

INTERNATIONAL STANDARD



**Maritime navigation and radiocommunication equipment and systems –
Shipborne equipment for long-range identification and tracking (LRIT) –
Performance requirements**



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IEC Central Office
3, rue de Varembe
CH-1211 Geneva 20
Switzerland

Tel.: +41 22 919 02 11
Fax: +41 22 919 03 00
info@iec.ch
www.iec.ch

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Performance requirements**

INTERNATIONAL
ELECTROTECHNICAL
COMMISSION

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

**MARITIME NAVIGATION AND RADIOCOMMUNICATION
EQUIPMENT AND SYSTEMS –
SHIPBORNE EQUIPMENT FOR LONG-RANGE
IDENTIFICATION AND TRACKING (LRIT) –
PERFORMANCE REQUIREMENTS**

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

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MARITIME NAVIGATION AND RADIOCOMMUNICATION EQUIPMENT AND SYSTEMS – SHIPBORNE EQUIPMENT FOR LONG-RANGE IDENTIFICATION AND TRACKING (LRIT) – PERFORMANCE REQUIREMENTS

1 Scope

International Standard IEC 62729 specifies the performance requirements and methods of testing for shipborne equipment for use for long-range identification and tracking (LRIT). Long-range identification and tracking of ships is a requirement of regulation V/19-1 of SOLAS 1974 as amended. An introduction to the system is given in Annex A. The standard results from observations made at the IMO meeting of MSC 88 in November 2010 that some LRIT equipment in practice was not operating in accordance with the provisions of SOLAS and the IMO performance standards.

The standard takes account of the general requirements given in IMO resolution A.694(17) and is associated with IEC 60945. When a requirement in this International Standard is different from IEC 60945, the requirement in this standard takes precedence.

This standard incorporates the parts of the performance standards included in IMO resolution MSC.263(84), Revised performance standards and functional requirements for the long-range identification and tracking of ships.

Equipment tested to this standard will demonstrate compliance with the SOLAS regulation as indicated below and the test results will assist Administrations in granting type approval:

(SOLAS V/19-1.6) Systems and equipment used to meet the requirements of this regulation shall conform to performance standards and functional requirements not inferior to those adopted by the IMO. Any shipboard equipment shall be type approved by the Administration.

Shipboard installations are not covered by this standard but matters relating to the installation of the shipboard equipment are reproduced in Annex B. The IMO conformance test of shipborne installations is not covered by this standard but details are given, for information, in Annex C.

NOTE All text of this standard, whose wording is identical to that of IMO resolution MSC.263(84) and the SOLAS Convention, is printed in italics, and the resolution and associated performance standard paragraph numbers or regulation are indicated in brackets.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. 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*

IMO, *International Convention for the safety of life at sea (SOLAS), 1974 as amended*

IMO Resolution A.694(17):1991, *General requirements for shipborne radio equipment forming part of the global maritime distress and safety system (GMDSS) and for electronic navigational aids*

IMO Resolution MSC.263(84):2008, *Revised performance standards and functional requirements for the long-range identification and tracking of ships*

ITU Radio Regulations, *Appendix 3, Tables of maximum permitted power levels for spurious or spurious domain emissions*

3 Abbreviations

ASP	Application Service Provider
CSP	Communication Service Provider
GMDSS	Global Maritime Distress and Safety System
GNSS	Global Navigation Satellite System
IMO	International Maritime Organization
LRIT	Long-Range Identification and Tracking
MMSI	Maritime Mobile Service Identity
RAIM	Receiver Autonomous Integrity Monitoring
SOLAS	International Convention for the Safety Of Life At Sea
SSAS	Ship Security Alert System

NOTE The meaning and usage of certain LRIT terms can be found in Annex A.

4 Performance requirements

4.1 General

4.1.1 General requirements

(See 6.2.1)

(MSC.263(84) A4.1) *In addition to the general requirements contained in resolution A.694(17) on Recommendations on general requirements for shipborne radio equipment forming part of the global maritime distress and safety system (GMDSS) and for electronic navigational aids, the shipborne equipment should comply with the following minimum requirements.*

The equipment shall comply with the general requirements described in IEC 60945.

In addition to the requirements of IEC 60945 for equipment manuals, the equipment handbooks shall state the areas in which the equipment will operate (see 4.6) and information on installation as described in Annex B.

4.1.2 Additional facilities

(See 6.2.2)

If the equipment incorporates facilities additional to the minimum requirements of this standard (for instance for GMDSS or SSAS) the operation of such additional facilities shall not degrade the performance of the equipment and the required performance requirements for LRIT shall be met. However, communications for distress, urgency and safety take priority over the transmission of LRIT information.

4.2 Transmission of information

(See 6.3.1)