

## CST Technical Specification

# Specification for Paging 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.

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### Document History Table

Version	Issue Date	Description
Issue 1	March 2006	
Issue 2	January 2010	
Issue 3	July 2021	Merge of RI003 "Paging Terminals and Ancillary Equipment" with RI004 "Paging Base Stations and Ancillary Equipment" into one technical specification.
Issue 4	October 2023	

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## 1- Scope

- 1-1 This specification applies to paging base stations, terminals and ancillary equipment.

## 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- 2-2 Any previous version of this technical specification is withdrawn.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
136 – 174 MHz	100 W	Paging	EN 300 224 EN 301 489-2	
169.4125 – 169.8125 MHz	100 W	Paging	EN 300 133-4 EN 301 489-2	
440 – 470 MHz	100 W	Paging	EN 300 224 EN 301 489-2	

## 5- Licensing Requirements

A spectrum license is required.

## 6- Additional Requirements

The one way paging characteristics below apply.

Protocol	Data Rate	Channel	Modulation
FLEX	6400 bps	25 kHz	2 FSK, 4 FSK
ERMES	6250 pps	25 kHz	4 FSK

## 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.

### **EN 300 133-4**

Electromagnetic Compatibility and Radio Spectrum Matters (ERM); Enhanced Radio Messaging System (ERMES); Part 4: Air interface specification.

### **EN 300 224**

Land Mobile Service; Radio Equipment for use in a Paging Service operating within the frequency range 25 MHz - 470 MHz; Harmonised Standard covering the essential requirements of article 3.2 of Directive 2014/53/EU

### **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 301 489-2**

Electromagnetic compatibility and Radio spectrum Matters (ERM); Electromagnetic Compatibility (EMC) standard for radio equipment and services; Part 2: Specific condition for Radio Paging Equipment