

# INTERNATIONAL STANDARD



**Maritime navigation and radiocommunication equipment and systems – Class B  
shipborne equipment of the automatic identification system (AIS) –  
Part 1: Carrier-sense time division multiple access (CSTDMA) techniques**



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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

**MARITIME NAVIGATION AND RADIOCOMMUNICATION  
EQUIPMENT AND SYSTEMS – CLASS B SHIPBORNE EQUIPMENT  
OF THE AUTOMATIC IDENTIFICATION SYSTEM (AIS) –****Part 1: Carrier-sense time division multiple access  
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This third edition cancels and replaces the second edition published in 2010 and Amendment 1:2013. This edition constitutes a technical revision.

This edition includes the following significant technical change with respect to the previous edition: in the synchronisation method, addition of a direct method for synchronisation from an internal UTC source.

The text of this document is based on the following documents:

FDIS	Report on voting
80/837/FDIS	80/842/RVD

Full information on the voting for the approval of this International Standard can be found in the report on voting indicated in the above table.

This document has been drafted in accordance with the ISO/IEC Directives, Part 2.

A list of all parts of the IEC 62287 series published under the general title *Maritime navigation and radiocommunication equipment and systems – Class B shipborne equipment of the automatic identification system (AIS)*, can be found on the IEC website.

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# MARITIME NAVIGATION AND RADIOCOMMUNICATION EQUIPMENT AND SYSTEMS – CLASS B SHIPBORNE EQUIPMENT OF THE AUTOMATIC IDENTIFICATION SYSTEM (AIS) –

## Part 1: Carrier-sense time division multiple access (CSTDMA) techniques

### 1 Scope

This part of IEC 62287 specifies the minimum operational and performance requirements, methods of testing and required test results for Class B shipborne automatic identification system (AIS) equipment using carrier-sense time division multiple access (CSTDMA) techniques. This document takes into account other associated IEC International Standards and existing national standards, as applicable.

It is applicable for AIS equipment used on craft that are not covered by the mandatory carriage requirement of AIS under SOLAS Chapter V.

An AIS station intended to operate in receive-only mode is not considered a Class B shipborne mobile AIS station.

### 2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

IEC 60945:2002, *Maritime navigation and radiocommunication equipment and systems – General requirements – Methods of testing and required test results*

IEC 61108 (all parts), *Maritime navigation and radiocommunication equipment and systems – Global navigation satellite systems (GNSS)*

IEC 61162-1, *Maritime navigation and radiocommunication equipment and systems – Digital interfaces – Part 1: Single talker and multiple listeners*

IEC 61993-2, *Maritime navigation and radiocommunication equipment and systems – Automatic identification systems (AIS) – Part 2: Class A shipborne equipment of the automatic identification system (AIS) – Operational and performance requirements, methods of test and required test results*

IEC 62320-1, *Maritime navigation and radiocommunication equipment and systems – Automatic identification systems (AIS) – Part 1: AIS Base Stations – Minimum operational and performance requirements, methods of testing and required test results*

ITU-R Recommendation M.493, *Digital selective-calling system for use in the maritime mobile service*

ITU-R Recommendation M.825-3:1998, *Characteristics of a transponder system using digital selective calling techniques for use with vessel traffic services and ship-to-ship identification*