



SLOVENSKI STANDARD

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Equipment Engineering (EE); European telecommunication standard for equipment practice; Part 4: Engineering requirements for subracks in miscellaneous racks and cabinets

Equipment Engineering (EE); European telecommunication standard for equipment practice; Part 4: Engineering requirements for subracks in miscellaneous racks and cabinets

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ETSI

European Telecommunications Standards Institute

ETSI Secretariat

Postal address: F-06921 Sophia Antipolis CEDEX - FRANCE

Office address: 650 Route des Lucioles - Sophia Antipolis - Valbonne - FRANCE

X.400: c=fr, a=atlas, p=etsi, s=secretariat - **Internet:** secretariat@etsi.fr

Tel.: +33 92 94 42 00 - Fax: +33 93 65 47 16

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Foreword

This European Telecommunication Standard (ETS) has been produced by the Equipment Engineering (EE) Technical Committee of the European Telecommunications Standards Institute (ETSI).

This ETS is part 4 of a 4 part ETS aimed at setting out, on a common basis, the engineering requirements for telecommunication practice, for housing equipment forming part of a public telecommunications network. Part 1 is a general introduction and explains the terminology used, Part 2 specifies the engineering requirements for racks and cabinets and Part 3 specifies the engineering requirements for miscellaneous racks and cabinets. This part, Part 4, specifies the engineering requirements for subracks mounted in miscellaneous racks and cabinets.

This ETS applies to all telecommunications equipment forming part of the public telecommunications network. The requirements for subracks mounted in miscellaneous racks/cabinets, which this part lays down, are based on the work of IEC Technical Committee 48D. However, in this part of the ETS deviation from the work of IEC Sub Committee 48D occurs (see Annex B).

Illustrative figures are contained in Annex A.

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1 Scope

This part of European Telecommunication Standard (ETS) 300 119 details requirements for subracks for use in miscellaneous racks/cabinets, as described in ETS 300 119-3 [4]. The subrack will normally be supplied as a fully assembled structure, unequipped, partially equipped or fully equipped with plug-in units, etc.

2 Normative references

This ETS incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this ETS only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies.

- [1] EN 60 950 (1988): "Safety of information technology equipment, including electrical business equipment".
- [2] Council Directive of 3 May 1989 on the approximation of the laws of the Member States relating to electromagnetic compatibility (EMC): 89/336/EEC.
- [3] ETS 300 019: "Equipment Engineering (EE); Environmental conditions and environmental tests for telecommunications equipment".
- [4] ETS 300 119-3: "Equipment Engineering (EE); European telecommunication standard for equipment practice Part 3: Engineering requirements for miscellaneous racks and cabinets".

3 Dimensions for subracks

The dimensions height H, width W and depth D1 and D2 of the equipped subrack shall include all plug-in units, switches, lamps, cooling fins, connectors, etc.

For a table of dimensions, see table 1 and refer to Annex A, figures A.1 and A.2.

4 Accessibility

Subracks fitting in a miscellaneous rack/cabinet of depth 300 mm shall require access only from the front, so that they can be placed in miscellaneous racks/cabinets which are back to back or against a wall.

5 Heat dissipation

5.1 Subrack heat management

It is a primary requirement for all equipment installed in miscellaneous racks/cabinets to be cooled by natural convection. The mechanical architecture of the subrack shall be designed to promote natural convection.

Assisted cooling methods should be employed only when it has been established that natural convection methods are unable to deal with the relevant heat dissipation.

The design of any subrack shall be such that when fully equipped with plug-in units and standing alone, the relevant components are not subjected to temperatures which exceed the maximum quoted by the component suppliers. This shall apply over the full operating room ambient temperature range selected from ETS 300 019 [3].

NOTE: Internal cabling of the subrack is considered as a component.