



UK Radio Interface Requirement 2027 for CB transmitters and receivers for use in the Citizens' Band Radio Service

(Version 1.1)

98/34/EC Notification Number: **2001/189/UK**

References

- MPT1382 Department of Trade and Industry Performance Specification – Angle-modulated 27 MHz radio equipment for use in the Citizens' Band Radio Service
- ETSI EN 300 135-2 V1.1.1 (2000-08) Electromagnetic compatibility and Radio spectrum Matters (ERM); Angle-modulated Citizens Band radio equipment (CEPT PR 27 Radio Equipment); Part 2: Harmonized EN covering essential requirements under article 3.2 of R&TTE Directive
- ETSI EN 300 135-1 V1.1.2 (2000-08) Electromagnetic compatibility and Radio spectrum Matters (ERM); Angle-modulated Citizens Band radio equipment (CEPT PR 27 Radio Equipment); Part 1: Technical characteristics and methods of measurement
- RA 246 Citizens' Band Radio Information Sheet - Radiocommunications Agency publication

1. Foreword

- 1.1 The Radio Equipment and Telecommunications Terminal Equipment Directive 99/5/EC (R&TTE Directive) was implemented in the United Kingdom (UK) on the 8 April 2000 by The Radio Equipment and Telecommunications Terminal Equipment Regulations 2000, Statutory Instrument 2000 No. 730. In accordance with Articles 4.1 and 7.2 of Directive 1999/5/EC, this UK Radio Interface Requirement contains the requirements for the licensing and use of Transmitters and Receivers for use in the Citizens' Band Radio Service.
- 1.2 Nothing in this UK Radio Interface Specification shall preclude the need for equipment to comply with Directive 1999/5/EC.
- 1.3 It is required by the Wireless Telegraphy Act 1949 that no radio equipment is installed or used in the UK except under the authority of a licence granted by or otherwise exempted by regulations made by the Secretary of State. It is a condition of such a licence or exemption regulations as appropriate that the equipment must meet the minimum requirements specified in this UK Interface Requirement for the stated equipment types and for the stated frequency bands.
- 1.4 The requirements given in the main body of this UK Radio Interface Requirement will apply to the licensing of Transmitters and Receivers for use in the Citizens' Band Radio Service.
- 1.5 This UK Radio Interface Requirement will be revised as necessary, for example to follow:
 - i) current technology developments for reasons related to the effective and appropriate use of the spectrum in particular maximising spectrum utilisation; and
 - ii) changes to the available spectrum allocated for Transmitters and Receivers for use in the Citizens' Band Radio Service.
- 1.6 All UK Radio Interface Requirements notified under Directive 98/34/EC will be published and will be made available free of charge from the RA Information and Library Service and/or the RA web-site. The addresses for both the Library and the web-site are given on the back cover of this document.
- 1.7 Further information on this UK Radio Interface Requirement can be obtained from the technical enquiry contact given on the back of this document.

2. **Minimum Equipment Requirements for Operation within the UK**

- 2.1 The minimum radio requirements in this document are made for reasons related to the effective and appropriate use of the radio spectrum, in particular maximising spectrum utilisation.
- 2.2 This UK Radio Interface Requirement gives a high level description of how the spectrum in the UK is used for Citizens' Band equipment. It does not prescribe a technical interpretation of the 'essential requirements' of Directive 1999/5/EC.
- 2.3 This UK Radio Interface Requirement therefore stipulates the necessary equipment parameters for the licensing of Citizen Band equipment. Table 2.1 contains the relevant equipment parameters. These together with the 'essential requirement' detailed in Article 3.2 of the Directive 1999/5/EC constitute the minimum equipment requirements for Citizens' Band equipment within the UK.
- 2.4 The technical parameters specified in the UK Radio Interface Requirement are applied to achieve the desired level of compatibility within the CB Service and with other radiocommunications services whilst promoting enterprise, innovation and competition.
- 2.5 This UK Radio Interface Requirement provides the necessary technical information which facilitates access to the CB Service spectrum by making clear the assumptions that are made in planning the use of the CB Service spectrum in the UK. It is not the intention of this UK Radio Interface Requirement to duplicate or impose any additional 'essential requirements' of the Directive 1999/5/EC on products. Any specified parameters within this document are for the purpose of identifying product options and not as a national product requirement.

Table 2.1: Minimum Equipment Requirements

CB

Frequency Range	Licence Class & Radio Service	Additional Requirements
EU/CEPT band (EU) 26.965 MHz to 27.405 MHz and UK band (UK) 27.60125 to 27.99125 MHz	Citizens' Band Licence Citizens' Band Radio Service.	Channels shall be in accordance with the relevant sections of the tables in RA 246, these tables show the only permissible frequencies.

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Channel Spacing	Class of emission	Maximum Power	Additional Requirements
10k Hz	G3E (Angle modulation with appropriate pre-emphasis and de-emphasis)	In the case of equipment with a non-integral antenna, the maximum transmitter RF carrier power output is 4W. In the case of equipment with an integral antenna, both the transmitter carrier power and the effective radiated power is limited to 4W.	Transmission and reception shall take place on the same channel (single frequency simplex mode). It is recommended that the equipment shall give a visual indication of the channel of operation (1,2,3, etc. ...40) and the frequency band (EU or UK) that the channel of operation is in, i.e. EU 1, UK 1, etc.
	G2D		<u>Data transmission</u> Data transmission shall be as per AX 25 protocol. The maximum permitted data rate is 1200 baud. The maximum frequency of the two modulating tones shall be 2200Hz. There shall be not more than 1000Hz frequency difference between the two modulating tones. Data transmission is only permitted on the following channels: 27.235 MHz EU24 27.245 MHz EU25 27.325 MHz EU32 Transmission shall be on a one to one basis only; no Node or Repeater operation is allowed.

Annex A Additional Performance Parameters (Informative)

- A.1 Reference specifications MPT1382, ETSI EN 300 135-1 V1.1.2 contain additional performance parameters and limits that the Radiocommunications Agency assume are fulfilled for Transmitters and Receivers for use in the Citizens' Band Radio Service in the UK.
- A.2 ETSI harmonised standard ETSI EN 300 135-2 V1.1.1 also contains technical information for this equipment type.

Document history

Version	Date	Changes
1.0	Jan 01	First Published Version
1.1	July 01	Second Published Version

Radiocommunications Agency

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This is a UK Radio Interface Requirement

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