

Advantages:

- Accurate universal atomic clock reference
- Supports all NTP compatible devices
- Ideal for CCTV and DVR applications
- Far lower cost than competing products
- Ideal for closed or secure networks
- Direct network interface for remote siting
- Simple setup - One IP address
- Indoor location (antenna on a window)
- Integral watchdog for long-term reliable operation
- Robust, self contained unit
- Very low power use



An NTP server with GPS accuracy for digital video TIMENET provides a low-cost solution to the problem of providing accurate reference time signals for CCTV recording equipment.

CCTV and digital video recorder (DVR) installations require accurate reference time signals for synchronisation of system clocks to ensure that they are always set at the precisely correct time. It is crucial that all recordings are accurately time-stamped, especially for evidential purposes.

Many DVR products, especially those which are PC-based, have inaccurate internal clocks which drift by many seconds per week. Considering that DVR systems may be left unattended for months on end, it is easy to see that the time settings can end up being in error by many minutes.

The traditional solution to providing an accurate reference time has been to use an atomic clock radio receiver or GPS sensor linked to an expensive rack-mounted master clock server, typically with serial-only output. Network output versions tend to be even more expensive. For this reason, master reference clocks are normally only used in very high-end installations such as city centres, airports and prisons.

TIMENET integrates the GPS receiver and master NTP clock server into a single device which can be directly connected to the network. TIMENET is extremely compact, can be wall-mounted, uses very little power and is less than half the cost of competing solutions.

**SPECIFICATION**

Time Source	GPS Satellite	Power	12V DC External power supply (included) Power consumption 0.9W
Protocol	NTP Stratum 1 Time Server	Dimensions	W : 67mm x D : 92mm x H : 33mm (W : 86mm with wall mounting brackets)
Accuracy	Ethernet NTP ±100ms overall GPS source ±0.1µs	Environmental	Operating temperature 15C to 75C (5F to 125F) Relative humidity 95% non-condensing
Antenna	GPS sensor on 3m cable (included)		
Connectivity	10/100BaseT Ethernet, RJ45		
Status indicators	Green LED - long pulse : OK; short pulse : no lock Amber LED - network connectivity		