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

GB/T 43907.1-2024

**Tractors and machinery for agriculture and forestry - Camera
interface between tractor and implement - Part 1: Analogue
camera interface**

农林拖拉机和机械 拖拉机与机具间的摄像头接口 第1部分：模拟摄像头接口
(English Translation)

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Foreword

This document is in accordance with the provisions of GB/T 1.1-2020 "Guidelines for standardization work Part 1: Structure and drafting rules for standardization documents" Drafting is required.

This document is Part 1 of GB/T 43907 "Camera interface between agricultural and forestry tractors and machine implements".

GB/T 43907 has published the following parts.

--- Part 1. Analog camera interface.

This document is equivalent to ISO 20112-1:2018 "Agricultural and forestry tractors and machine tools - Camera interface between tractors and implements - Part 1: Analog Camera Interface".

Introduction

GB/T 43907 "Camera interface between agricultural and forestry tractors and mechanical tractors and implements" specifies the camera interface between agricultural and forestry tractors and implements.

The technical requirements for the design, manufacture and use of camera interfaces and the corresponding test methods and acceptance conditions are intended to consist of the following parts.

--- Part 1. Analog camera interface. The purpose is to provide the interface between the analog camera installed on the implement and the analog camera installed on the tractor. Physical link requirements between indoor operating terminals or monitors.

1 Scope

This document specifies the physical connection between the analog camera mounted on the implement and the operator terminal or monitor installed in the tractor cab.

Link Requirements. The interface specified in this document supports up to two analog video streams and provides power to analog cameras.

This document applies to analog camera interfaces installed in the cab.

2 Normative references

The contents of the following documents constitute the essential clauses of this document through normative references in this document.

For referenced documents without a date, only the version corresponding to that date applies to this document; for referenced documents without a date, the latest version (including all amendments) applies to This document.

Note: GB/T 25392-2024 Environmental tests for electrical and electronic equipment in agricultural engineering (ISO 15003:2019, IDT)

3 Terms and definitions

The following terms and definitions apply to this document.

3.1 Camera control unit

A device that combines images from multiple cameras into a single video stream.

3.2 CAN Bus

Controller Area Network bus.

3.3 Discrete I/O's

Input/output lines for electrical signals.

3.4 ISO BUS network

A complete set of equipment units using the network connection specified in the ISO 11783 series of standards.

4.1 Physical Link Configuration

This document describes the physical connection between the analog camera mounted on the implement and the operator terminal or monitor installed in the tractor cab. link.

If an attachment (e.g. an implement) is equipped with more than two cameras, a CCU should be installed on the attachment.