3.2.54 GPRMC
GPS specific information

OEM Platform: 615, 617, 617D, 628, 638, FlexPak6, FlexPak6D, ProPak6

This log contains time, date, position, track made good and speed data provided by the GPS navigation receiver. RMC and RMB are the recommended minimum navigation data to be provided by a GNSS receiver.

A comparison of the position precision between this log and other selected NMEA logs can be seen in *Table 106, Position Precision of NMEA Logs* on *page 481.*

The GPRMC log outputs these messages without waiting for a valid almanac. Instead, it uses a UTC time, calculated with default parameters. In this case, the UTC time status is set to WARNING since it may not be one hundred percent accurate. When a valid almanac is available, the receiver uses the real parameters. Then the UTC time status is set to VALID.

If the NMEATALKER command, see *page 219*, is set to AUTO, the talker (the first 2 characters after the $ sign in the log header) is set to GP (GPS satellites only), GL (GLONASS satellites only) or GN (satellites from both systems) or GA (Galileo satellites only).

Message ID: **225**
Log Type: **Synch**

Recommended Input:

log gprmc ontime 1

Example 1 (GPS):

```
$GPRMC,144326.00,A,5107.0017737,N,11402.3291611,W,0.080,323.3,
210307,0.0,E,A*20
```

Example 2 (Combined GPS and GLONASS):

```
$GNRMC,143909.00,A,5107.0020216,N,11402.3294835,W,0.036,348.3,
210307,0.0,E,A*31
```

See the GPGGA usage box that applies to all NMEA logs on *page 474.*

Field	Structure	Field Description	Symbol	Example
1	$GPRMC	Log header		$GPRMC
2	utc	UTC of position	hhmmss.ss	144326.00
3	pos status	Position status: A = data valid, V = data invalid	A	A
4	lat	Latitude (DDmm.mm)	llll.ll	5107.0017737

Field	Structure	Field Description	Symbol	Example
5	lat dir	Latitude direction N = North, S = South	a	N
6	lon	Longitude (DDDmm.mm)	yyyyy.yy	11402.3291611
7	lon dir	Longitude direction E = East, W = West	a	W
8	speed Kn	Speed over ground, knots	x.x	0.080
9	track true	Track made good, degrees True	x.x	323.3
10	date	Date: dd/mm/yy	xxxxxx	210307
11	mag var	Magnetic variation, degrees [a]	x.x	0.0
12	var dir	Magnetic variation direction E/W [b]	a	E
13	mode ind	Positioning system mode indicator, see *Table 107* on *page 492*	a	A
14	*xx	Checksum	*hh	*20
15	[CR][LF]	Sentence terminator		[CR][LF]

a. Note that this field is the actual magnetic variation and will always be positive. The direction of the magnetic variation is always positive.

b. Easterly variation (E) subtracts from True course and Westerly variation (W) adds to True course.