

INTERNATIONAL STANDARD

Touch and interactive displays –
Part 1-2: Generic – Terminology and letter symbols

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

TOUCH AND INTERACTIVE DISPLAYS –

Part 1-2: Generic – Terminology and letter symbols

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International Standard IEC 62908-1-2 has been prepared by IEC technical committee 110: Electronic display devices.

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

FDIS	Report on voting
110/886/FDIS	110/903/RVD

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

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

A list of all the parts in the IEC 62908 series, under the general title *Touch and interactive displays*, 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 "<http://webstore.iec.ch>" in the data related to the specific document. At this date, the document will be

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- withdrawn,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

A bilingual version of this publication may be issued at a later date.

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TOUCH AND INTERACTIVE DISPLAYS –

Part 1-2: Generic – Terminology and letter symbols

1 Scope

This part of IEC 62908 provides a list of terminological entries that are frequently used in the literature related to touch and interactive displays in the IEC 62908 series. Terms for various input methods such as touch, hovering, proximity, gesture, eye tracking, and motion recognition are included. This document is applicable to touch displays, interactive displays and their components.

2 Normative references

There are no normative references in this document.

3 Terms and definitions

3.1 Classification of terms

For the purposes of this document, the following terms and definitions apply.

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

- IEC Electropedia: available at <http://www.electropedia.org/>
- ISO Online browsing platform: available at <http://www.iso.org/obp>

Terms for touch and interactive displays are classified as follows (see also Annex A):

- touch displays (3.2);
- components of touch displays (3.3);
- structure types of touch displays (3.4);
- sensor types of touch displays (3.5);
- input operations of touch displays (3.6);
- measurement elements of touch displays (3.7);
- measurement performances of touch displays (3.8);
- interactive displays (3.9);
- components of interactive displays (3.10);
- sensor types of interactive displays (3.11);
- input operations of interactive displays (3.12);
- actuator types of interactive displays (3.13);
- feedback operations of interactive displays (3.14); and
- measurement performances of interactive displays (3.15).

3.2 Touch displays

3.2.1

touch display

touch display module

electronic device that allows the users to input by using touch objects corresponding to the displayed information

3.3 Components of touch displays

3.3.1

touch sensor

sensor which recognizes input through touch

3.3.2

touch display panel

combination of a touch sensor module and a display panel

3.3.3

touch sensor module

touch screen panel

combination of a touch sensor and touch controller that creates an integrated module capable of sensing and processing touch

Note 1 to entry: A cover window is sometimes attached to the touch sensor.

3.3.4

test pattern cell

test sample with patterned electrodes that is made for reliability measurement

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3.3.5

cover window

transparent window that covers and protects the touch screen panel and display panel

3.3.6

touch controller

integrated circuit that converts analogue input signals to digital output signals in the touch screen panel

3.3.7

receive electrode array

Rx

array of electrodes used for receiving the electrical signal

3.3.8

transmit electrode array

Tx

array of electrodes with changing voltage used for transmitting the electrical signal

3.4 Structure types of touch displays

3.4.1

add-on type

out-cell type

structure that has touch sensors which are separately fabricated and attached to the display panel

3.4.2**in-cell type**

structure that has touch sensors which are integrated inside the display panel

3.4.3**on-cell type**

structure that has touch sensors which are integrated on the outside of the display panel

3.4.4**hybrid-cell type**

structure that has touch sensors which are both inside and outside the display panel

3.5 Sensor types of touch displays**3.5.1****capacitive touch sensor**

sensor for detecting the change of capacitance

3.5.2**resistive touch sensor**

sensor for detecting the change of resistance

3.5.3**optical touch sensor**

sensor that senses the change of light intensity by using light emitter and detector pairs arranged around the perimeter of the touch screen

3.5.4**surface acoustic wave touch sensor** IEC 62908-1-2:2017

sensor for detecting the change of surface acoustic wave which is generated by the touch input operations of the touch displays 81523c3/iec-62908-1-2-2017

3.6 Input operations of touch displays**3.6.1****touch event**

event of detecting the coordinate of the physical contact with a touch sensor

3.6.2**hovering**

detection which responds to the non-physical touch of a human body or an object which is suspended over the touch sensor

3.6.3**pressure touch**

touch putting pressure on the touch sensor which recognizes the changes in pressure

3.7 Measurement elements of touch displays**3.7.1****touch test bar**

artificial bar that is applied as touch input on the touch screen panel

3.8 Measurement performances of touch displays**3.8.1****false touch**

phenomenon where touch coordinates are incorrectly reported