IEC 62820-1-2

Edition 2.0 2026-07

INTERNATIONAL STANDARD

Building intercom systems -
Part 1-2: System requirements - Building intercom systems using the Internet protocol (IP)

ICS 13.320

ISBN 978-2-8327-1305-1

IEC 62820-1-2:2026-07(en)

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IEC Secretariat
3, rue de Varembé
CH-1211 Geneva 20
Switzerland

Tel.: +41 22 919 02 11
info@iec.ch
www.iec.ch

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Building intercom systems - Part 1-2: System requirements - Building intercom systems using the Internet protocol (IP)

FOREWORD

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IEC 62820-1-2 has been prepared by IEC technical committee 79: Alarm and electronic security systems. It is an International Standard.

This second edition cancels and replaces the first edition published in 2017. This edition constitutes a technical revision.

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

a) addition of the requirement for overall loudness rating (OLR) when the screen size of the hands-free intercom unit is larger than 10 inches at the test distance of 30 cm;
b) addition of the requirement for test conditions when the test distance is 30 cm or longer;
c) addition of the method of testing overall loudness rating (OLR) when the screen size of the hands-free intercom unit is larger than 10 inches.

The text of this International Standard is based on the following documents:

Draft	Report on voting
79/721/CDV	79/729A/RVC

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 International Standard 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/publications.

A list of all parts in the IEC 62820 series, published under the general title *Building intercom systems*, can be found on the IEC website.

The committee has decided that the contents of this document will remain unchanged until the stability date indicated on the IEC website under webstore.iec.ch in the data related to the specific document. At this date, the document will be

– reconfirmed,
– withdrawn, or
– revised.

INTRODUCTION

The IEC 62820 series of standards set out the technical requirements for the composition, functions, performance, and test methods of building intercom systems for building entry and application guidelines and consist of five parts:

Part 1-1: *System requirements - General*

Part 1-2: *System requirements - Building intercom systems using the internet protocol (IP*)

Part 2: *Requirements for advanced security building intercom systems (ASBIS)*

Part 3-1: *Application guidelines - General*

Part 3-2: *Application guidelines - Advanced security building intercom systems (ASBIS)*

1 Scope

IEC 62820-1-2 specifies the technical requirements for the composition, functions, performance and test methods of building intercom systems using the Internet protocol (IP), and it is a supplement to IEC 62820-1-1.

This document is applicable to the IP building intercom systems for both residential and commercial buildings.

NOTE A BIS that has a mixture of IP and non-IP connections is not covered by IEC 62820-1-2 but covered by IEC 62820-1-1.

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.

IEC 62820-1-1:2026, *Building intercom systems - Part 1-1: System requirements - General*

ITU-T P.501, *Test signals for use in telephony and other speech-based applications*

3 Terms, definitions and abbreviated terms

3.1 Terms and definitions

For the purposes of this document, the terms and definitions given in IEC 62820-1-1 and the following apply.

ISO and IEC maintain terminology databases for use in standardization at the following addresses:

– IEC Electropedia: available at https://www.electropedia.org/

– ISO Online browsing platform: available at https://www.iso.org/obp

3.1.1
audio delay
audio latency
one way delay (OWD) time of the transmitted audio signal from the microphone of one intercom unit through other components in the system to the loudspeaker of other intercom unit

3.1.2
audio switching time
time, from one transmission direction to the other, measured from the removal of the signal in the first direction until the level in the second direction reaches 3 dB below its final value

3.1.3
echo return loss
ability of the local intercom unit to avoid retransmitting the audio signal received from the far intercom unit back again to it