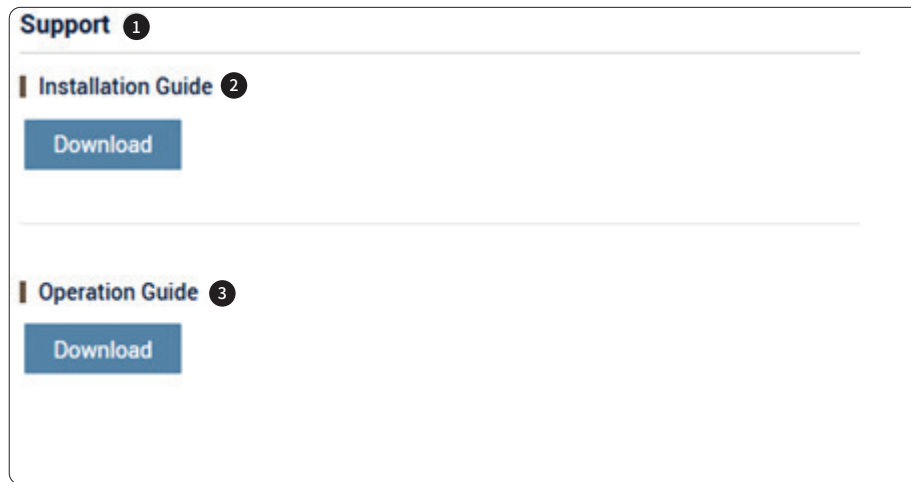


14.5.6 Support



No.	Item	Description
①	Support	Downloads the installation guide and operation guide files.
②	Installation Guide	The installation guide file (.pdf) can be downloaded. Click the Download button.
③	Operation Guide	The operation guide file (.pdf) can be downloaded. Click the Download button.

Chapter 15. Appendix

15.1 Specification

Interface	
Item	Specification
Display	- Resolution: 1024 X 600 Pixels - Pixel Arrangement: RGB vertical Stripe - Response time: Typ. 30ms
LAN	100BASE-TX (RJ-45, IEEE 802.3u (IEC 61162-450)) / IGMP Version 3
Switch	Not supported.
Hub	Not supported.
Datagram	UdPbC
Network function	SF, NF (ONF is not supported.)
Transmission group	MISC, BAM1, BAM2, NETA
Multicast address	239.192.0.1, 239.192.0.17, 239.192.0.18, 239.192.0.56, 239.192.0.254
Destination port	60001, 60017, 60018, 60056, 514
Input	ACN(CRP), HBT, SRP(SBM)
Output	ALC, ALF(MSM), ARC(CRP), SM1, SM2, SM3, SM4, SMB, SMV, SRP (SBM)

15.2 BAM Sentences

This appendix provides detailed information about the Bridge Alert Management (BAM) sentences supported by the C200M/C700 GMDSS System, according to IEC 62923-1 and IEC 62923-2. For further details, refer to the relevant sections on BAM configuration and operation within this manual. The table below lists all BAM sentences the C200M/C700 GMDSS System can transmit (as a talker):

Sentence Formatter	Function Description	Transmission Interval	Data Latency
ALC	Cyclic alert list	30s	n/a
ALF	Alert sentence	n/a	n/a
ARC	Alert command refused	n/a	n/a

The table below lists all BAM sentences the C200M/C700 GMDSS System can transmit (as a talker):

Sentence Formatter	Function Description	Presence
ACN	Alert command	Optional
HBT	Heartbeat supervision sentence	Optional

BAM Talker Sentence Formats

ALC	Cyclic Alert List: \$--ALC,xx,xx,xx,x.x,aaa,x.x,x.x,x.x,.....,aaa,x.x,x.x,x.x*hh<CR><LF>
ALF	Alert Sentence: \$--ALF,x,x,x,hhmmss.ss,a,a,aaa,x.x,x.x,x.x,x,c---c*hh<CR><LF>
ARC	Alert Command Refused: \$--ARC,hhmmss.ss,aaa,x.x,x.x,c*hh<CR><LF>

BAM Listener Sentence Formats

ACN	Alert Command: \$--ACN,hhmmss.ss,aaa,x.x,x.x,c,a*hh<CR><LF>
HBT	Heartbeat Supervision Sentence: \$--HBT,x.x,A,x*hh<CR><LF>

SRP Sentence Formats

SRP	\s:ccxxx*hh\\$--SRP,x,hhhhhhhhhhhh,c-c*hh<CR><LF>
-----	---



NOTE

Unused fields are set to null. Null fields are used to clearly indicate that no data is being transmitted, and use the symbols “,” or “*”.

15.3 List of BAM Alert

Doubtful pos (ID: 3013)	
Priority	Caution
Category	B
Alert Description	GMDSS update manual position
Decision Support	Update the manual position as described in Position Settings.
Raise/Rectify Conditions	Raise: Occurs 4 hours after the user sets Manual Position
	Rectify: On manual position update/cancel or when mode set to Auto. Rectify sent if Auto on boot.
Escalation Properties	Not Applicable
Permitted Exceptions / Other	Raised in manual position mode if set position > 4 hours old.

Lost position (ID: 3016)	
Priority	Caution
Category	B
Alert Description	Check GMDSS terminal for lost position
Decision Support	Change to manual position mode as described in Position Settings.
Raise/Rectify Conditions	Raise: Occurs after 10 minutes of no GNSS information.
	Rectify: When manual position is set or GNSS information is received again. Rectify sent if Manual on boot.
Escalation Properties	Not Applicable
Permitted Exceptions / Other	Raised in auto (GNSS) mode if position lost > 10 min. Cleared to Normal if mode set to manual.

System fault (ID: 3062)	
Priority	Warning
Category	B
Alert Description	Reverted to the factory image due to system error
Decision Support	Please contact technical support in Intellian.
Raise/Rectify Conditions	Raise: Occurs when the application image is a factory partition
	Rectify: Power-cycle the system. If that does not help, contact technical support in Intellian.
Escalation Properties	Repeated as a warning after 90 seconds.
Permitted Exceptions / Other	-

Printer fault (ID: 3062)	
Priority	Warning
Category	B
Alert Description	Check GMDSS printer
Decision Support	Check printer online/selected. Bring back online/reselect if needed. Consult printer manual if unresolved.
Raise/Rectify Conditions	Raise: Printer disconnected, or unspecified printer error detected, or printer offline/deselected for 60s or more.
	Rectify: Connection reestablished.
Escalation Properties	Repeated as a warning after 90 seconds.
Permitted Exceptions / Other	-

Paper low (ID: 3079)	
Priority	Caution
Category	B
Alert Description	Check GMDSS printer paper
Decision Support	Replace /refill printer paper.
Raise/Rectify Conditions	Raise: Printer out of paper.
	Rectify: Paper refilled.
Escalation Properties	Not Applicable
Permitted Exceptions / Other	-

Lost connection (ID: 3116)	
Priority	Caution
Category	B
Alert Description	Check GMDSS satellite terminal
Decision Support	Verify Antenna Unit has free line of sight to the sky. Remove obstructions.
Raise/Rectify Conditions	Raise: The terminal has been unable to detect or otherwise contact the satellites of the Iridium satellite system for a period of one minute or more.
	Rectify: Iridium satellite system detected.
Escalation Properties	Not Applicable
Permitted Exceptions / Other	-

Distress Rx (ID: 3122)	
Priority	Warning
Category	A
Alert Description	Incoming distress. Check GMDSS display
Decision Support	Read the received Distress Alert Relay (see Maritime Safety Information (MSI)).
Raise/Rectify Conditions	Raise: Distress Alert Relay message (MSI of Distress priority) received.
	Rectify: All Distress Alert Relay messages read.
Escalation Properties	Repeated as a warning after 90 seconds.
Permitted Exceptions / Other	Only one alert raised for multiple messages. Ack'able=N (CAM must send ARC if ACN received).

Urgency Rx (ID: 3122)	
Priority	Warning
Category	A
Alert Description	Incoming urgency warning. Check GMDSS display
Decision Support	Read the received urgency MSI message or urgency priority message (see Maritime Safety Information (MSI) and Safety Messaging).
Raise/Rectify Conditions	Raise: Urgency MSI message or urgency priority message received.
	Rectify: All urgency priority messages read. (MSI or Safety msg)
Escalation Properties	Repeated as a warning after 90 seconds.
Permitted Exceptions / Other	Only one alert raised for multiple messages. Ack'able=N (CAM must send ARC if ACN received).

Distress missed (ID: 3122)	
Priority	Warning
Category	A
Alert Description	Missed distress call. Check GMDSS display
Decision Support	Open the Call History to see the details on the missed call.
Raise/Rectify Conditions	Raise: Incoming distress priority voice call not answered.
	Rectify: Call History accessed.
Escalation Properties	Repeated as a warning after 90 seconds.
Permitted Exceptions / Other	Only one alert raised for multiple missed calls. Ack'able=N (CAM must send ARC if ACN received).

Urgency missed (ID: 3122)	
Priority	Warning
Category	A
Alert Description	Missed urgency call. Check GMDSS display
Decision Support	Open the Call History to see the details on the missed call.
Raise/Rectify Conditions	Raise: Incoming urgency priority voice call not answered.
	Rectify: Call History accessed.
Escalation Properties	Repeated as a warning after 90 seconds.
Permitted Exceptions / Other	Only one alert raised for multiple missed calls. Ack'able=N (CAM must send ARC if ACN received).

MSI Rx (ID: 3123)	
Priority	Caution
Category	B
Alert Description	Check new received maritime safety information
Decision Support	Read the received MSI message (see Maritime Safety Information (MSI)).
Raise/Rectify Conditions	Raise: Safety priority MSI message received.
	Rectify: All safety priority MSI messages read.
Escalation Properties	Not Applicable
Permitted Exceptions / Other	Only one alert raised for multiple safety messages.

Safety Rx (ID: 3123)	
Priority	Caution
Category	B
Alert Description	Check new received safety message
Decision Support	Read the received safety message (see Safety Messaging).
Raise/Rectify Conditions	Raise: Safety message received (Safety priority).
	Rectify: All safety messages read.
Escalation Properties	Not Applicable
Permitted Exceptions / Other	Only one alert raised for multiple safety messages.

Safety missed (ID: 3123)	
Priority	Caution
Category	B
Alert Description	Missed safety call. Check GMDSS display
Decision Support	Open the Call History to see the details on the missed call.
Raise/Rectify Conditions	Raise: Incoming safety priority voice call not answered.
	Rectify: Call History accessed.
Escalation Properties	Not Applicable
Permitted Exceptions / Other	Only one alert raised for multiple missed calls.

Storage low (ID: 3079)	
Priority	Caution
Category	B
Alert Description	Check GMDSS message storage medium
Decision Support	If the system uses more than 80% of the storage space, it automatically deletes the logs in order, starting with the oldest logs, until the storage space is below 80%.
Raise/Rectify Conditions	Raise: Storage space insufficient (e.g., up to 80% used).
	Rectify: Storage space below threshold (e.g., below 80%).
Escalation Properties	Not Applicable
Permitted Exceptions / Other	-

Invalid antenna (ID: 12001)	
Priority	Warning
Category	B
Alert Description	GMDSS unavailable. Incompatible antenna
Decision Support	If the combination of SDT-1 and BDU/ADU is not connected correctly.
Raise/Rectify Conditions	Raise: Control Unit detects incompatible Antenna Unit revision (e.g., C700 BDU/ADU on C200M SDT-1)
	Rectify: Control Unit detected compatible Antenna Unit
Escalation Properties	Repeated as a warning after 90 seconds.
Permitted Exceptions / Other	-

Lost handset (ID: 12002)	
Priority	Warning
Category	B
Alert Description	Voice calls unavailable. Check handset cable.
Decision Support	Check the cable between the handset and the Control Unit.
Raise/Rectify Conditions	Raise: Analog handset not connected or becomes disconnected (poor/intentional). (Control Unit loses connection with Handset).
	Rectify: Connection reestablished.
Escalation Properties	Repeated as a warning after 90 seconds.
Permitted Exceptions / Other	-

Lost antenna ADU (ID: 12002)	
Priority	Warning
Category	B
Alert Description	GMDSS unavailable. Check BDU/ADU cable in antenna.
Decision Support	Check the cable between the BDU and the ADU.
Raise/Rectify Conditions	Raise: SDT connected to BDU, but ADU not connected to or becomes disconnect. (Control Unit loses connection with Antenna Unit).
	Rectify: Connection reestablished.
Escalation Properties	Repeated as a warning after 90 seconds.
Permitted Exceptions / Other	Not raised if SDT-BDU connection lost.

Lost antenna BDU (ID: 12002)	
Priority	Warning
Category	B
Alert Description	GMDSS unavailable. Check ethernet cable between SDT and BDU.
Decision Support	Check the ethernet cable connection between SDT and BDU.
Raise/Rectify Conditions	Raise: BDU not connected or SDT-BDU connection disconnected (ethernet cable issue).
	Rectify: Connection reestablished.
Escalation Properties	Repeated as a warning after 90 seconds.
Permitted Exceptions / Other	If this alert "Lost antenna BDU/ADU" is active, This Alert is not raised.

Lost alarm box (ID: 12002)	
Priority	Warning
Category	B
Alert Description	Alarm box lost. Check alarm box cable.
Decision Support	Check the cable between the Junction box and the Alarm box(s).
Raise/Rectify Conditions	Raise: Not connected to alarm box (from boot) or connection lost (intentional/ CAN failure). (Interface Unit loses connection with Alarm panel).
	Rectify: Connection reestablished.
Escalation Properties	Repeated as a warning after 90 seconds.
Permitted Exceptions / Other	Only one alert raised for multiple lost Alarm Panels.

Lost alarm unit (ID: 12002)	
Priority	Warning
Category	B
Alert Description	Alarm unit lost. Check alarm unit cable.
Decision Support	Check the cable between the Junction box and the Alarm unit.
Raise/Rectify Conditions	Raise: Not connected to alarm unit (from boot) or connection lost (intentional/ CAN failure).
	Rectify: Connection reestablished.
Escalation Properties	Repeated as a warning after 90 seconds.
Permitted Exceptions / Other	-

Lost SSAS box (ID: 12002)	
Priority	Warning
Category	B
Alert Description	SSAS box lost. Check SSAS box cable.
Decision Support	Check the cable between the Junction box and the SSAS box(s).
Raise/Rectify Conditions	Raise: Not connected to SSAS box (from boot) or connection lost (intentional/ CAN failure).
	Rectify: Connection reestablished.
Escalation Properties	Repeated as a warning after 90 seconds.
Permitted Exceptions / Other	-

Invalid SIM card (ID: 12201)	
Priority	Warning
Category	B
Alert Description	GMDSS unavailable. Check SIM subscription information
Decision Support	Check if the SIM supports the GMDSS feature.
Raise/Rectify Conditions	Raise: SIM that does not support GMDSS is inserted.
	Rectify: Insert a SIM that supports GMDSS.
Escalation Properties	Repeated as a warning after 90 seconds.
Permitted Exceptions / Other	-

Lost SIM card (ID: 12202)	
Priority	Warning
Category	B
Alert Description	GMDSS unavailable. Check SIM card slot
Decision Support	Verify the SIM card is properly inserted.
Raise/Rectify Conditions	Raise: SIM not inserted or cannot be detected.
	Rectify: SIM card detected.
Escalation Properties	Repeated as a warning after 90 seconds.
Permitted Exceptions / Other	-

GMDSS fault (ID: 21002)	
Priority	Warning
Category	B
Alert Description	GMDSS service blocked (SIM locked)
Decision Support	Contact your service provider.
Raise/Rectify Conditions	Raise: GMDSS System is unavailable by Iridium network.
	Rectify: None specified. Contact your service provider.
Escalation Properties	Repeated as a warning after 90 seconds.
Permitted Exceptions / Other	-

GMDSS fault (ID: 21002)	
Priority	Warning
Category	B
Alert Description	GMDSS service blocked (Unlock device)
Decision Support	Contact your service provider.
Raise/Rectify Conditions	Raise: GMDSS System is unavailable by Iridium network.
	Rectify: None specified. Contact your service provider.
Escalation Properties	Repeated as a warning after 90 seconds.
Permitted Exceptions / Other	-

GMDSS fault (ID: 21002)	
Priority	Warning
Category	B
Alert Description	GMDSS service blocked (IMSI invalid)
Decision Support	Contact your service provider.
Raise/Rectify Conditions	Raise: GMDSS System is unavailable by Iridium network.
	Rectify: None specified. Contact your service provider.
Escalation Properties	Repeated as a warning after 90 seconds.
Permitted Exceptions / Other	-

GMDSS fault (ID: 21002)	
Priority	Warning
Category	B
Alert Description	GMDSS service blocked (IMEI blacklisted)
Decision Support	Contact your service provider.
Raise/Rectify Conditions	Raise: GMDSS System is unavailable by Iridium network.
	Rectify: None specified. Contact your service provider.
Escalation Properties	Repeated as a warning after 90 seconds.
Permitted Exceptions / Other	-

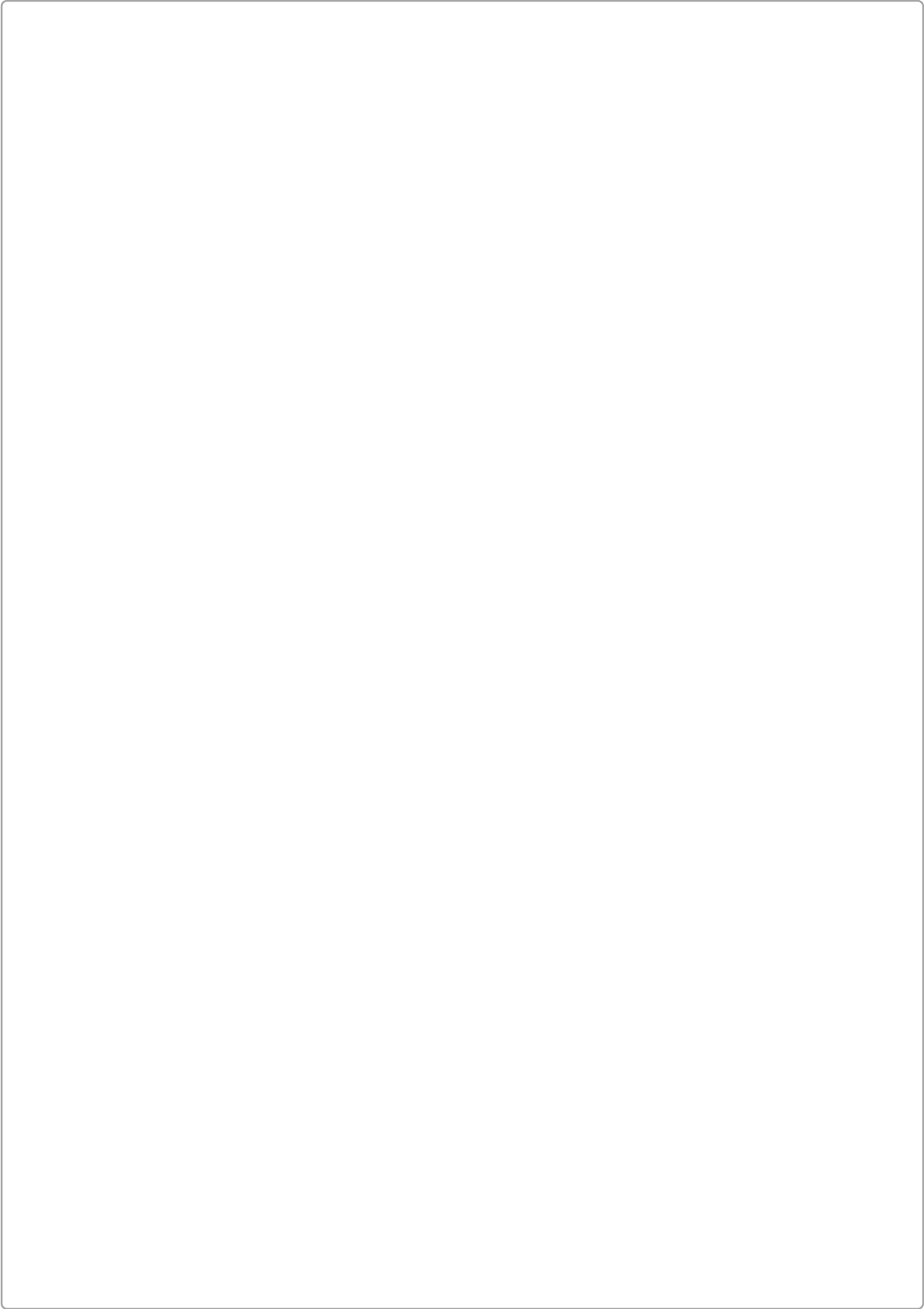
Safety Tx fail (ID: 22002)	
Priority	Warning
Category	B
Alert Description	Failed to send safety message.
Decision Support	Verify Antenna Unit line of sight. Remove obstructions. Initiate resending (see Safety Messaging).
Raise/Rectify Conditions	Raise: No messages were sent to the Iridium server for 5 minutes after the safety message was sent.
	Rectify: User Acknowledged message transmission failure (transitory alert).
Escalation Properties	Repeated as a warning after 90 seconds.
Permitted Exceptions / Other	Only one alert raised for multiple failed safety message transmissions.

15.4 Abbreviation / Acronym

Abbreviation / Acronym	Meaning
A	
ACK	Acknowledgment
ADU	Above Deck Unit
B	
BAM	Bridge Alert Management
BDU	Below Deck Unit
C	
COG	Course Over Ground
CSO	Chief Security Officer
CWA	Coastal Warning Area
D	
DAR	Distress Alert Relay
DTMF	Dual-Tone Multi-Frequency
E	
EIRP	Effective Isotropic Radiated Power
G	
G/T	Gain-to-Noise-Temperature Ratio
GEO	Geostationary Orbit
GMDSS	Global Maritime Distress and Safety System
GNSS	Global Navigation Satellite System
GPS	Global Positioning System
I	
IC	Integrated Circuit
IGS	Iridium GMDSS System
IME	Input Method Editor
IMO	International Maritime Organization
IP	Internet Protocol
L	
LCD	Liquid Crystal Display
LED	Light Emitting Diode
LEO	Low Earth Orbit
M	
MB	Megabit
MET	Meteorological Area
MMSI	Maritime Mobile Service Identity
MoCA	Multimedia over Coax Alliance
MSI	Maritime Safety Information
N	
NAV	Navigation
O	
OTA	Over-the-Air
P	
PABX	Private Automatic Branch Exchange
PBX	Private Branch Exchange
PSU	Power Supply Unit

Abbreviation / Acronym	Meaning
R	
RCC	Responsible Rescue Coordination Center
RF	Radio Frequency
RX	Receive
S	
SAR	Search and Rescue
SDT	Safety Display Terminal
SES	Ship Earth Station
SFA	Safety Function Assessment
SIM	Subscriber Identity Module
SMS	Short Message Service
SOG	Speed Over Ground
SOLAS	Safety of Life at Sea
SSAS	Ship Security Alert System
T	
TNC	Threaded Neill-Concelman
TX	Transmit
U	
UHF	Ultra High Frequency
USB	Universal Serial Bus
USIM	Universal Subscriber Identity Module
V	
VBUS	USB Power Bus
VBW	Vessel Speed Relative to Water
VDC	Volts Direct Current
VHF	Very High Frequency
VHW	Speed Through Water
VTG	Course Over Ground and Ground Speed
W	
WAN	Wide Area Network

Note



Note