

CW55 Network Assistance Base Station

Description

The CW55 Network Assistance Base Station is a complete module specifically designed to output time, frequency and ephemeris data that allows assisted GPS operation of the CW55 GPS receiver.

The base station is developed from a specialized version of the CW55 receiver that is designed to output the required assist data in a format required by the tracking CW55 receivers.

The CW55 base station is a complete stand alone module with integral DC/DC PSU and serial port and only requires an external GPS aerial with a clear view of the sky.

The use of this base station is restricted to applications where the tracking CW55 GPS receivers have a similar view of the sky as the base station (for applications that require greater distances between the base station and tracking CW55 GPS receivers, please contact NavSync).

The base station outputs the assist data over an RS232 serial port or USB port, and for versions of the base station that include other communication modems, such as GSM/GPRS, please contact NavSync.



Features

- Easy to use complete Network Assistance Base Station
- Includes all required user peripherals (RS232 and USB)
- Includes all manuals and software
- For base station versions with GSM/GPRS, please contact NavSync

Bulletin	NS06-PB
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CW55 NETWORK ASSISTANCE BASE STATION

CW55 Network Assist Message Format

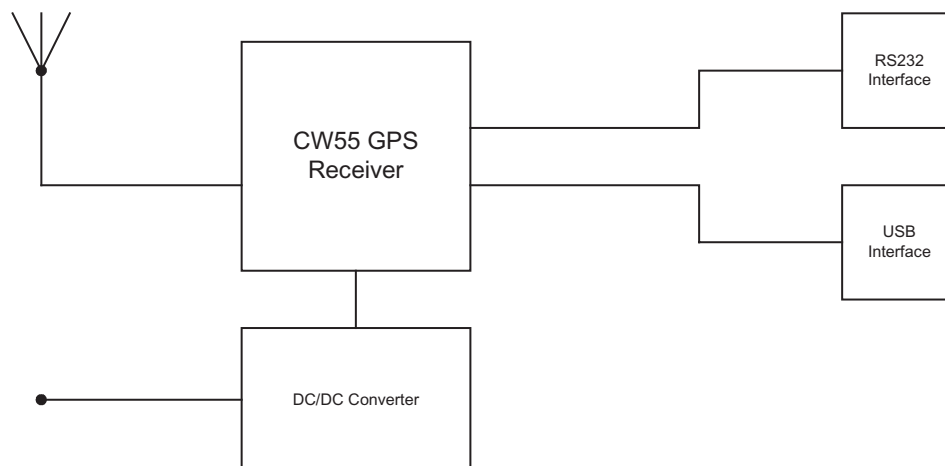
These messages are a series of ASCII comma separated messages which are output from UART3 of the CW55 Network Assist Base Station at 38,400,8,N,1. Each message starts with a # character and ends with a <CR><LF>. Prior to the end of the message, there is an & character followed by an 8-bit accumulative checksum of all bytes in-between the # and & characters in represented in ASCII hexadecimal.

For simplicity, the messages which contain data normally transmitted in the GPS satellite's Navigation Messages, contain the data formatted and scaled as closely as possible to it.

The data messages output are as follows:

- #WTP: Week, Time, Position Message
- #EPH: Ephemeris Subframe Message
- #ALM: Almanac Subframe Message
- #KLB: Klobuchar Ionospheric Parameters Message
- #UCP: UTC Correction Parameters Message
- #TIM: Time Input Message
- #LOC: Location Message

Block Diagram



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