

# GPS NTP/SNTP Time Server

## GPS-2-E-NTP



### Introduction

The GPS-2-E-NTP Network Time server provides a high precision time directly to TCP/IP networks using NTP(Network Time Protocol). It synchronizes time of any NTP clients running on remote PC' s. It supports both NTP and SNTP clients for more of current popular operating systems including: Microsoft Windows 95/98/Me/NT/2K/XP, Linux, FreeBSD, IBM AIX and other UNIX family systems. It can synchronize simultaneously thousands of servers, workstations and routers.

### Features

The GPS-2-E-NTP is high quality professional time server for computing, telecom, military, power grid, traffic systems and other science purposes. It has been manufactured with no mechanical parts as coolers or hard disk. All cooling system has been resolved on natural air circulation outgoing via metal case of unit.

### Technology

NTP : supports all versions of NTP, SNTP including latest release 4.1.1 supporting modes: CLIENT,SERVER, BROADCAST, MULTICAST. Authentication: MD5 with manual/automatic key generation.

SNTP : supports all versions of Simple Network Time Protocol  
OS Supports :Windows 95/98/Me/2K/XP/WIN7/CE, OS/2, VAX-11/785 v4.3, HPUX, SunOS, Solaris, MIPS Ultrix, ALPHA OSF/1, SGI IRIX, A/UX, AIX, Sinix, BSD, Linux, Dell SVR4, SCO Unixware, CISCO products.

LAN : 10/100 Based T: RJ-45 connector IEEE 802.3 - shielded data line

IRIG-B: 2 channels of terminal or 2 channels of BNC

RS-485: 2 channels(serial code)

RS-232: 4 channels(serial code)

PPS: 2 channel 1 PPS,2 port 1 PPM , 1 channel 1 PPH ((TTL/ active optical isolation and passive)

Alarm dry contact output: 1 channel, alarm signal can be transmitted to RTU

Chipset : Motorola receiver (8) channel with RAIM

Antenna: BNC1.5GHz / 8m + active converter (IP65 to UTP Cat5. cable 200m. (max.500m),  
RECEIVER : input frequency 1575.42MHz (L1).

INPUT : 110-240V AC/DC, DC48V,DC24V,DC12V FUSE : 1 electronic

OUTPUTS : +5V / 5A, +12V / 0.6A, -12V / 0.5A TOTAL LOAD : 60 Watt

GPS ACCURACY: better than  $\pm 100$  nsec after synchronization of first 1 hour better than  $\pm 1$   $\mu$ sec during the first hour of operation

NTP Accuracy : Better than 10 msec (with nanosecond kernel) HOUSING : Metal desktop case, 1U/2U/3U/4U

Front Panel: 43mm high / 483mm wide

Protection : rating IP20

LCD Display: 6 character+8 character .Can display local & UTC time ,longitude, latitude & altitude. The master clock has self-examination function, when the GPS signal is off and the time server system has internal problems,the LCD has error warning and the dry contact alarm outputs will send signal to RTU.

LED indicator: The LED Blinks when GPS signal is off and DC power supply is faulty.

Dual redundant power supplies: 24V DC & 110V AC

Temperature : 0~ 70°C

Storage: -40~ 125°C

Humidity: 85% max

Housing Color: Balck or White

GPS Antenna: 30 meters wire and GPS antenna

