

## CST Technical Specification

# Specification for Power-Line Communication 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	January 2010	
Issue 2	July 2021	
Issue 3	October 2023	

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## 1- Scope

- 1-1 This specification applies to power-line communication equipment.
- 1-2 The powerline technology is used to carry data over conductors that are used for AC electric power transmission or electric power distribution to consumers.

## 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- 2-2 Any previous version of this technical specification is withdrawn.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
1.6 – 30 MHz	-50 dBm/Hz	Powerline	EN 55032 EN 50412-2-1	

## 5-Licensing Requirements

No licensing requirements apply.

## 6-Additional Requirements

Power line equipment imported into Saudi Arabia should be approved by a recognized industry alliance, such as HomePlug, Universal Powerline Association (UPA), and HD-PLC.

## 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 55032**

Electromagnetic compatibility of multimedia equipment - Emission Requirements (CISPR 32:2015)

### **EN 50412-2-1**

Power line communication apparatus and systems used in low-voltage installations in the frequency range 1.6 MHz to 30 MHz Part 2-1: Residential, commercial and industrial environment Immunity requirements.