هيئة الاتصالات وتقنية المعلومات
Communications & Information Technology Commission

CITC Technical Specification

Specification for Automatic Identification System (AIS) Equipment

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Scope

This specification applies to automatic identification system (AIS) equipment.
The AIS is an automatic tracking systems used on ships and vessel traffic services to locate and identify movements of vessels.

Enforcement

This specification shall enter into force on 01/07/2021.
Any previous version of this technical specification is withdrawn.

General Requirements

- All equipment must comply with the requirement of CITC specification GEN001, be safe and must not adversely affect other electrical equipment.
- All telecommunications and radio terminal equipment must comply with the relevant technical specifications established by CITC. In addition, such equipment may be subject to regulations for Declaration of Conformity or registration. Please visit www.citc.gov.sa for details.
- If more than one interface type is offered by a piece of equipment, each interface must meet the applicable technical specifications.
- It is mandatory that test reports are obtained from a laboratory that has been accredited by a body that is a member of the ILAC Mutual Recognition Arrangement.

Limits and conditions

Testing should be carried out to ensure compliance with the listed specifications.

Frequency band	Max Output Power or Magnetic Field	Usage	Standard	Comments
161.975 MHz	12.5 W	AIS	IEC 62287 IEC 61108-1 IEC 60945 IEC 61162-1 ITU-R M.1371-5 ITU-R M.493-9 ITU-R M.825-3	Class B
162.025 MHz	12.5 W	AIS	IEC 62287 IEC 61108-1 IEC 60945	Class B

			IEC 61162-1 ITU-R M.1371-5 ITU-R M.493-9 ITU-R M.825-3	
161.975 MHz	2 W	AIS	IEC 62287-1 IEC 61108-1 IEC 60945 IEC 61162-1 ITU-R M.1371-5 ITU-R M.493-9 ITU-R M.825-3	CSTDMA
162.025 MHz	2 W	AIS	IEC 62287 IEC 61108-1 IEC 60945 IEC 61162-1 ITU-R M.1371-5 ITU-R M.493-9 ITU-R M.825-3	CSTDMA
161.975 MHz	5 W	AIS	IEC 62287-2 IEC 61108-1 IEC 60945 IEC 61162-1 ITU-R M.1371-5 ITU-R M.493-9 ITU-R M.825-3	class B SOTDMA
162.025 MHz	5 W	AIS	IEC 62287-2 IEC 61108-1	class B SOTDMA

			IEC 60945 IEC 61162-1 ITU-R M.1371-5 ITU-R M.493-9 ITU-R M.825-3	
161.975 MHz	12.5 W	AIS	IEC 61993-2 IEC 61108-1 IEC 60945 IEC 61162-1 ITU-R M.1371-5 ITU-R M.493-9 ITU-R M.825-3	class A
162.025 MHz	12.5 W	AIS	IEC 61993-2 IEC 61108-1 IEC 60945 IEC 61162-1 ITU-R M.1371-5 ITU-R M.493-9 ITU-R M.825-3	class A

Licensing Requirements

No licensing requirements apply

Additional Requirements

- AIS equipment are subject for device registration requirements.
- A device license must be obtained before equipment of this type can be used in the Kingdom.

References

The following referenced documents are indispensable for the application of this document. If no issue or revision number is quoted along with the title of a technical specification or standard, the latest published version should be used.

IEC 62287

Maritime navigation and radiocommunication equipment and systems – Class B shipborne equipment of the automatic identification system (AIS).

IEC 62287-1

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

IEC 62287-2

Maritime navigation and radiocommunication equipment and systems - Class B shipborne equipment of the automatic identification system (AIS) - Part 2: Self-organising time division multiple access (SOTDMA) techniques

IEC 61108-1

Maritime navigation and radiocommunication equipment and systems – Global navigation satellite systems.

IEC 60945

Maritime navigation and radiocommunication equipment and systems – General requirements – Methods of testing and required test results.

IEC 61162-1

Maritime navigation and radiocommunication equipment and systems – Digital interfaces

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

ITU-R M.1371-5

Technical characteristics for an automatic identification system using time-division multiple access in the VHF maritime mobile frequency band

ITU-R M.493-9

Digital selective-calling system for use in the maritime mobile service

ITU-R M.825-3

Characteristics of a transponder system using digital selective calling techniques for use with vessel traffic services and ship-to-ship identification

History

For reference, the latest versions of the technical specifications are published on the CITC website www.citc.gov.sa.

Description	Status	Date
	Issue 1	10/01/2010
	Issue 2	20/06/2021