

<b>STN</b>	<b>Rádiové vysielače pre rádiokomunikáciu. Frekvenčná odozva zariadení na opticko-elektrickú premenu vo vysokofrekvenčnom rádiovom prenose cez vláknové systémy. Metóda merania.</b>	<b>STN EN 62803</b>
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Transmitting equipment for radiocommunication - Frequency response of optical-to-electric conversion device in high-frequency radio over fibre systems - Measurement method

Táto norma obsahuje anglickú verziu európskej normy.  
This standard includes the English version of the European Standard.

Táto norma bola označená vo Vestníku ÚNMS SR č. 03/17

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**EUROPEAN STANDARD**  
**NORME EUROPÉENNE**  
**EUROPÄISCHE NORM**

**EN 62803**

October 2016

ICS 33.060.20

English Version

**Transmitting equipment for radiocommunication - Frequency  
 response of optical-to-electric conversion device in high-  
 frequency radio over fibre systems - Measurement method  
 (IEC 62803:2016)**

Matériels émetteurs pour les radiocommunications -  
 Réponse en fréquence des dispositifs de conversion  
 optique-electrique dans des systèmes de transmission radio  
 sur fibre haute fréquence - Méthode de mesure  
 (IEC 62803:2016)

Messverfahren einer Frequenzantwort eines optisch-  
 elektrischen Wandlers in HF-Rundfunk-über-Glasfaser-  
 Übertragungssystemen  
 (IEC 62803:2016)

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The text of document 103/147/FDIS, future edition 1 of IEC 62803, prepared by IEC/TC 103 "Transmitting equipment for radiocommunication" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 62803:2016.

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# INTERNATIONAL STANDARD

# NORME INTERNATIONALE

**Transmitting equipment for radiocommunication – Frequency response of optical-to-electric conversion device in high-frequency radio over fibre systems – Measurement method**

**Matériels émetteurs pour les radiocommunications – Réponse en fréquence des dispositifs de conversion optique-electrique dans des systèmes de transmission radio sur fibre haute fréquence – Méthode de mesure**





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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

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### **TRANSMITTING EQUIPMENT FOR RADIOTRANSFER – FREQUENCY RESPONSE OF OPTICAL-TO-ELECTRIC CONVERSION DEVICE IN HIGH-FREQUENCY RADIO OVER FIBRE SYSTEMS – MEASUREMENT METHOD**

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FDIS	Report on voting
103/147/FDIS	103/148/RVD

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## INTRODUCTION

A variety of microwave-photonic devices are used in wireless communication and broadcasting systems. A photo-receiver is an interface which converts an optical signal to an electronic signal. This International Standard has been prepared to provide methods for evaluating and calibrating high speed photo-receivers to be used in Radio over Fibre systems.

The method utilizes a Mach-Zehnder modulator for generating two-tone lightwaves as stimulus signals, to provide simpler and easier methods than the conventional method utilizing a complex two-laser system phase-locked with each other.

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**TRANSMITTING EQUIPMENT FOR RADIOTRANSMISSION –  
FREQUENCY RESPONSE OF OPTICAL-TO-ELECTRIC CONVERSION  
DEVICE IN HIGH-FREQUENCY RADIO OVER FIBRE SYSTEMS –  
MEASUREMENT METHOD**

## 1 Scope

This International Standard provides a method for measuring the frequency response of optical-to-electric conversion devices in wireless communication and broadcasting systems.

The frequency range covered by this standard goes up to 100 GHz (practically limited up to 110 GHz by precise RF power measurement) and the wavelength band concerned is 0,8 µm to 2,0 µm.

## 2 Normative references

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