Message ID RMC: Recommended Minimum Specific GNSS Data

Table 5-8 Recommended Minimum Specific GNSS Data

Name	Example	Unit	Description
Message ID	$GPRMC		RMC protocol header
UTC Time	161229.5		hhmmss.sss
Status[1.]	A		A=data valid or V=data not valid
Latitude	3723.248		ddmm.mmmmmm
N/S Indicator	N		N=north or S=south
Longitude	12158.34		dddmm.mmmmmm
E/W Indicator	W		E=east or W=west
Speed Over Ground	0.13	knots	
Course Over Ground	309.62	degrees	TRUE
Date	120598		ddmmyy
Magnetic Variation[2]		degrees	E=east or W=west
East/West Indicator[2]	E		E=east
Mode	A		A=Autonomous, D=DGPS, E=DR, N = Output Data Not Valid R = Coarse Position
Checksum	*10		
<CR><LF>			End of message termination

Note:

1. A valid status is derived from all the parameters set in the software. This includes the minimum number of satellites required, any DOP mask setting, presence of DGPS corrections, etc. If the default or current software setting requires that a factor is met, then if that factor is not met the solution will be marked as invalid.
2. SiRF Technology Inc. does not support magnetic declination. All “course over ground” data are geodetic WGS84 directions relative to true North.
3. Position was calculated based on one or more of the SVs having their states derived from almanac parameters, as opposed to ephemerides.