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**General technical requirements for agricultural internet of
things-Part 1: Field planting**

农业物联网通用技术要求 第1部分：大田种植

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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.

This document is Part 1 of GB/T 44985 General Technical Requirements for Agricultural Internet of Things. GB/T 44985 has been published as follows part.

- Part 1: Field planting;
- Part 3: Aquaculture;
- Part 4: Livestock and poultry farming.

Please note that some of the contents of this document may involve patents. The issuing organization of this document does not assume the responsibility for identifying patents.

This document is proposed and coordinated by the Ministry of Agriculture and Rural Affairs of the People's Republic of China.

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Introduction

GB/T 44985 "General Technical Requirements for Agricultural Internet of Things" is intended to support the development of agricultural Internet of Things, agricultural informatization and agricultural modernization The construction is planned to consist of the following 10 parts.

- Part 1: Field planting. The purpose is to establish general technical requirements for the Internet of Things applicable to field planting applications.
- Part 2: Facility Horticulture. The purpose is to establish common technical requirements

for the Internet of Things applicable to facility horticulture applications.

- Part 3: Aquaculture. The purpose is to establish common technical requirements for the Internet of Things applicable to aquaculture applications.
- Part 4: Livestock and poultry farming. The purpose is to establish general technical requirements for the Internet of Things applicable to livestock and poultry farming applications.
- Part 5: Agricultural machinery operation. The purpose is to establish general technical requirements for the Internet of Things applicable to agricultural machinery operation applications.
- Part 6: Orchard and tea plantation production. The purpose is to establish general technical requirements for the Internet of Things applicable to orchard and tea plantation production.
- Part 7: Agricultural products processing and circulation. The purpose is to establish general Internet of Things technologies applicable to agricultural products processing and circulation applications Require.
- Part 8: Agricultural materials circulation management. The purpose is to establish the general technical requirements of the Internet of Things applicable to agricultural materials circulation management.
- Part 9: Agricultural product quality and safety monitoring. The purpose is to establish general Internet of Things technology applicable to agricultural product quality and safety monitoring. Technical requirements.
- Part 10. Agricultural resource and environmental monitoring. The purpose is to establish general IoT technologies applicable to agricultural resource and environmental monitoring Require.

General technical requirements for agricultural Internet of Things Part 1: Field planting

1 Scope

This document establishes the overall architecture of the field planting agricultural Internet of Things, specifies the overall requirements of the field planting agricultural Internet of Things, and Technical requirements for control, transmission, application, and security.

This document is applicable to the planning, design, system development, operation and maintenance management of the field planting Internet of Things system and the field planting Internet of Things terminal production, testing, system integration and application.

2 Normative references

GB/T 2423.18-2021

GB/T 2423.24-2022

GB/T 4208-2017

GB 4943.1

GB/T 9254.2

GB/T 20984

GB/T 22239

GB/T 30269.701

GB/T 30269.702

GB/T 33745

GB/T 36478.2

GB/T 36951

GB/T 37024

GB/T 37025

GB/T 37044

GB/T 37802-2019

GB/T 41187-2021

GB 50174

3 Terms and definitions

The terms and definitions defined in GB/T 33745 and the following apply to this document.