



SLOVENSKI STANDARD

SIST EN 60835-3-12:2002

01-oktober-2002

Methods of measurement for equipment used in digital microwave radio transmission systems - Part 3: Measurements on satellite earth stations - Section 12: Overall system performance (IEC 60835-3-12:1993)

Methods of measurement for equipment used in digital microwave radio transmission systems -- Part 3: Measurements on satellite earth stations -- Section 12: Overall system performance

Meßverfahren für Geräte in digitalen Mikrowellen-Funkübertragungssystemen -- Teil 3: Messungen an Satelliten-Erdfunkstellen -- Hauptabschnitt 12: Leistung des Gesamtsystems

[SIST EN 60835-3-12:2002](https://standards.iteh.ai/catalog/standards/sist/97fc8a62-2b77-496d-88e2-2c0a01010101/60835-3-12-2002)

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 12: Performance globale du système

Ta slovenski standard je istoveten z: EN 60835-3-12:1995

ICS:

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

SIST EN 60835-3-12:2002

en

iTeh STANDARD PREVIEW
(standards.iteh.ai)

SIST EN 60835-3-12:2002

<https://standards.iteh.ai/catalog/standards/sist/97fc8a62-2b77-496d-88e2-b8f0a19d66d1/sist-en-60835-3-12-2002>

EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN 60835-3-12

January 1995

IEC/SC11

ICS 33.060.30

Descriptors: Telecommunications, radiocommunications, communication equipment, earth stations, microwave frequencies, digital technics, measurements, characteristics

English version

**Methods of measurement for equipment used in digital microwave
radio transmission systems**
Part 3: Measurements on satellite earth stations
Section 12: Overall system performance
(IEC 835-3-12:1993)

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 12: Performance globale du système
(CEI 835-3-12:1993)

Meßverfahren für Geräte in digitalen Mikrowellen-Funkübertragungssystemen

Teil 3: Messungen an Satelliten-Erdfunkstellen
Hauptabschnitt 12: Leistung des Gesamtsystems
(IEC 835-3-12:1993)

This European Standard was approved by CENELEC on 1994-12-06. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat or to any CENELEC member.

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 the International Standard IEC 835-3-12:1993, prepared by SC 12E, Radio-relay and fixed satellite communications systems, of IEC TC 12, Radiocommunications, was submitted to the formal vote and was approved by CENELEC as EN 60835-3-12 on 1994-12-06 without any modification.

The following dates were fixed:

- latest date by which the EN has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 1995-12-01
- latest date by which the national standards conflicting with the EN have to be withdrawn (dow) 1995-12-01

Annexes designated "normative" are part of the body of the standard.
In this standard, annex ZA is normative.
Annex ZA has been added by CENELEC.

Endorsement notice

The text of the International Standard IEC 835-3-12:1993 was approved by CENELEC as a European Standard without any modification.

[SIST EN 60835-3-12:2002](https://standards.iteh.ai/catalog/standards/sist/97fc8a62-2b77-496d-88e2-b8f0a19d66d1/sist-en-60835-3-12-2002)

<https://standards.iteh.ai/catalog/standards/sist/97fc8a62-2b77-496d-88e2-b8f0a19d66d1/sist-en-60835-3-12-2002>



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
835-3-9	1993	Methods of measurement for equipment used in digital microwave radio transmission systems Part 3: Measurements on satellite earth stations - Section 9: Terminal equipment, SCPC-PSK	EN 60835-3-9	1995
835-3-10	1993	Section 10: Terminal equipment TDMA traffic earth station	EN 60835-3-10	1994

[SIST EN 60835-3-12:2002](https://standards.iteh.ai/catalog/standards/sist/97fc8a62-2b77-496d-88e2-b8f0a19d66d1/sist-en-60835-3-12-2002)

<https://standards.iteh.ai/catalog/standards/sist/97fc8a62-2b77-496d-88e2-b8f0a19d66d1/sist-en-60835-3-12-2002>

iTeh STANDARD PREVIEW
(standards.iteh.ai)

SIST EN 60835-3-12:2002

<https://standards.iteh.ai/catalog/standards/sist/97fc8a62-2b77-496d-88e2-b8f0a19d66d1/sist-en-60835-3-12-2002>

**NORME
INTERNATIONALE
INTERNATIONAL
STANDARD**

**CEI
IEC**

60835-3-12

Première édition
First edition
1993-04

**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 12: Performance globale du système

[SIST EN 60835-3-12:2002](https://standards.iteh.ai/catalog/standards/sist/97fc8a62-2b77-496d-88e2-b87019d6114/sist-en-60835-3-12-2002)

[https://standards.iteh.ai/catalog/standards/sist/97fc8a62-2b77-496d-88e2-](https://standards.iteh.ai/catalog/standards/sist/97fc8a62-2b77-496d-88e2-b87019d6114/sist-en-60835-3-12-2002)

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

Part 3:

Measurements on satellite earth stations

Section 12: Overall system performance

© IEC 1993 Droits de reproduction réservés — Copyright - all rights reserved

Aucune partie de cette publication ne peut être reproduite ni utilisée sous quelque forme que ce soit et par aucun procédé, électronique ou mécanique, y compris la photocopie et les microfilms, sans l'accord écrit de l'éditeur.

No part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from the publisher.

International Electrotechnical Commission
Telefax: +41 22 919 0300

3, rue de Varembé Geneva, Switzerland
e-mail: inmail@iec.ch IEC web site <http://www.iec.ch>



Commission Electrotechnique Internationale
International Electrotechnical Commission
Международная Электротехническая Комиссия

CODE PRIX
PRICE CODE

D

Pour prix, voir catalogue en vigueur
For price, see current catalogue

INTERNATIONAL ELECTROTECHNICAL COMMISSION

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

**Part 3: Measurements on satellite
earth stations
Section 12: Overall system performance**

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

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

DIS	Report on Voting
12E(CO)143	12E(CO)153

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

IEC 835 consists of the following parts, under the general title 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.
- Part 2: Measurements on terrestrial radio-relay systems.
- Part 3: Measurements on satellite earth stations.

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

Part 3: Measurements on satellite earth stations

Section 12: Overall system performance

1 Scope

This section of IEC 835-3 describes methods of measurement on overall system performances on satellite earth stations.

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.

(standards.iteh.ai)

IEC 835-3-9: 1993, *Methods of measurement for equipment used in digital microwave radio transmission systems – Measurements on satellite earth stations – Section 9: Terminal equipment SCPC-PSK*, IEC 835-3-9:1993
<https://standards.iteh.ai/catalog/standards/sist/97fc8a62-2b77-496d-88e2-b8f0a19d66d1/sist-en-60835-3-12-2002>

IEC 835-3-10: 1993, *Methods of measurement for equipment used in digital microwave radio transmission systems – Part 3: Measurements on satellite earth stations – Section 10: Terminal equipment TDMA*

3 Overall system performance

In the case of satellite communications equipment, the overall system performance is defined as the performance of the system including:

- the terminal equipment such as SCPC (single-channel-per carrier) or TDMA (Time division multiple access) common equipment and channel units;
- the station RF/IF equipment such as LNA (low noise amplifier), HPA (high power amplifier), and up-down-converters;
- the antenna;
- the satellite transponder.