Gigabit Dual Power GPS NTP Server

AP-GTR2000GD

AP-GTR2000GD Gigabit Dual Power GPS NTP Server

AP-GTR2000GD embedded NTP server with GPS time receiver hardware receives GPS time information from GPS satellite and performs the NTP (network time protocol) server service for network based application server which requires accurate time information like as CCTV NVR server. AP-GTR2000GD embedded NTP server terminal is easy to manage remotely and provides excellent scalability. This device can be applied to various real-time video applications such as video surveillance, traffic management and monitoring for disaster prevention.

AP-GTR2000GD embedded NTP server transmits GPS time information to network based application server which requires accurate time information via ethernet port. In local area network, this device transmits GPS based time information to application server like as CCTV recording serverby using NTP protocol. Without GPS based time synchronization or NTP server, if time is passed after installation or in service, each application server's time clock is mismatched comparing with GPS based real-time. Especially, in case of CCTV application, time mismatching should be solved between real-time and CCTV application server's current time.

AP-GTR2000GD provides easy system cabling and Installation service by using gigabit LAN interface and internal GPS time receive hardware module.

In front of AP-GTR2000GD, there are LCD display for GPS time information and blue LAMP for device status. Also, there are two (2) gigabit ethernet port and console port. At the rear of AP-GTR2000GD, there is one module slot for AP-GPSR2 module. AP-GPSR2 module provides dual DB-9 RS232 interface port and GPS antenna interface port. And, AP-GTR2000GD provides the dual power supply by using SMPS power for redundancy and stability.

AddPac network products are well recognized in terms of performance and stability in the world. With our accumulated experience in enterprise market and communication market, AP-GTR2000GD embedded NTP server with internal GPS time receiver hardware module will satisfy the needs of customer along with AddPac CCTV VMS solution.

Product Overview

- **Embedded GPS NTP (Network Time Protocol) Server**
- **Module Type GPS Hardware Support for Easy Maintenance and GPS Hardware Upgrade**
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- **Dual RS232C Port for GPS Time Information Transmission (GPS NMEA)**
- **Firmware Upgrade Support based on High Performance Processor**
- **Real-time Operating System for Time Critical GPS Application**
- **Dual GNSS System Receiver Simultaneous Support using Dual Frequency RF Receiver (ex : GPS (USA), GLONASS (Russia))**
- **Basic Configuration : GPS (SBAS and QZSS (Japan, Australia) Including) and GLONASS Simultaneous Receiver Mode**
- **Advanced RF Design Architecture and Anti-Jamming Technology Support**
- **Maximum 72 Channel Satellite Channel Support**
- **Optimized Performance Support for Passive & Active GPS Antenna**
- **Optional Long Distance GPS Antenna Support : basic 10m, option : 20m, 30m, 40m, 50m**
- **Advanced Security Protocol Support (SSH, TCP MD5, Enhanced Password Management)**
- **2-Port 10/100Mbps Gigabit Ethernet Support**
- **1-Port RS232C Interface Support (Command Line Interface)**
- **Dual SMPS Power Supply for Redundancy**
- **Web based Smart Manager Support**

AP-GTR2000GD Application

- **GPS Time Synchronization Service Support in Closed Network Environment**
- **IP based GPS Time Synchronization Service**
- **Embedded GPS NTP (Network Time Protocol) Server**

AP-GTR2000GD

Gigabit Dual Power GPS NTP Server

Hardware Specifications

Main Chassis	High Solidity Steel Chassis
CPU	High Performance RISC Processor
Memory	512MB Flash Memory
	128MB SDRAM Main Memory
Module Slot	1ea
GPS Module	AP-GPSR2 Module Type GPS Hardware
	1-Port Antenna Interface for GPS
	10m Antenna (Default), 20m Antenna (Option)
	Two(2) RS232C Interface for GPS Data : backward compatibility
Blue LAMP LED	GPS Sync Status Display
LCD Display	LCD Display for Real-time GPS Time Display, etc
Network Interface	2-port 10/100/1000Mbps Ethernet Interface(RJ45)
Console Interface	1-port RS232C Console Interface (RJ45) for CLI (Command Line Interface)
Front LED	Power LED, Run LED, LAN LED

Power and Operation Management

Operation Environment	Temperature 0°C to +50°C (32° to 122°F) (operating), -40°C to +85°C (-40° to 185°F) (storage), Humidity 5% ~ 95%
Power Supply	AC110~220VAC 50/60Hz Free Voltage, 5V 8Amp. Internal Dual SMPS Power
Demension	56mm x 440mm x 370mm (H x W x D)
Weight	4.95 Kg

GPS NTP Service Features

GNSS (Global Navigation Satellite System) Service	**GPS**(USA), **QZSS** (Japan, Australia), **SBAS GLONASS** (Russia), **Beidou** (China)
Default GNSS	GPS, GLOBASS
Receiver Frequency	Dual Frequency Receiver Support Concurrently
Channels	Maximum 72 Channel
Default GNSS	GPS, GLOBASS
GPS Antenna	Passive, Active GPS Antenna Support
GPS Performance	Advanced RF Technology and Immune Interference
Maximum Update Rate	10Hz
Accuracy of Time Pulse	30ns~60ns
IP Time Sync. Protocol	NTP (Network Time Protocol) Support

WAN, IP Routing and Other Features

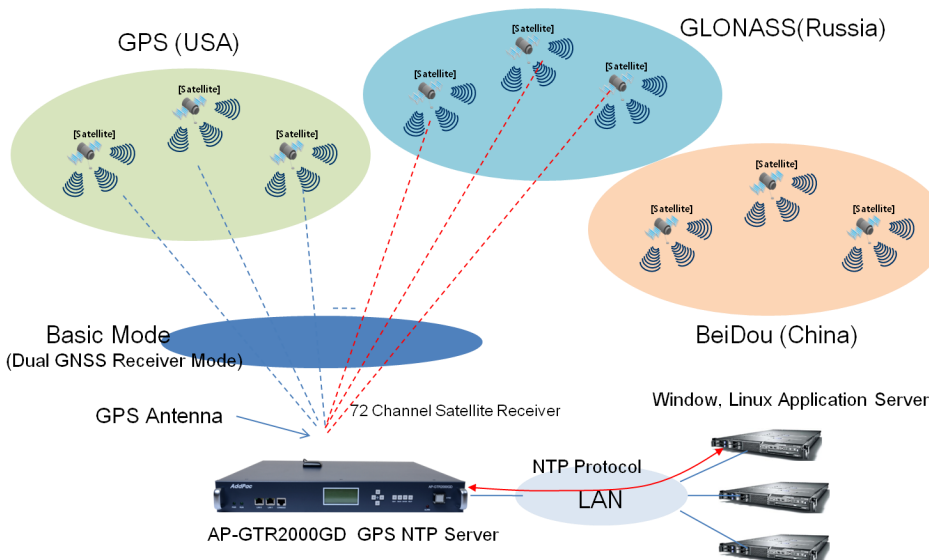|	
WAN Protocol	Point-to-Point Protocol (PPPoE) for ADSL
IP Routing	IPv4 Static and IEEE 802.1Q VLAN Routing
Other Features	DHCP Server and Relay, NAT/PAT, IEEE Standard Transparent Bridging (Spanning Tree Bridging and Concurrent Routing Bridging Protocol), NTP, Cisco Style Command Line Interface (CLI), DNS Proxy, MAC Address Filter Service DNS Proxy, VLAN, DNS Update Feature, etc.

Operation and Management Features

Network Management	Standard SNMP Agent (MIB v2) Support, Telnet, Command Line Interface via Telnet (Public, Private IP Support), Web Based Management (Network, etc) Remote Firmware (APOS) Upgrade via FTP/TFTP Support.
Operation & Management	Performance Analyzing (Process, CPU, Interface), Configuration Backup and Restore for APOS Management, Debugging and Diagnosis Features, System Booting/Rebooting through Watch-Dog, Data Logging Features, IP Traffic Statistics through Accounting Support
Security Features	IP Packet Filtering, Access List, Access Control and Data Protections, Enable/Disable for Specific Protocols Multi-level User Account Management, Auto-disconnect for Telnet/Console Sessions, PPP User Authentication Support (PAP/CHAP)

Enhanced Security Protocol

HTTP Security	Support HTTPS
	Support WebSocket
	Support PHP/FastCGI
Secure Shell	SSH : Secure Shell
TCP MD5	Support RFC2385 TCP MD5 Signatures
Password Security	Password Policy Enhancement
	System Lock

Network Diagram

GPS (USA)

GLONASS(Russia)

BeiDou (China)

Basic Mode
(Dual GNSS Receiver Mode)

GPS Antenna

72 Channel Satellite Receiver

Window, Linux Application Server

NTP Protocol

LAN

AP-GTR2000GD GPS NTP Server

Ordering Information

- AP-GTR2000GD GPS NTP Server
- CAB-GPS10m 10m GPS Antenna Cable
- CAB-GPS20m 20m GPS Antenna Cable
- CAB-LAN Ethernet Cable

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