

TIMENET

GPS MASTER NTP TIME SERVER

QUICK START GUIDE



INSTALLATION (1)

TIMENET should only be installed:

- indoors, or :
- inside an appropriately IP-rated enclosure

TIMENET should be safely located, either :

- on a shelf, or :
- mounted to a wall

NB :

TIMENET should not be supported only by the attached cables.

The GPS antenna must be positioned in a location that has a clear view of the sky. It can be mounted, either :

- on a window, using the adhesive pad supplied (first clean the glass, using the alcohol pad supplied) or :
- on a metal surface, using the magnetic antenna pod

Should you require additional length on the antenna cable, please use TIMENET antenna 10m extender, partcode : VTN - EXTEND

TIMENET should only be powered by :

- a suitable POE network, or :
- a Class II isolated 12V DC power supply, or :
- 24V AC power supply

SOFTWARE & COPYRIGHT NOTICES

This manual is © Veracity 2012.

TIMENET contains open source products released under GPL V2 or similar license. The relevant products can be downloaded for free from the following locations, or be provided by Veracity UK Ltd for a fee, upon request to info@veracityuk.com

- Linux <http://www.kernel.org/>
- NTP Server <http://www.ntp.org/>
- jQuery <http://www.jquery.com/>
- BusyBox <http://www.busybox.net/>
- jQuery Impromptu <http://www.trentrichardson.com/Impromptu/>
- overLIB <http://www.bosrup.com/web/overlib/>

EC DECLARATION OF CONFORMITY
In accordance with EN 45014:1998



We, Veracity UK Ltd. of Prestwick International Aerospace Park, 4 Dow Road, Prestwick, KA9 2TU, United Kingdom, declare that the equipment TIMENET GPS Master NTP Time Server model number VTN-TN conforms to the essential protection requirements of the EMC Directive 89/336/EEC as amended.

The product conforms with the following standards: EN 55022:2006 including Amendment 1:2007. EN 55024:1998 including Amendment 2:2003

I hereby declare that the equipment named above has been found to comply with the relevant sections of the above referenced specifications. The unit complies with all essential requirements of the EMC Directive.

Responsible Person *Mr Alastair McLeod* Mr Alastair McLeod, Director

Issued 4th January 2012 at Prestwick. This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

NOTE: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

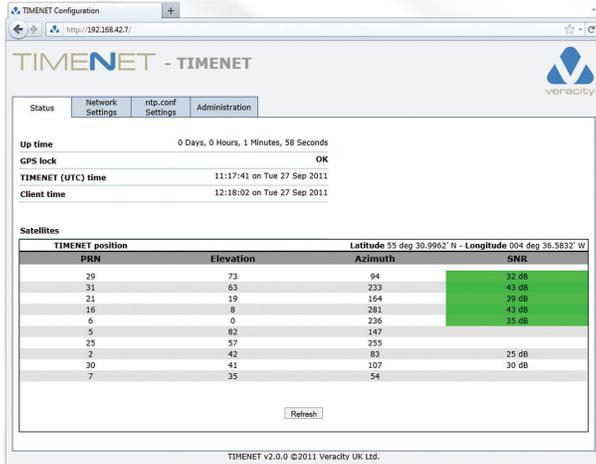
INSTALLATION (2)



1. Connect the network cable.
TIMENET consumes under 3W and provides a Class I POE signature.
2. If your network is NOT POE, then you must also connect the alternative 12V DC power (24V AC source is also compatible).
3. The amber LED will blink twice and then stay on.
After approximately 30 seconds, the unit will be running and the green LED will blink with short pulses.
This indicates normal running with no GPS signal lock.
4. Connect the GPS antenna cable supplied with the unit and ensure that the cable connector is fully screwed on.
5. After a few minutes (assuming the GPS antenna has been properly mounted and connected) the green LED will switch to a long pulse, indicating GPS signal lock.
NB: Depending upon the positioning of the antenna with respect to the view of the sky, it may take longer to gain signal lock.

SET UP (1)

1. Connect a PC to the same network as TIMENET.
The default IP address of TIMENET is 192.168.42.7
2. Configure the network settings of the PC to the same domain (e.g. 192.168.42.100).
3. Start an internet browser and navigate to 192.168.42.7
This will connect the PC to TIMENET.
4. Enter the password. This will display the TIMENET Configuration Status page. The default password is admin



SET UP (3)

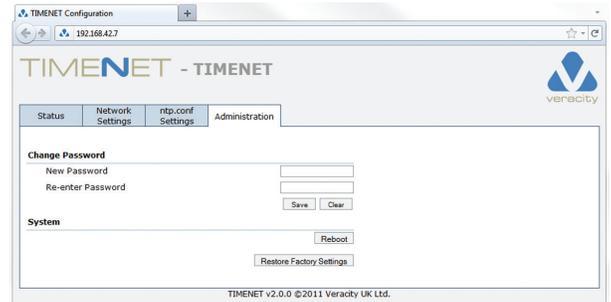
To change the default password:

1. Click on the Administration tab.
2. Type in the new password and click on Save.

Please note that any future use of the Configuration page will require the new password to be used.

To reset TIMENET to its default settings, either :

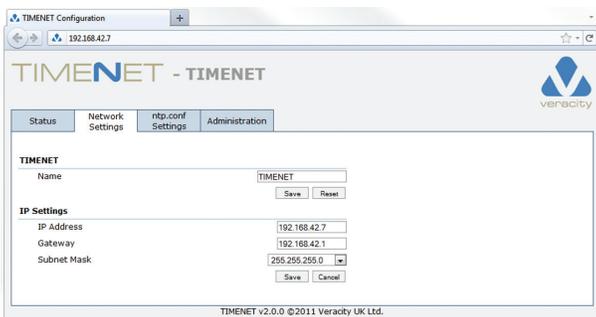
1. Click on the Administration tab and select Restore Factory Settings or :
2. Use a paper clip to press the reset button (see connections diagram) and TIMENET will re-boot with the default settings.



SET UP (2)

To change the IP address setting for your application:

1. Click the Network Settings tab and enter the IP Address, Subnet Mask and Gateway.
2. Click on Save to write the settings to TIMENET.
This will automatically cause TIMENET to re-boot with the new IP settings. This will take approximately 60 seconds.
3. Be sure to change the PC to the new IP domain before re-checking TIMENET operation.



TROUBLESHOOTING

Both LEDs are off :

Check power source is available and functional.

Amber LED is off :

Check Ethernet cable is securely connected.

Internet browser cannot connect to TIMENET :

Verify IP address of PC is on the same domain as TIMENET.

TIMENET does not get a GPS lock :

Check the status page of TIMENET.

- If the SNR column shows several entries, some with high values then wait a few minutes and check again.
- If the SNR column shows very few entries /low values then check that the antenna is mounted in a suitable position with a clear view of the sky.

Clients will not synchronise to TIMENET :

If TIMENET has just been powered up, then wait 30 minutes and try again.

FURTHER INFORMATION

For the latest product information and application notes please visit our website: www.veracityglobal.com

Product Code VTN - TN