

ICS 37.100.10
CCS J 87



**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB/T 47123.1-2026

**Printed electronics - Part 1: Roll-to-roll printing equipment -
Mechanical dimensions**

印刷电子 第1部分：卷对卷印刷设备 机械尺寸
(English Translation)

Issued on: January 28, 2026

Implemented on: May 1, 2026

Issued by: State Administration for Market Regulation

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Foreword

This document complies with the provisions of GB/T 1.1-2020 "Standardization Work Guidelines Part 1: Structure and Drafting Rules of Standardization Documents".

Drafting.

This document is equivalent to IEC 62899-303-1:2018 "Printed electronics - Part 303-1. Equipment roll-to-roll printing machinery scales" inch".

The following minimal editorial changes have been made to this document.

---To align with existing standards, the standard name has been changed to "Printed Electronics Part 1: Mechanical Dimensions of Roll-to-Roll Printing Equipment".

Please note that some content in this document may involve patents. The issuing organization of this document assumes no responsibility for identifying patents.

This document was proposed by the China Machinery Industry Federation.

This document is under the jurisdiction of the National Technical Committee on Standardization of Printing Machinery (SAC/TC192).

Introduction

Currently, printed electronics technology has progressed from the experimental stage to the actual commercialization of products based on these technologies. In order to achieve

industrial-scale...

Developing these technologies and possessing industrial-scale equipment to produce products in large quantities is crucial. However, unlike other electronic products, this new...

Xing's printed electronics technology does not have any standards for the mechanical dimensions of the final product or equipment.

"Printing" usually refers to "image reproduction" or simply "copying." Printing has a history of over a thousand years. Throughout this long history...

In China, international industry standards defining paper sizes and the inputs and outputs of the printing process have always played a significant role. This is achieved through the development of input and output standards.

Output standards. Printing equipment can have standard mechanical dimensions, which will help avoid developing printing equipment that adapts to uncertain input or output dimensions.

The lack of awareness regarding equipment.

To follow this best practice, this document establishes standard mechanical dimensions for the inputs and outputs of printed electronic devices.

Printed electronics

Part 1: Mechanical Dimensions of Roll-to-Roll Printing Equipment

1 Scope

This document specifies the standard mechanical dimensions of printed electronic equipment (particularly those related to roll stock dimensions).

This document applies to both roll-to-roll and sheet-fed printing equipment.

2 Normative references

This document has no normative references.

3 Terms and Definitions

The following terms and definitions apply to this document.

Roll-to-roll process/R2R process the production process uses a roll-to-roll method for feeding, printing, and collecting materials.

alignment mark

Marks used to identify alignment positions during the manufacturing process.

Trigger mark

A mark used to identify where the printing process needs to be started.

4.1 General Provisions

The measurement conditions for mechanical dimensions are as follows.

---Room temperature;

---Indoor relative humidity.

Record these measurement conditions.

4.2 Schematic diagram of electronic printing equipment

Figure 1 is a schematic diagram of a roll-to-roll printing system.