (China)) using dual frequency RF receiver
- Basic Mode: GPS (including SBAS and QZSS (Japan, Australia)) and GLONASS simultaneous reception mode
- QZSS and SBAS (GPS Supplementary Service) use the same frequency band as GPS system
- Advanced RF Design Architecture and Anti-Interference Function support Maximum Performance even in Poor GNSS Environments
- 72 Channel Simultaneous Receiver Support
- Optimum Performance Support for Passive & Active GPS Antenna
- BeiDou (China) GNSS supports Global Service from 2020 year

GNSS Hardware Module Service Features

Parameter	Specification			
Receiver Type	72-channel engine GPS L1C/A (USA) SBAS L1C/A (GPS Supplementary Service) QZSS L1C/A (Japan, Australia) GLONASS L1OF (Russia) BeiDou B1 (China)			
	GNSS	GPS & GLONASS	GPS & BeiDou	GPS
Time-to-First-Fix	Cold start Hot start	26s 1s	27s 1s	29s 1s
Sensitivity	Tracking & Navigation Reacquisition Cold start Hot start	-167 dBm -160 dBm -148 dBm -156 dBm	-165 dBm -160 dBm -148 dBm -156 dBm	-166 dBm -160 dBm -148 dBm -156 dBm
Max navigation update rate		10 Hz	10 Hz	10 Hz
Accuracy of time pulse signal	RMS 99%	30 ns 60 ns		
Operational limits	Dynamics Altitude Velocity	≤ 4 g 50,000 m 500 m/s		

GNSS Signal Reception Status Display

Command Line Interface (CLI)

Connect the console or telnet to the machine and run the following command

GTR# **show mobile gps-time**

```
[GPS] HARD SYNC                → GPS signal reception status
[GPS] time is 1546827609.920000 = 2019-01-07T02:20:9.00Z → Current time received by GPS
[GPS] last update time is 1546827609 → Time of applying GPS time to equipment
[GPS] update period is 1.000000 → Cycle of applying GPS time to equipment
[GPS] hard sync count = 936194 → A counter indicating reception of the Hard Sync signal
[GPS] soft sync count = 936059 → A counter indicating reception of the Soft Sync signal
[GPS] hard sync lost = 0 → sync lost counter (If lost is not, default is 0)

[GPS] satellites = 22 → The number of satellites that are currently receiving GPS signals
[GPS] latitude = 37.50 → Current latitude
[GPS] longitude = 127.04 → Current longitude
```

GPS Signal Reception Status

HARD SYNC : GPS time information and synchronization signal receiving mode
SOFT SYNC : GPS time information receiving mode only
NO SYNC : GPS No Signal Reception



Thank you!

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