

INTERNATIONAL STANDARD

NORME INTERNATIONALE

**Safety of machinery – Electro-sensitive protective equipment –
Part 2: Particular requirements for equipment using active opto-electronic
protective devices (AOPDs)**

**Sécurité des machines – Équipements de protection électro-sensibles –
Partie 2: Exigences particulières à un équipement utilisant des appareils
protecteurs optoélectroniques actifs (AOPD)**



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Withdrawing

INTERNATIONAL ELECTROTECHNICAL COMMISSION

**SAFETY OF MACHINERY –
ELECTRO-SENSITIVE PROTECTIVE EQUIPMENT –**

**Part 2: Particular requirements for equipment using
active opto-electronic protective devices (AOPDs)**

FOREWORD

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International Standard IEC 61496-2 has been prepared by IEC technical committee 44: Safety of machinery – Electrotechnical aspects, in collaboration with CENELEC technical committee 44X: Safety of machinery – Electrotechnical aspects.

This third edition cancels and replaces the second edition published in 2006. It constitutes a technical revision.

This edition includes the following significant technical changes with respect to the previous edition:

- a) Requirements have been corrected and made easier to understand.
- b) Test procedures have been revised to make them easier to perform and to improve repeatability.
- c) Guidance is provided for the evaluation and verification of AOPDs using design techniques for which the test procedures of this part are not sufficient.

This standard has the status of a product family standard and may be used as a normative reference in a dedicated product standard for the safety of machinery.

This standard is to be used in conjunction with IEC 61496-1:2012.

This part supplements or modifies the corresponding clauses in IEC 61496-1.

Where a particular clause or subclause of Part 1 is not mentioned in this Part 2, that clause or subclause applies as far as is reasonable. Where this part states "addition", "modification" or "replacement", the relevant text of Part 1 is adapted accordingly.

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

CDV	Report on voting
44/651/CDV	44/670/RVC

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

This publication has been drafted in accordance with the ISO/IEC Directives, Part 2.

A list of all parts in the IEC 61496 series, published under the general title *Safety of machinery – Electro-sensitive protective equipment* can be found on the IEC website.

The committee has decided that the contents of this publication will remain unchanged until the stability date indicated on the IEC web site under "<http://webstore.iec.ch>" in the data related to the specific publication. At this date, the publication will be

- reconfirmed,
- withdrawn,
- replaced by a revised edition, or
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INTRODUCTION

Electro-sensitive protective equipment (ESPE) is applied to machinery that presents a risk of personal injury. It provides protection by causing the machine to revert to a safe condition before a person can be placed in a hazardous situation.

This part of IEC 61496 provides particular requirements for the design, construction and testing of electro-sensitive protective equipment (ESPE) for the safeguarding of machinery, employing active opto-electronic protective devices (AOPDs) for the sensing function.

Each type of machine presents its own particular hazards, and it is not the purpose of this standard to recommend the manner of application of the ESPE to any particular machine. The application of the ESPE should be a matter for agreement between the equipment supplier, the machine user and the enforcing authority; in this context, attention is drawn to the relevant guidance established internationally, for example, ISO 12100.

Due to the complexity of the technology of ESPEs there are many issues that are highly dependent on analysis and expertise in specific test and measurement techniques. In order to provide a high level of confidence, independent review by relevant expertise is recommended.

Withdrawing