



|              |               |                      |                               |
|--------------|---------------|----------------------|-------------------------------|
| <b>Date:</b> | 2015 / 4 / 27 | <b>Module:</b>       | MT3333 module                 |
| <b>FAE:</b>  | Dylan/Brian   | <b>Test subject:</b> | NMEA output sentence for GNSS |

1. Firmware: 20140919\_GTOP\_Module\_AXN3.60\_C33\_00\_BETA.bin

2. NMEA out sentence:

| NMEA output sentence for GPS, GLONASS and GALILEO |         |                               |                               |         |         |
|---|---------|-------------------------------|-------------------------------|---------|---------|
| System  | GGA     | GSA                           | GSV                           | RMC     | VTG     |
| GPS   | \$GPGGA | \$GPGSA                       | \$GPGSV                       | \$GPRMC | \$GPVTG |
| GPS<br>GLONASS                                    | \$GNGGA | \$GPGSA<br>\$GLGSA            | \$GPGSV<br>\$GLGSV            | \$GNRMC | \$GNVTG |
| GPS<br>GALILEO                                    | \$GNGGA | \$GPGSA<br>\$GAGSA            | \$GPGSV<br>\$GAGSV            | \$GNRMC | \$GNVTG |
| GPS<br>GLONASS<br>GALILEO                         | \$GNGGA | \$GPGSA<br>\$GLGSA<br>\$GAGSA | \$GPGSV<br>\$GLGSV<br>\$GAGSV | \$GNRMC | \$GNVTG |

**GPS/GALILEO**

\$GNGGA,054157.013,2307.1261,N,12016.4308,E,1,6,1.93,34.9,M,17.8,M,,\*76

\$GPGSA,A,3,25,14,31,29,193,27,,,,,2.11,1.93,0.86\*30

\$GAGSA,A,3,,,,,2.11,1.93,0.86\*14

\$GPGSV,3,1,10,42,54,137,,14,51,128,46,31,48,015,48,16,42,243,\*72

\$GPGSV,3,2,10,29,23,054,44,193,20,175,37,03,17,298,,27,15,190,37\*47

\$GPGSV,3,3,10,22,10,176,,25,06,043,38\*74

\$GAGSV,1,1,00\*68

\$GNRMC,054157.013,A,2307.1261,N,12016.4308,E,0.62,286.99,170415,,,A\*77

\$GNVTG,286.99,T,,M,0.62,N,1.15,K,A\*2E

**GPS/GLONASS/GALILEO**

\$GNGGA,063355.000,2307.1275,N,12016.4310,E,2,21,0.51,9.6,M,17.8,M,0000,0000\*74

\$GPGSA,A,3,32,27,03,193,29,23,19,16,21,31,14,,1.18,0.51,1.07\*35

\$GLGSA,A,3,72,84,86,74,66,65,85,75,,,,,1.18,0.51,1.07\*1C

\$GAGSA,A,3,11,12,,,,,1.18,0.51,1.07\*1A

\$GPGSV,3,1,12,42,55,137,43,16,54,279,39,31,47,049,48,27,37,187,37\*77

\$GPGSV,3,2,12,14,30,146,39,32,26,230,30,23,18,320,37,03,17,274,16\*7D

\$GPGSV,3,3,12,193,16,170,33,29,09,039,40,19,08,199,32,21,06,097,14\*42

\$GLGSV,3,1,09,85,44,085,49,65,40,249,34,75,36,011,47,86,32,155,47\*65

\$GLGSV,3,2,09,66,22,311,27,76,21,310,18,72,18,194,42,84,16,038,34\*63

\$GLGSV,3,3,09,74,14,063,41\*5A

\$GAGSV,1,1,02,12,43,106,36,11,30,166,34\*69

\$GNRMC,063355.000,A,2307.1275,N,12016.4310,E,0.02,133.71,170415,,,D\*75

\$GNVTG,133.71,T,,M,0.02,N,0.03,K,D\*20