



Actisense NMEA 2000 Gateway NGW-1 15th December 2009

Firmware Version 2.173

This is a short description of the [NMEA 0183 to NMEA 2000](#) and [NMEA 2000 to NMEA 0183](#) conversions that will be available or planned at product release. This list will grow as and when customers request additional conversions.

All sentences will be fully configurable (which conversions, transmit rates, etc) from the PC control software, via the NMEA 2000 bus. This makes for a simple and comprehensive product that can be used to connect an NMEA 0183 network to an NMEA 2000 bus.

Formatter	Description	NMEA 0183 ► 2000	NMEA 2000 ► 0183	IMO
APB	Autopilot format "B"	Planned	Planned	
BWC	Bearing & Distance to Waypoint, Great Circle	Planned	Planned	
BWR	Bearing & Distance to Waypoint, Rhumb Line	Planned	Planned	
DBT	Depth Below Transducer	YES	YES	
DPT	Depth	YES	YES	
GGA	Global Positioning System Fix Data	YES	YES	
GLL	Geographic Position, Latitude / Longitude	YES	YES	
GSA	GNSS DOP and Active Satellites	Planned	Planned	
GSV	GNSS Satellites in View	Planned	Planned	
HDG	Heading, Deviation & Variation	YES	YES	
HDM	Heading, Magnetic	YES	YES	
HDT	Heading, True	YES	YES	
HSC	Heading Steering Command	YES	YES	
MDA	Meteorological Composite	Planned	Planned	
MTW	Water Temperature	YES	YES	
MWD	Wind Direction and Speed	YES	YES	
MWV (R/T)	Wind Speed and Angle	Planned	Planned	
RMA	Recommended Minimum Specific Loran-C Data	YES	YES	
RMB	Recommended Minimum Navigation Information	Planned	Planned	
RMC	Recommended Minimum Specific GPS Data	YES	YES	
ROT	Rate Of Turn	YES	YES	
RPM	Revolutions	In Part	In Part	*IMO
RSA	Rudder Sensor Angle	YES	YES	
RTE	Routes	Planned	Planned	
VBW	Dual Ground/Water Speed	YES	YES	
VDR	Set And Drift	YES	YES	
VHW	Water Speed and Heading	YES	YES	
VLW	Distance Travelled through the Water	YES	YES	
VTG	Track Made Good and Ground Speed	YES	YES	
VWR	Relative wind direction and speed	YES	YES	
WCV	Waypoint Closure Velocity	Planned	Planned	
WPL	Waypoint Location	Planned	Planned	
XDR	Transducer Measurements	Planned	Planned	
XTE	Cross-Track Error, Measured	YES	YES	
ZDA	UTC Date/Time and Local Time Zone Offset	YES	YES	
ZFO	UTC and Time from Origin Waypoint	Planned	Planned	
ZTG	UTC and Time to Destination Waypoint	Planned	Planned	
DSC	Digital Selective Calling Information	TBA	TBA	*IMO
DTM	Datum Reference	TBA	TBA	*IMO
FSI	Frequency Set Information	TBA	TBA	*IMO
HMR	Heading Monitor Receive	TBA	TBA	*IMO
HMS	Heading Monitor Set	TBA	TBA	*IMO
HTC	Heading/Track Control Command	TBA	TBA	*IMO
HTD	Heading/Track Control Data	TBA	TBA	*IMO
OSD	Own Ship Data	TBA	TBA	*IMO
RSD	Radar System Data	TBA	TBA	*IMO
SFI	Scanning Frequency Information	TBA	TBA	*IMO
TTM	Tracked Target Message	TBA	TBA	*IMO
ABK	UAIS Addressed and binary broadcast ack	TBA	TBA	
ABM (!)	UAIS Addressed binary and safety related message	TBA	TBA	
ACA	UAIS Regional Channel Assignment Message	TBA	TBA	
ACS	UAIS Channel management information Source	TBA	TBA	
AIR	UAIS Interrogation Request	TBA	TBA	
BBM (!)	UAIS Broadcast Binary Message	TBA	TBA	
LRF	UAIS Long-Range Function	TBA	TBA	
LR1	UAIS Long-range Reply Sentence 1	TBA	TBA	
LR2	UAIS Long-range Reply Sentence 2	TBA	TBA	
LR3	UAIS Long-range Reply Sentence 3	TBA	TBA	
LRI	UAIS Long-Range Interrogation	TBA	TBA	
SSD	UAIS Ship Static Data	TBA	TBA	
VDM (!)	UAIS VHF Data-link Message	TBA	TBA	
VDO (!)	UAIS VHF Data-link Own-vessel report	TBA	TBA	
VSD	UAIS Voyage Static Data	TBA	TBA	