



NTS20 GPS Network Time Server

Accurate. Reliable. Compact

NTS20 Network Time Server is an accurate, low cost, extremely compact Din Rail mount GPS for network time synchronisation.

Network Time Server takes the time from GPS satellites and provide accurate time output over NTP protocol, to synchronize slave devices with 1 milliseconds accuracy or better with respect to universal UTC time. NTP is an "open source" (royalty free) time synchronization distribution and this feature is freely/already available in computer servers with different OS support, IP cameras and NVR's

NTS20 is a compact Network Time Server having time signal output like NTP for time synch applications. It is having USB port for configuration.

NTS20 provides accurate reference time signals for synchronization of security related applications that includes time synchronization of DVR and NVR, servers, access control servers, operator workstations, and even IP cameras. More general applications include time-synchronisation of windows, Mac and Linux PCs and servers.

NTS20 Network Time Server is supplied with GPS magnetic antenna with built in LNA. It is supplied with 3 meter of RG174 cable terminated with an SMA male connector. It can be fixed to any window which has a clear view of the sky. Optionally roof top antenna and antenna cable with extended length is provided if required.

NTS20 Network Time Server can be powered up over the network by PoE or by a 5V DC power supply.

Features

- Accurate, compact Network Time Server
- 12 Satellite parallel tracking
- USB port for configuration
- PoE option
- Supporting timing protocols:
 - NTP/SNTP
- NTP v2/v3 with MD5/SHA authentication
- IPv4, UDP, TCP, SNMP, HTTP, Telnet networking protocols
- Remote alarm notification by SNMP

Applications

- Time synchronization of
 - Various security devices such as IP camera, CCTV, DVR, NVR, biometric identification devices, Access control system.
 - Microsoft windows, Linux, Servers/Clients, workstations and network infrastructure.
 - Automation systems, SCADA, Network monitoring and control systems (PLC/DCS)

TECHNICAL SPECIFICATIONS

GPS Receiver				Interface	
Timing Accuracy	<15 ns			Ethernet Connector Type	10/100Mbps (RJ45)
Horizontal Position Accuracy	10 meter			Supporting TCP/IP and UDP Protocol	IPv4, TELNET, SNMP, DHCP
Tracking Satellite	12 parallel channels			USB (Configuration Only)*	USB type B
Input Operating Frequency	1575.42 MHz L1 C/A			Monitoring and Reporting	SNMP v1/v2c trap alarms (can be disabled), status LED
Hot Start	5 second			NTP / SNTP Client Software	Platform support: Windows 10/8.1/7 SP1/ windows server 2012 R2/ 2008 R2 SP1 Unix Linux, Solarisserver synchronization
Warm Start	38 second				
Cold Start	45 second				
Status LED	Power, PPS, GPS lock, Watch dog			Power	
Time Server				Physical	
Time Source	GPS			Power Adaptor (5V/1A)	5V DC (MSTB connector)
Antenna				PoE Type	Optional (RJ45 connector)
Antenna Type	Magnetic	Roof Top (Optional)		Power Consumption	<2.5W
Connector	SMA	SMA		Environmental	
Antenna Type	28 dB	Active L1 GPS 40 dB		Dimension (in mm)	27 X 66 X 100 (H X W X L)
Antenna Cable Type	RG174	RG 6		Mounting	Din Rail, Wall mount
Operating Temperature	-40 to 85 °C		-40 to 85 °C	Ingress Protection	IP20
Humidity	95%		95%	Weight	0.3 Kg approx
Ingress Protection	IP67		IP67	Environmental	
Weight	60 g		150 g	Operating Temperature	0 to 55 °C
Time Signal Output				Storage Temperature	-20 to 80 °C
Output Type	Description	Connector	Accuracy	Humidity	20-90% non-condensing
NTP	NTPv2/v3/v4 (RFC1119, RFC1305, RFC5905) SNTP (RFC4330, RFC2030, RFC1769)	RJ45	±1ms		

Ordering Code

Model	PoE Option	Mounting	Antenna	Antenna Cable Length
NTS20	X	X	X	X
	N	None	WO	Wall mount
	Y	Yes	DO	Din Rail mount
				1
				2
			3	50 Meters
			4	100 Meters
			S	Special

Note: For magnetic antenna 3 meter RG174 antenna cable will be provided
For rooftop antenna specify antenna cable length

Standard Accessory

Non PoE Option	PoE Option
Power adaptor	USB type B cables
USB type B cable	1 no mounting clamp
1 no mounting clamp	

Application Diagram

