

MASTER NTP TIME SERVER  
**TIMENET™**  
**PRO**



TIMENET Pro is used in security applications to maintain accurate time for reliable evidential data.

Accurate, low cost,  
 extremely compact  
 universal atomic  
 clock reference for  
 network time  
 synchronisation

- | TIMENET Pro supports all NTP compatible devices
- | Ideal for synchronising VMS + ACS servers & clients
- | Ideal for closed or secure networks
- | Ideal for mobile or vehicle-based applications
- | Class 1 POE compatible (or 12V DC input)
- | Simple browser interface allows fast installation
- | Wide operating temperature range

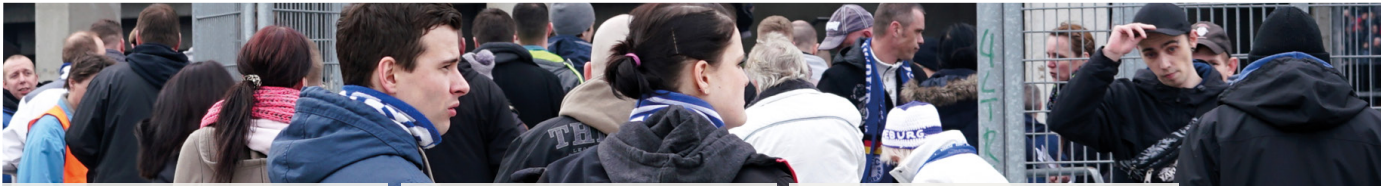
TIMENET Pro is a Master NTP reference clock for Ethernet networks with POE capability.





# TIMENET Pro is GPS based, so it can be used anywhere on the earth's surface

GPS is a global satellite system used primarily for position location, using accurate atomic clock references.



mounted on a roof, window or wall etc. As an alternative to POE, TIMENET Pro can be powered by an optional 12V DC supply (VPSU-12V-U).

### TIMENET Pro Applications

With its compact rugged enclosure, extended operating temperature range TIMENET Pro is suitable for a wide range of applications and environments.

Security related applications include time synchronisation 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. The availability of full GPS position data to third party applications also makes TIMENET Pro ideal for use in mobile or vehicle based systems.

### About GPS

GPS is a global satellite system used primarily for position location, using very accurate atomic clock references. GPS signals are far less prone to interference than traditional national radio clock signals. Thus TIMENET Pro is a universal solution which can be used anywhere in the world.

### About Time Zones

UTC is effectively a GMT reference time and TIMENET Pro provides this via NTP as a universal reference. It is the task of the network client (i.e. DVR or other client device) to look after the local time zone setting for the country or zone location, including any local or national variations to daylight savings time or equivalent.

### About UTC Time

Universal co-ordinated time is an official world-wide atomic clock reference for time, agreed by national standards around the world. UTC time copes with variations in the earth's rotation by the introduction of leap seconds at pre defined intervals. GPS time references incorporate this automatically. Therefore TIMENET Pro will continuously and automatically provide an accurate UTC clock reference over many years.

### About NTP

NTP stands for Network Time Protocol and is a universal standard for time synchronisation of computers or other devices on a network. TIMENET Pro is NTP compatible and acts as a time server for any NTP-enabled client. All Windows, Linux and Mac OS operating systems are NTP compatible.

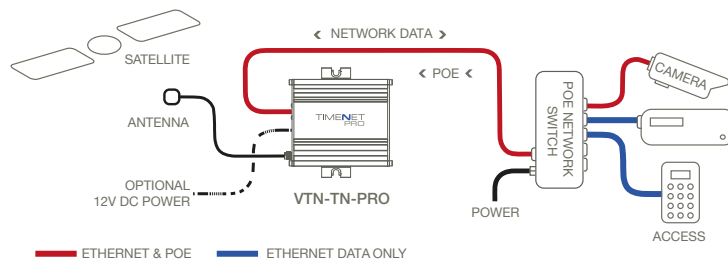


Diagram 1. TIMENET Pro delivers an accurate network time signal with maximum reliability and minimal installation effort.



TIMENET Pro comes with antenna and 5 metre cable included.

TECHNICAL SPECIFICATION

<b>TIME SERVER</b>	
Time source	GPS Satellite
Protocol	NTP Stratum 1 Time Server
Accuracy	Ethernet NTP ± 1ms overall GPS source ±0.1µS
<b>ANTENNA</b>	
Connector	SMA Male
Cable	5 metre cable, (optional 10 metre extension)
Antenna head	GPS sensor, in externally rated magnetic housing (+ adhesive pad/window fixing)
<b>POWER</b>	
Unit power	1.5W
POE type	Class 1
Alternative power input	10-40V DC (max current 150mA at 12V)
<b>ETHERNET INTERFACE</b>	
Connector type	RJ45
Rate	10Base-T/100Base-TX full-duplex with auto-negotiation
Data security	Shared Keys system (server authentication)
<b>LEDS</b>	
Status indicators	Green LED: long pulse: OK    short pulse: no GPS lock Amber LED: heartbeat pulse
<b>PHYSICAL/ENVIRONMENTAL</b>	
Dimensions	L 87mm W 75mm H 22mm (W 97mm with wall mounting brackets) L 3.42 inches W 2.95 in H 0.86 in (W 3.8 in with wall mounting brackets)
Weight	123g [ 4.3oz ] (with mounting brackets) 121g [ 4.2oz ] (without brackets)
Operating temperature	TIMENET Pro -15°C to 75°C [5°F to 167°F] Antenna -40°C to 85°C [-40°F to 185°F]
Relative humidity	95% non-condensing
Compliance	CE, FCC, RoHS
<b>PRODUCT CODES</b>	
VTN-TN-PRO	TIMENET Pro Device
VTN-EXTEND	Antenna Extension (10 metre) [32.8 feet]
VPSU-12V-U	Optional 12V Power Supply (not required if POE is used)



TIMENET Pro Antenna  
Extension Cable  
10 metres

**Surge Protection**

All Veracity products have been independently tested to verify their resilience to the stringent immunity levels of international standards. Users should note that no electronic equipment can be guaranteed to be completely protected at levels beyond the defined standard; therefore product warranty cannot include damage to products which has been caused by surges exceeding those of the standards specified, for example lightning strike activity.

It is the user's responsibility to implement relevant surge protection measures, as appropriate to the installation. This may include the fitting of additional surge protection devices where required.



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