

## NMEA 0183 to NMEA 2000 Translations

NMEA 0183 Identifier	Description	NMEA 2000 PGNs that can be generated when this NMEA 0183 sentence is received
ASHR	Proprietary - Heading, Pitch, Roll, Heave, Time	127250, 127257
DBS	Depth Below Surface	128267
DBT	Depth Below Transducer	128267
DPT	Depth	128267
FEC	Proprietary Furuno - Heading, Pitch, Roll	127250, 127257
GGA	Global Positioning System Fix Data	126992, 129025, 129029, 129539
GLL	Geographic Position - Latitude/Longitude	126992, 129025, 129029
GSA	GNSS DOP and Active Satellites	129029, 129539
GSV	GNSS Satellites in View	129540
HDG	Heading, Deviation & Variation	127250, 127258
HDM	Heading, Magnetic	127250
HDT	Heading, True	127250
MWD	Wind Direction & Speed	130306
MWV	Wind Speed & Angle	130306
RMC	Recommended Minimum Specific GNSS Data	126992, 127250, 127258, 129025, 129029
ROT	Rate of Turn	127251
SAT	Proprietary - Heading, Pitch, Roll	127250, 127257
THS	True Heading and Status	127250
VHW	Water Speed and Heading	128259 *Only speed is translated
VWR	Relative (Apparent) Wind Speed and Angle	130306
ZDA	Time & Date	126992, 129029

\*Note: These translations need to be configured. See Default Port Routing table for default port outputs.

## NMEA 2000 to NMEA 0183 Translations

NMEA 2000 Identifier	Description	NMEA 0183 Sentences that can be generated when this NMEA 2000 PGN is received
126992 [0x1F010]	System Time	ZDA
127245 [0x1F10D]	Rudder Angle	RSA
127250 [0x1F112]	Vessel Heading	HDG, HDT, HDM, VHW
127251 [0x1F113]	Rate of Turn	ROT
127258 [0x1F11A]	Magnetic Variation	HDG
128259 [0x1F503]	Speed, Water Referenced	VHW
128267 [0x1F50B]	Water Depth	DBT, DPT
129025 [0x1F801]	Position, Rapid Update	GGA, GLL, RMC
129026 [0x1F802]	COG & SOG, Rapid Update	RMC
129029 [0x1F805]	GNSS Position Data	GGA, GLL, GSA, RMC, ZDA
129539 [0x1FA03]	GNSS DOPs	GSA
129540 [0x1FA04]	GNSS Satellites in View	GSV
130306 [0x1FD02]	Wind Data	MWD, MWV, VWR

\*Note: These translations need to be configured. See Default Port Routing table for default port outputs.

### AIS PGNs

NMEA 2000 Identifier	Description	NMEA 0183 Sentences that can be generated when this NMEA 2000 PGN is received
129038 [0x1F80E]	AIS Class A Position Report	VDM or VDO Message ID 1,2,3
129039 [0x1F80F]	AIS Class B Position Report	VDM or VDO Message ID 18
129041 [0x1F811]	AIS Aids to Navigation (AtoN) Report	VDM or VDO Message 21
129794 [0x1FB02]	AIS Class A Static and Voyage Related Data	VDM or VDO Message 5
129797 [0x1FB05]	AIS Binary Broadcast Message	VDM or VDO Message 8
129809 [0x1FB11]	AIS Class B "CS" Static Data Report, Part A	VDM or VDO Message 24, Part A
129810 [0x1FB12]	AIS Class B "CS" Static Data Report, Part B	VDM or VDO Message 24, Part B

## Default Port Routing and Configuration

*This is the default port configuration of the Nemo Gateway. IF enough information is received through Nemo Gateway ports, these NMEA 0183 sentences and NMEA 2000 PGNs will be automatically generated and output on the respective ports.*

Port	Sentence or PGN	Description	Rate
<b>NMEA 0183 Port 1</b>	No default output	N/A	N/A
<b>NMEA 0183 Port 2</b>	DBT	Depth Below Transducer	2 s
	HDG	Heading, Deviation and Variation	2 s
	RMC	Recommended Minimum Specific GNSS Data	2 s
	VHW	Water Speed and Heading	2 hz (0.5 s)
<b>NMEA 2000</b>	127250 [0x1F112]	Vessel Heading	10 hz (0.1 s)
	128259 [0x1F503]	Speed, Water Referenced	1 s
	128267 [0x1F50B]	Water Depth	1 s
	129025 [0x1F801]	Position, Rapid Update	10 hz (0.1 s)
	129026 [0x1F802]	COG & SOG, Rapid Update	4 hz (0.25 s)
	129029 [0x1F805]	GNSS Position Data	1 s
<b>NMEA 0183 Over UDP</b>	DBT	Depth Below Transducer	2 hz (0.5 s)
	HDG	Heading, Deviation and Variation	2 hz (0.5 s)
	RMC	Recommended Minimum Specific GNSS Data	2 hz (0.5 s)
	GGA	Global Positioning System Fix Data	2 hz (0.5 s)
	GLL	Geographic Position - Latitude/Longitude	2 hz (0.5 s)
	GSA	GNSS DOP and Active Satellites	2 s
	GSV	GNSS Satellites in View	10 s
	VHW	Water Speed and Heading	2 hz (0.5 s)