
Methods of measurement for equipment used in digital microwave radio transmission systems - Part 3: Measurements on satellite earth stations - Section 5: Up- and down-converters (IEC 60835-3-5:1994)

Methods of measurement for equipment used in digital microwave radio transmission systems -- Part 3: Measurements on satellite earth stations -- Section 5: Up- and down-converters

Meßverfahren für Geräte in digitalen Mikrowellen-Funkübertragungssystemen -- Teil 3: Messungen an Satelliten-Erdfunkstellen -- Hauptabschnitt 5: Sende- und Empfangsumsetzer

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Méthodes de mesure applicables au matériel utilisé pour les systèmes de transmission numérique en hyperfréquence -- Partie 3: Mesures applicables aux stations terriennes de télécommunications par satellite -- Section 5: Convertisseurs éleveurs et abaisseurs de fréquence

Ta slovenski standard je istoveten z: EN 60835-3-5:1994

ICS:

33.060.30 Radiorelejni in fiksni satelitski komunikacijski sistemi Radio relay and fixed satellite communications systems

SIST EN 60835-3-5:2002**en**

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UDC 621.396.6:629.783:621.317.08

Descriptors: Radiocommunications, telecommunications, communication equipment, earth stations, satellite broadcasting, microwave frequencies, measurement, characteristics

ENGLISH VERSION

Methods of measurement for equipment used in
digital microwave radio transmission systems
Part 3: Measurements on satellite earth stations
Section 5: Up- and down-converters
(IEC 835-3-5:1994)

Méthodes de mesure applicables
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systèmes de transmission
numérique en hyperfréquence
Partie 3: Mesures applicables
aux stations terriennes de
télécommunications par satellite
Section 5: Convertisseurs
élevateurs et abaisseurs de
de fréquence
(CEI 835-3-5:1994)

Meßverfahren für
Geräte in digitalen
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Empfangsumsetzer
(IEC 835-3-5:1994)

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This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CENELEC member into its own language and notified to the Central Secretariat has the same status as the official versions.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.

CENELEC

European Committee for Electrotechnical Standardization
Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

Central Secretariat: rue de Stassart 35, B-1050 Brussels

FOREWORD

The text of document 12E(CO)147, as prepared by Sub-Committee 12E: Radio-relay and fixed satellite communications systems, of IEC Technical Committee 12: Radiocommunications, was submitted to the IEC-CENELEC parallel vote in April 1993.

The reference document was approved by CENELEC as EN 60835-3-5 on 8 December 1993.

The following dates were fixed:

- latest date of publication of an identical national standard (dop) 1995-04-01
- latest date of withdrawal of conflicting national standards (dow) 1995-04-01

ENDORSEMENT NOTICE iTeh STANDARD PREVIEW (standards.iteh.ai)

The text of the International Standard IEC 835-3-5:1994 was approved by CENELEC as a European Standard without any modification.

SIST EN 60835-3-5:2002

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ANNEX ZA (normative)

OTHER INTERNATIONAL PUBLICATIONS QUOTED IN THIS STANDARD
WITH THE REFERENCES OF THE RELEVANT EUROPEAN PUBLICATIONS

This European Standard 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 European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies.

NOTE : When the international publication has been modified by CENELEC common modifications, indicated by (mod), the relevant EN/HD applies.

| IEC Publication | Date | Title | EN/HD | Date |
|--------------------|------|--|--------------|------|
| ----- | ---- | ----- | ----- | ---- |
| 835-1-1 | 1990 | Methods of measurement for equipment used in digital microwave radio transmission systems - Part 1: Measurements common to terrestrial radio-relay systems and satellite earth stations - Section One: General | EN 60835-1-1 | 1992 |
| 835-1-2 | 1992 | Section 2: (Basic characteristics) | EN 60835-1-2 | 1993 |
| 835-1-3 | 1992 | Section 3: Transmission characteristics | - | - |
| 835-3-4 | 1993 | Part 3: Measurements on satellite earth stations Section 4: Low noise amplifier | - | - |

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**NORME
INTERNATIONALE
INTERNATIONAL
STANDARD**

**CEI
IEC**

60835-3-5

Première édition
First edition
1994-04

**Méthodes de mesure applicables au matériel
utilisé pour les systèmes de transmission
numérique en hyperfréquence**

Partie 3:

**Mesures applicables aux stations terriennes
de télécommunications par satellite
Section 5: Convertisseurs éleveurs et
abaisseurs de fréquence**

<https://standards.iteh.ai/catalog/standards/sist/0b90f235-842d-4cfd-b1ad-f4c3517dd65d/sist-en-60835-3-5-2002>

**Methods of measurement for equipment used in
digital microwave radio transmission systems**

Part 3:

**Measurements on satellite earth stations
Section 5: Up- and down-converters**

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Commission Electrotechnique Internationale
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INTERNATIONAL ELECTROTECHNICAL COMMISSION

**METHODS OF MEASUREMENT FOR EQUIPMENT
USED IN DIGITAL MICROWAVE RADIO
TRANSMISSION SYSTEMS**

Part 3: Measurements on satellite earth stations

Section 5: Up- and down-converters

FOREWORD

- 1) The IEC (International Electrotechnical Commission) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of the IEC is to promote international cooperation on all questions concerning standardization in the electrical and electronic fields. To this end and in addition to other activities, the IEC publishes International Standards. Their preparation is entrusted to technical committees; any IEC National Committee interested in the subject dealt with may participate in this preparatory work. International, governmental and non-governmental organizations liaising with the IEC also participate in this preparation. The IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
- 2) The formal decisions or agreements of the IEC on technical matters, prepared by technical committees on which all the National Committees having a special interest therein are represented, express, as nearly as possible, an international consensus of opinion on the subjects dealt with.
- 3) They have the form of recommendations for international use published in the form of standards, technical reports or guides and they are accepted by the National Committees in that sense.
- 4) In order to promote international unification, IEC National Committees undertake to apply IEC International Standards transparently to the maximum extent possible in their national and regional standards. Any divergence between the IEC Standard and the corresponding national or regional standard shall be clearly indicated in the latter.

International Standard IEC 835-3-5 has been prepared by sub-committee 12E: Radio-relay and fixed satellite communications systems, of IEC technical committee 12: Radiocommunications.

The text of this standard is based on the following documents:

| DIS | Report on Voting |
|------------|------------------|
| 12E(CO)147 | 12E(CO)162 |

Full information on the voting for the approval of this standard can be found in the report on voting indicated in the above table.

METHODS OF MEASUREMENT FOR EQUIPMENT USED IN DIGITAL MICROWAVE RADIO TRANSMISSION SYSTEMS

Part 3: Measurements on satellite earth stations

Section 5: Up- and down-converters

1 Scope

This section of IEC 835-3 describes methods of measurement of the electrical characteristics of up-converters and down-converters used in satellite earth station transmitters and receivers with digital modulation.

2 Normative references

The following normative documents contain provisions which, through reference in this text, constitute provisions of this section of IEC 835-3. At the time of publication, the editions indicated were valid. All normative documents are subject to revision, and parties to agreements based on this section of IEC 835-3 are encouraged to investigate the possibility of applying the most recent editions of the normative documents indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

<https://standards.iteh.ai/catalog/standards/sist/0b90f235-842d-4cfd-b1ad-f4c3517dd65d/sist-en-60835-3-5-2002>

IEC 835-1-1: 1990, *Methods of measurement for equipment used in digital microwave radio transmission systems – Part 1: Measurements common to terrestrial radio-relay systems and satellite earth stations – Section 1: General*

IEC 835-1-2: 1992, *Methods of measurement for equipment used in digital microwave radio transmission systems – Part 1: Measurements common to terrestrial radio-relay systems and satellite earth stations – Section 2: Basic characteristics*

IEC 835-1-3: 1992, *Methods of measurement for equipment used in digital microwave radio transmission systems – Part 1: Measurements common to terrestrial radio-relay systems and satellite earth stations – Section 3: Transmission characteristics*

IEC 835-3-4: 1993, *Methods of measurement for equipment used in digital microwave radio transmission systems – Part 3: Measurements on satellite earth stations – Section 4: Low noise amplifier*