

CST Technical Specification

Specification for Emergency Beacons Equipment

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This technical specification is issued by The Communications, Space and Technology Commission in the Kingdom of Saudi Arabia in accordance with the provisions of the Communications and Information Technology Act issued by Royal Decree No. (M/106) dated 02/11/1443 AH and its bylaw, and the Commission's regulation.

Communications, Space and Technology Commission (CST)
P.O Box 75606 – Riyadh 11588 - Kingdom of Saudi Arabia

Telephone: + 966 1 14618000
Fax: + 966 1 14618120
E-mail: info@cst.gov.sa
Website: www.cst.gov.sa

Document History Table

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Issue 1	September 2017	
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Issue 3	October 2023	

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1- Scope

- 1-1 This specification applies to emergency beacons.
- 1-2 Emergency beacons are radio transmitters used to locate airplanes, vessels or people in distress and in need of rescue.

2- Enforcement

- 2-1 This specification shall enter into force from issue date.
- 2-2 Any previous version of this technical specification is withdrawn.

3- General Requirements

- 3-1 All equipment must comply with the requirement of CST specification GEN001, be safe and must not adversely affect other electrical equipment.
- 3-2 All telecommunications and radio terminal equipment must comply with the relevant technical specifications established by CST. In addition, such equipment may be subject to regulations for Declaration of Conformity or registration. Please visit CST website for details.
- 3-3 If more than one interface type is offered by a piece of equipment, each interface must meet the applicable technical specifications.
- 3-4 Further information on the characteristics and presentation of network interfaces can be obtained by coordinating with the mobile network operators.
- 3-5 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.

4- 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
406.0 – 406.1 MHz	5 W	Emergency beacon	IEC 610972:2008 EN 302 152 IEC 60945:2002	
121.5 MHz	63 mW	Emergency beacon	EN 302 152 EN 301 489-3	

5- Licensing Requirements

No licensing requirements apply.

6- Additional Requirements

There is no additional requirements for this technical specification.

7- 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 61097-2:2008

Global maritime distress and safety system (GMDSS) - Part 2: COSPAS-SARSAT EPIRB - Satellite emergency position indicating radio beacon operating on 406 MHz - Operational and performance requirements, methods of testing and required test results

IEC 60945:2002

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

EN 302 152-1

Electromagnetic compatibility and Radio spectrum Matters (ERM); Satellite Personal Locator Beacons (PLBs) operating in the 406,0 MHz to 406,1 MHz frequency band; Part 1: Technical characteristics and methods of measurement

EN 301 489-1

Electromagnetic compatibility and Radio spectrum Matters (ERM); Electromagnetic Compatibility (EMC) standard for radio equipment and services; Part 1: Common technical requirements.

EN 301 489-3

Electromagnetic Compatibility (EMC) standard for radio equipment and services; Part 3: Specific conditions for Short-Range Devices (SRD) operating on frequencies between 9 kHz and 246 GHz; Harmonised

Standard covering the essential requirements of article 3.1(b) of Directive
2014/53/EU