



NMEA 0183 V 4.11 Sentence Descriptions

The following list contains all NMEA 0183 Sentence Descriptions as of Version 4.11.
Please check www.nmea.org for the most up-to-date version of the NMEA 0183 Standard.

Complete List of Approved Sentence Formatters Alphabetical Order

AAM	Waypoint Arrival Alarm
ABK	AIS Addressed and Binary Broadcast Acknowledgement
ABM	AIS Addressed Binary and Safety Related Message
ACA	AIS Regional Channel Assignment Message
ACF	General AtoN Station Configuration Command
ACG	Extended General AtoN Station Configuration Command
ACK	Acknowledge Alarm
ACM	AIS Base Station Addressed Channel Management Command
ACS	AIS Channel Management Information Source
ADS	Automatic Device Status
AFB	AtoN Forced Broadcast Command
AGA	AIS Base Station Broadcast of a Group Assignment Command
AID	AtoN Identification Configuration Command
AIR	AIS Interrogation Request
AKD	Acknowledge Detail Alarm Condition
ALA	Set Detail Alarm Condition
ALM	GPS Almanac Data
ALR	Set Alarm State
APB	Heading/Track Controller (Autopilot) Sentence "B"
ASN	AIS Base Station Broadcast of Assignment Command
BBM	AIS Broadcast Binary Message
BCG	Base Station Configuration, General Command
BCL	Base Station Configuration, Location Command
BEC	Bearing & Distance to Waypoint – Dead Reckoning
BOD	Bearing - Origin to Destination
BWC	Bearing & Distance to Waypoint – Great Circle
BWR	Bearing & Distance to Waypoint – Rhumb Line
BWW	Bearing – Waypoint to Waypoint
CEK	Configure Encryption Key Command
COP	Configure the Operational Period, Command
CBR	Configure Broadcast Rates for AIS AtoN Station Message Command
CPC	Configure Parameter-code for UNIX Time Parameter (c)
CPD	Configure Parameter-code for Destination-identification Parameter (d)
CPG	Configure Parameter-code for the Sentence-Grouping Parameter (g)
CPN	Configure Parameter-code for the Line-count Parameter (n)
CPR	Configure Parameter-code for Relative (epoch / event) Time Parameter (r)
CPS	Configure Parameter-code for the Source-identification Parameter(s)
CPT	Configure Parameter-code for a Text-string Parameter (t)
CUR	Water Current Layer
DBT	Depth Below Transducer
DCN	DECCA position
DCR	Device Capability Report

DDC	–	Display Dimming Control.....
DLM	–	Data Link Management Slot Allocations for Base Station Command.....
DOR	–	Door Status Detection.....
DPT	–	Depth.....
DSC	–	Digital Selective Calling Information.....
DSE	–	Expanded Digital Selective Calling.....
DSI	–	DSC Transponder Initialize.....
DSR	–	DSC Transponder Response.....
DTM	–	Datum Reference.....
ECB	–	Configure Broadcast Schedules for Base Station Messages, Command....
ETL	–	Engine Telegraph Operation Status.....
EVE	–	General Event Message.....
FIR	–	Fire Detection.....
FSI	–	Frequency Set Status or Command.....
FSR	–	Frame Summary of AIS Reception.....
GBS	–	GNSS Satellite Fault Detection.....
GEN	–	Generic Binary Information.....
GFA	–	GNSS Fix Accuracy and Integrity.....
GGA	–	Global Positioning System Fix Data.....
GLC	–	Geographic Position – Loran-C.....
GLL	–	Geographic Position – Latitude/Longitude.....
GMP	–	GNSS Map Projection Fix Data.....
GNS	–	GNSS Fix Data.....
GRS	–	GNSS Range Residuals.....
GSA	–	GNSS DOP and Active Satellites.....
GST	–	GNSS Pseudorange Error Statistics.....
GSV	–	GNSS Satellites In View.....
HBT	–	Heartbeat Supervision Sentence.....
HDG	–	Heading, Deviation & Variation.....
HDT	–	Heading, True (Deprecated).....
HMR	–	Heading Monitor Receive.....
HMS	–	Heading Monitor Set.....
HSC	–	Heading Steering Command.....
HSS	–	Hull Stress Surveillance Systems.....
HTC	–	Heading/Track Control Command.....
HTD	–	Heading/Track Control Data.....
LCD	–	Loran-C Signal Data.....
LRF	–	AIS Long-Range Function.....
LRI	–	AIS Long-Range Interrogation.....
LR1	–	AIS Long-range Reply Sentence 1.....
LR2	–	AIS Long-range Reply Sentence 2.....
LR3	–	AIS Long-range Reply Sentence 3.....
MEB	–	Message Input for Broadcast, Command.....
MLA	–	GLONASS Almanac Data.....
MSK	–	MSK Receiver Interface Command.....
MSS	–	MSK Receiver Signal.....
MTW	–	Water Temperature.....

MWD – Wind Direction & Speed.....
MWV – Wind Speed & Angle.....
NAK – Negative Acknowledgement.....
NRM – NAVTEX Receiver Mask Command.....
NRX – NAVTEX Received Message.....
OSD – Own Ship Data.....
POS – Device Position and Ship Dimensions Report or Configuration Command...
PRC – Propulsion Remote Control Status.....
RMA – Recommended Minimum Specific Loran-C Data.....
RMB – Recommended Minimum Navigation Information.....
RMC – Recommended Minimum Specific GNSS Data.....
ROR – Rudder Order Status.....
ROT – Rate Of Turn.....
RPM – Revolutions.....
RSA – Rudder Sensor Angle.....
RSD – Radar System Data.....
RST – Equipment Reset Command.....
RTE – Routes RTE – Routes.....
SFI – Scanning Frequency Information Status and Command.....
SID – Set an Equipment’s Identification and Command.....
SPO – Select AIS Device’s Processing and Output, Command.....
SSD – AIS Ship Static Data.....
STN – Multiple Data ID.....
TBR – TAG Block Report Request.....
TBS – TAG Block Listener Source-identification Configuration Command.....
TFR – Transmit Feed-Back Report.....
THS – True Heading and Status.....
TLB – Target Label.....
TLL – Target Latitude and Longitude.....
TPC – Transmit Slot Prohibit, Command.....
TRC – Thruster Control Data.....
TRD – Thruster Response Data.....
TSA – Transmit Slot Assignment.....
TSP – Temporary Transmit Slot Prohibit.....
TSR – Transmit Slot Prohibit Status Report.....
TTD – Tracked Target Data.....
TTM – Tracked Target Message.....
TUT – Transmission of Multi-language Text.....
TXT – Text Transmission.....
UID – User Identification Code Transmission.....
VBW – Dual Ground/Water Speed.....
VDM – AIS VHF Data-link Message.....
VDO – AIS VHF Data-Link Own-Vessel Report.....
VDR – Set & Drift.....
VER – Version.....
VHW – Water Speed and Heading.....
VLW – Dual Ground/Water Distance.....

VPW – Speed – Measured Parallel to Wind.....
VSD – AIS Voyage Static Data.....
VSI – VDL Signal Information.....
VTG – Course Over Ground & Ground Speed.....
WAT – Water Level Detection.....
WCV – Waypoint Closure Velocity.....
WNC – Distance – Waypoint to Waypoint.....
WPL – Waypoint Location.....
XDR – Transducer Measurements
XTE – Cross-Track Error, Measured.....
XTR – Cross-Track Error – Dead Reckoning.....
ZDA – Time & Date
ZDL – Time & Distance to Variable Point.....
ZFO – UTC & Time from Origin Waypoint.....
ZTG – UTC & Time to Destination Waypoint.....

NMEA 0183 Version 4.11 Sentence talker Identifiers

TALKER DEVICE	IDENTIFIER
Independent AIS Base Station	AB
Dependent AIS Base Station	AD
HEADING TRACK CONTROLLER (Autopilot):	
General	AG
Magnetic	AP
Mobile Class A or B AIS Station	AI
AIS Aids to Navigation Station	AN
AIS Receiving Station	AR
AIS Station (ITU_R M1371, ("Limited Base Station")	AS
AIS Transmitting Station	AT
AIS Simplex Repeater Station	AX
Bilge Systems	BI
Bridge Navigational Watch Alarm System	BN
Central Alarm Management	CA
COMMUNICATIONS:	
Digital Selective Calling (DSC)	CD
Data Receiver	CR
Satellite	CS
Radio-Telephone (MF/HF)	CT
Radio-Telephone (VHF)	CV
Scanning Receiver	CX
Direction Finder	DF
Duplex Repeater Station	DU
Dynamic Position	DP
Electronic Chart System (ECS)	EC
Electronic Chart Display & Information System (ECDIS)	EI
Emergency Position Indicating Beacon (EPIRB)	EP
Engine Room Monitoring Systems	ER
Fire Door Controller/Monitoring Point	FD
Fire Extinguisher System	FE
Fire Detection Point	FR
Fire Sprinkler System	FS
NAVIGATION SATELLITE SYSTEM RECIEVERS	
Galileo Positioning System	GA
BDS (BeiDou System)	GB
NavIC (IRNSS)	GI
GLONASS Receiver	GL
Global Navigation Satellite System (GNSS)	GN
Global Positioning System (GPS)	GP
QZSS	GQ
Note: The "GN" Talker Identifier shall be used when the data in the sentence is produced from a combination of multiple satellite systems. Individual satellite system Talker Identifiers are only used when the data in the sentence is produced from a single Navigation Satellite System. The description and notes in sentence definitions provide guidance on the use of Navigation Satellite System Receiver Talker Identifiers when required.	
HEADING SENSORS:	
Compass, Magnetic	HC
Gyro, North Seeking	HE
Fluxgate	HF
Gyro, Non-North Seeking	HN
Hull Door Controller/Monitoring Panel	HD
Hull Stress Monitoring	HS
Integrated Instrumentation	II

Integrated Navigation	IN
AUTOMATION:	
Alarm and Monitoring System (reserved for future use)	JA
Reefer Monitoring System (reserved for future use)	JB
Power Management System (reserved for future use)	JC
Propulsion Control System (reserved for future use)	JD
Engine Control Console (reserved for future use)	JE
Propulsion Boiler (reserved for future use)	JF
Auxiliary Boiler (reserved for future use)	JG
Electronic Governor System (reserved for future use)	JH
Loran C	LC
Multiplexer	MX
Navigation Light Controller	NL
Proprietary Code	P
Radar and/or Radar Plotting	RA
Record Book (reserved for future use)	RB
Propulsion Machinery Including Remote Control	RC
Rudder Angle Indicator (reserved for future use)	RI
Physical Shore AIS Station	SA
Steering Control System/Device (reserved for future use)	SC
Sounder, depth	SD
Steering Gear/Steering Engine	SG
Electronic Positioning System, other/general	SN
Sounder, scanning	SS
Track Control System (reserved for future use)	TC
Turn Rate Indicator	TI
Microprocessor Controller	UP
(0 < # < 9) User configured talker identifier ¹	U# ¹
VELOCITY SENSORS:	
Doppler, other/general	VD
Speed Log, Water, Magnetic	VM
Speed Log, Water Mechanical	VW
VHF DATA EXCHANGE SYSTEM (VDES)	
ASM	VA
Satellite	VS
Terrestrial	VT
Voyage Data Recorder	VR
Watertight Door Controller/Monitoring Panel	WD
Weather Instruments	WI
Water Level Detection Systems	WL
Transducer	YX
TIMEKEEPERS, TIME/DATE:	
Atomics Clock	ZA
Chronometer	ZC
Quartz	ZQ
Radio Update	ZV