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**GB/T 47016-2026**

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**Physical and electrical control interfaces for ultra high  
definition lenses**

超高清镜头物理及电气控制接口

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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. 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 Photographic Machinery (SAC/TC107). This document was drafted by: Sichuan Guochuang Innovation Vision Ultra HD Video Technology Co., Ltd., Institute of Optoelectronics Technology, Chinese Academy of Sciences, and Jiaying Zhongrun. Optical Technology Co., Ltd., Guangdong Sirui Optical Co., Ltd., Hangzhou Photographic Machinery Research Institute Co., Ltd., Hangzhou Guozhao Testing Technology Co., Ltd. Shenzhen Yongtai Optoelectronics Co., Ltd., Guangdong Bohua Ultra HD Innovation Center Co., Ltd., and Guangzhou Boguang Optoelectronic Technology Co., Ltd. Limited Company, Guangdong Tusheng Ultra HD Innovation Center Co., Ltd., Shenzhen Dongzheng Optical Technology Co., Ltd., Shenzhen Skyworth-RGB Electronics Limited Liability Company, Beijing MicroPoint Zhixin Technology Co., Ltd., Sichuan Provincial Institute of Product Quality Supervision and Inspection, Chengdu University of Information Technology, Southwest University for Nationalities University, National Innovation Vision Ultra-High Definition Video Inspection Technology (Sichuan) Co., Ltd. The main drafters of this document are. Song Xiaomin, Zheng Huiming, Xiang Shiwen, Li Jie, Ge Shiqing, Li Tongyue, Wei Yuxing, Dai Guomin, Huang Wushuang,

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Ultra-high definition lens physical and electrical control interface

## 1 Scope

GB/T 47016-2026 is the Chinese national standard covering the mount and the control interface of a broadcast UHD lens - the mechanical interface to the camera, the electrical connector and its pinout, and the protocol carrying zoom, focus, iris and the lens metadata a production needs. First edition, 17,000 words. It was issued on 28 January 2026 and has been in force since 1 August 2026, as a first edition. The document is under the responsibility of the China Machinery Industry Federation. This page is published from the official record of the 2026 edition; the clause text of a standard this recent is not yet in circulation, and the figures, limits and tables it contains are those of the document itself, delivered in full with the English translation.

This document specifies the mechanical interface structure and dimensions of ultra-high-definition lenses, as well as the electrical control technical requirements for the lens interface, and describes the corresponding... The experimental method. This document is applicable to guiding the manufacturing of ultra-high-definition lens mechanisms, modules, and complete systems in the fields of ultra-high-definition industrial imaging and ultra-high-definition consumer imaging. Businesses and others collaborate with ultra-high-definition lens manufacturers on the research, design, and production of supporting lenses.

## 2 Normative references

The contents of the following documents, through normative references within the text, constitute essential provisions of this document. Dated citations are not included. For references to documents, only the version corresponding to that date applies to this document; for undated references, the latest version (including all amendments) applies. This document.

GB/T 9917.1 Photographic lenses - Part

## 3 Terms and Definitions

The following terms and definitions apply to this document.

3.1 Optical imaging lens that can be adapted to ultra-high definition cameras (3.2).

3.2 Cameras with a resolution of 4K (3840x2160 pixels), 8K (7680x4320 pixels), or 8 megapixels or more.

3.3 Lens mount The interface between the optical lens and the imaging device.

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