



**Fixed Radio Systems;
Characteristics and requirements
for point-to-point equipment and antennas;
Part 4: Antennas**

ETSI EN 302 217-4 V2.2.0 (2025-04)

<https://standards.iteh.ai/catalog/standards/etsi/07e03e37-c7c3-48c2-bbab-3f5af12e2b01/etsi-en-302-217-4-v2-2-0-2025-04>

Reference

REN/ATTM-0456

Keywords

antenna, DFRS, DRRS, FWA, point-to-point, radio,
regulation, transmission

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Sous-Préfecture de Grasse (06) N° w061004871

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Foreword

This draft European Standard (EN) has been produced by ETSI Technical Committee Access, Terminals, Transmission and Multiplexing (ATTM), and is now submitted for the combined Public Enquiry and Vote phase of the ETSI EN Approval Procedure.

The present document is part 4 of a multi-part deliverable covering the Fixed Radio Systems; Characteristics and requirements for point-to-point equipment and antennas. Full details of the entire series can be found in ETSI EN 302 217-1 [2].

Proposed national transposition dates	
Date of latest announcement of this EN (doa):	3 months after ETSI publication
Date of latest publication of new National Standard or endorsement of this EN (dop/e):	6 months after doa
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Modal verbs terminology

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1 Scope

The present document defines the characteristics and requirements of antennas for point-to-point radio equipment operating in the frequency range from 1 GHz to 174,8 GHz falling within the scope (see note) of ETSI EN 302 217-2 [i.2].

For technical commonalities that range is here divided into sub-ranges as follows:

Range 0:	1 GHz to 3 GHz;
Range 1:	3 GHz to 14 GHz;
Range 2:	14 GHz to 20 GHz;
Range 3:	20 GHz to 24 GHz;
Range 4:	24 GHz to 30 GHz;
Range 5:	30 GHz to 47 GHz;
Range 6:	47 GHz to 71 GHz;
Range 7:	71 GHz to 86 GHz;
Range 8:	92 GHz to 114,25 GHz;
Range 9:	130 GHz to 174,8 GHz.

The present document is applicable to fixed radio equipment with *integral* (see note) or *dedicated antennas*.

NOTE: For information, ETSI EN 302 217-2 [i.2] includes in its scope only the use of *detachable integral antennas*; *undetachable integral antennas* are not considered due to the present lack of radiated test procedures for the radio equipment parameters.

The present document also applies to *stand-alone antennas*, placed separately on the market. In this case the present document is to be used by radio equipment manufacturers to provide guidance as to the information for the user, as required by article 10 paragraph 8 of Directive 2014/53/EU [i.1], regarding the antenna characteristics required so as the radio equipment, supplied without antenna, can operate as intended in its *technical documentation*.

The present document is applicable to fixed beam antennas, as well as to "*self-alignment tracking*" antenna, with limited tracking range, so that all requirements in the present document are respected throughout the *tracking angle* indicated in the *technical documentation*.

The main body of the present document specifies the characteristics that define the various antenna classes, whilst the annexes provide additional information that is useful to both antenna manufacturers and user/installers.

2 References

2.1 Normative references

References are either specific (identified by date of publication and/or edition number or version number) or non-specific. For specific references, only the cited version applies. For non-specific references, the latest version of the referenced document (including any amendments) applies.

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