



Recommendation ITU-R M.2134-0
(10/2019)

**Receiver characteristics and protection
criteria for systems in the mobile service in
the frequency range 27.5-29.5 GHz for
use in sharing and compatibility studies**

M Series
**Mobile, radiodetermination, amateur
and related satellite services**



Foreword

The role of the Radiocommunication Sector is to ensure the rational, equitable, efficient and economical use of the radio-frequency spectrum by all radiocommunication services, including satellite services, and carry out studies without limit of frequency range on the basis of which Recommendations are adopted.

The regulatory and policy functions of the Radiocommunication Sector are performed by World and Regional Radiocommunication Conferences and Radiocommunication Assemblies supported by Study Groups.

Policy on Intellectual Property Right (IPR)

ITU-R policy on IPR is described in the Common Patent Policy for ITU-T/ITU-R/ISO/IEC referenced in Resolution ITU-R 1. Forms to be used for the submission of patent statements and licensing declarations by patent holders are available from <http://www.itu.int/ITU-R/go/patents/en> where the Guidelines for Implementation of the Common Patent Policy for ITU-T/ITU-R/ISO/IEC and the ITU-R patent information database can also be found.

Series of ITU-R Recommendations

(Also available online at <http://www.itu.int/publ/R-REC/en>)

Series	Title
BO	Satellite delivery
BR	Recording for production, archival and play-out; film for television
BS	Broadcasting service (sound)
BT	Broadcasting service (television)
F	Fixed service
M	Mobile, radiodetermination, amateur and related satellite services
P	Radiowave propagation
RA	Radio astronomy
RS	Remote sensing systems
S	Fixed-satellite service
SA	Space applications and meteorology
SF	Frequency sharing and coordination between fixed-satellite and fixed service systems
SM	Spectrum management
SNG	Satellite news gathering
TF	Time signals and frequency standards emissions
V	Vocabulary and related subjects

Note: This ITU-R Recommendation was approved in English under the procedure detailed in Resolution ITU-R 1.

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**Receiver characteristics and protection criteria for systems
in the mobile service in the frequency range 27.5-29.5 GHz for
use in sharing and compatibility studies**

(2019)

Scope

This Recommendation provides the receiver characteristics and protection criteria for systems of the mobile service in the frequency range 27.5-29.5 GHz. These technical and operational characteristics should be utilized in sharing and compatibility studies.¹

Keywords

Mobile service, technical characteristics, protection criteria

Abbreviations/Glossary

AAS	Advanced antenna system
ACS	Adjacent channel selectivity
AP	Access point
AR	Augmented reality
BS	Base station
FS	Fixed service
FSS	Fixed satellite service
LDPC	Low density parity check
MCS	Modulation and coding schemes
MIMO	Multiple input multiple output
TDD	Time division duplex
UHD	Ultra high definition
UE	User equipment
VR	Virtual reality

The ITU Radiocommunication Assembly,

considering

- a) that mobile use of the frequency range 27.5-29.5 GHz or parts thereof, inter alia, for high speed data links, mainly used to convey high definition multi-media, is planned in several countries;
- b) that representative receiver technical and operational characteristics of systems in frequency bands allocated to the mobile service are required for use in sharing and compatibility studies;

¹ This Recommendation does not cover any technical characteristics and protection criteria of ESIM and HAPS under agenda items 1.5 and 1.14 of WRC-19.