



TECHNICAL REPORT



**Wearable electronic devices and technologies –
Part 250-1: Electronic textile – Snap fastener connectors between e-textiles and
detachable electronic devices**

INTERNATIONAL
ELECTROTECHNICAL
COMMISSION

ICS 59.080.80

ISBN 978-2-8322-9891-6

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CONTENTS

FOREWORD.....	3
INTRODUCTION.....	5
1 Scope.....	6
2 Normative references	6
3 Terms and definitions	6
4 Classification of devices by connector type.....	6
4.1 General.....	6
4.2 Devices having two electrodes and using sockets of snap fasteners to connect with the e-textile	7
4.2.1 Size of the stud on the e-textile	7
4.2.2 Distance between electrodes on the e-textile	7
4.3 Devices with two electrodes using snap fastener studs to connect.....	9
4.3.1 Size of the stud on the device	9
4.3.2 Distance between the electrodes on the device.....	9
4.4 Devices using snap fasteners to connect the e-textile, but having more than two electrodes.....	9
5 Summary.....	11
5.1 Overview.....	11
5.2 Standardization needs	11
Figure 1 – a pair of typical snap fastener stud and socket.....	7
Table 1 – Examples of devices using sockets as connector	8
Table 2 – Examples of devices using two studs as connectors	9
Table 3 – Examples of devices having many electrodes.....	10

INTERNATIONAL ELECTROTECHNICAL COMMISSION

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The text of this Technical Report is based on the following documents:

Draft	Report on voting
124/119/DTR	124/143/RVDTR

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

The language used for the development of this Technical Report is English.

This document was drafted in accordance with ISO/IEC Directives, Part 2, and developed in accordance with ISO/IEC Directives, Part 1 and ISO/IEC Directives, IEC Supplement, available at www.iec.ch/members_experts/refdocs. The main document types developed by IEC are described in greater detail at www.iec.ch/standardsdev/publications.

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- reconfirmed,
- withdrawn,
- replaced by a revised edition, or
- amended.

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INTRODUCTION

E-textiles are suitable for measuring biological signals such as electrocardiograms, electromyograms and respiratory rates in everyday life without discomfort. The e-textile is interwoven or coated with an electric material for sensing the body surface potential in order to measure biological signals. To measure these biological signals, a detachable electronic device is connected to measure the body surface potential from the e-textile.

However, there is no established standard on the method for connecting the detachable electronic device to the e-textile. In view of the above circumstances and in order to standardize connection interface issues, it is necessary to investigate the connector types between e-textile and the detachable electronic device.

To date, conductive snap fasteners have been the most commonly applied as connectors for e-textiles.

This document reviews conductive snap fastener connectors and gives some guidance for future standardization work as regards connectors for e-textiles.

WEARABLE ELECTRONIC DEVICES AND TECHNOLOGIES –

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1 Scope

This document reviews the use cases of conductive snap fasteners applied as electrical connectors for e-textile products available on the market and provides guidance on future standardization works.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

There are no normative references in this document.