

Rockwell GPS module tu00-D200/D205 connections

Pin 1: Antenna power input. Normally 3-5 volts. Maximum 12v, 100mA.
 Pin 2: GPS unit power input. 5.0 volts DC. Draws approximately 175mA.
 Pin 4: NMEA/Binary mode select. +5v for NMEA. 0v or floating for binary mode.
 Pin 5: Battery backup for RTC only (internal clock). 2.5-5 volts.
 Pin 6: Serial Data Out. Output of GPS messages. 0/5v level RS-232 signal.
 Pin 7: Time Mark Out. 1Hz (1PPS) timing output.
 Pin 8: CTS/DTR Serial Data control. 0v or floating for normal. 5v stops serial output.
 Pin 9: Serial Data In. Commands or data sent into GPS here. 0/5v level RS-232.
 Pin 10: Battery backup for Sram and RTC. 2.5-5 volts.
 Pin 13: Master Reset. +5v to turn on GPS. 0v or floating to turn off and reset.
 Pin 18: Serial Data In from DGPS correction receiver. 0/5v level RS-232
 Pin 20: Baud Rate select. 0v for 4800 baud. 5v or floating for 9600 baud.

Pins 3, 11, 14, 17, 19 all Grounded

Pins 12, 15, 16 No Connection

When power is connected in NMEA mode, GPS module will output \$GPGGA string with no data (\$GPGGA,,,,,0,00,,,,,*66). After satellites have been acquired and GPS is able to calculate position, it will output GGA and VTG string data:

\$GPGGA,172534.21,4042.849,N,09901.021,W,1,04,2.58,737,M,-26,M,,*6B

\$GPVTG,000.0,T,353.9,M,0.000,N,0.000,K*42

This data is repeated once every second. Without a battery backup for RTC/Sram or when first using the receiver, it may take up to 15 minutes before it can give output. With battery backup, the time will be much shorter, less than 2 minutes.

