

ICS 33.040
CCS M16



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

GB/Z 41292-2022

**General technology requirements on WAN based remote
measurement and control applications for intelligent agriculture**

基于广域网通信的智能农业远程测控应用总体技术要求

Issued on: March 9, 2022

Implemented on: March 9, 2022

**Issued by: State Administration for Market Regulation;
Standardization Administration of China**

Table of Contents

- 1 Scope
- 2 Normative references
- 3 Terms and Definitions
- 4 Abbreviations

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 of Standardization Documents" drafted. Please note that some content of this document may be patented. The issuing agency of this document assumes no responsibility for identifying patents. This document is proposed by the Ministry of Industry and Information Technology of the People's Republic of China. This document is under the jurisdiction of the National Communication Standardization Technical Committee (SAC/TC485). This document is drafted by: China Telecom Group Co., Ltd., China Academy of Information and Communications Technology, Beijing Tiandi Interconnection Information Technology Co., Ltd., China Agricultural University, Nanjing Ericsson Panda Communications Co., Ltd., and ZTE Corporation. The main drafters of this document. Feng Shuntian, Jiang Zhifeng, Zhou Kaiyu, Sun Xianghui, Du Jiatong, Huang Wei, Gu Chen, Ma Daokun. Intelligent agricultural remote measurement and control based on wide area network communication General technical requirements of the application

1 Scope

GB/Z 41292-2022 is the Chinese national standard on general technology requirements on wan based remote measurement and control applications for intelligent agriculture, in the field of telecommunications and audio-video engineering. The /Z suffix marks it as a guiding technical document: it does not prescribe requirements that can be certified against, but sets out the technique, the method or the state of the art that the standards bodies recommend following. It was issued on 9 March 2022 by the State Administration for Market Regulation; Standardization Administration of China. As a guiding technical document it carries no separate date of entry into force: it applies from publication. Classification: ICS 33.040, CCS M16. This page is published from the official record of the standard held by the Chinese standards administration: the identification, the dates, the classification and the issuing body are taken from there. The clause text, the tables and the numeric limits are in the document itself, which is delivered complete in English translation.

This document specifies the general technical requirements for remote monitoring and control applications of intelligent agriculture based on WAN communication, including business overview, business characteristics, Business scope, business classification, business description and application scenario description. This document applies to the construction of intelligent agricultural services based on public communication networks.

2 Normative references

There are no normative references in this document.

3 Terms and Definitions

The following terms and definitions apply to this document.

3.1 sensor sensor According to certain rules, the objective phenomena and physical properties in the physical world are monitored, and the monitoring results are transformed into those that can be further processed. signal device.

3.2 Actuator A device or device that produces a certain physical response according to a certain law under the action of an input signal.

3.3 Sensing node actuator nodes A network element with functions such as data processing, networking and control management in a sensor network. Note

1.The sensor nodes described in this document do not include sensors and actuators. Note

2.The sensor node supports the data relay function.

3.4 IoT terminal terminal of IoT A device that has functions such as information collection and/or control, and implements information initiation and termination in the communication between people and things and things and things in the Internet of Things.

Note. The IoT terminals involved in this document only include sensors, actuators and video surveillance equipment.

3.5 In order to improve the modernization level of agriculture, by deploying IoT terminals and sensor node equipment on agricultural sites, using computers or mobile terminals. The terminal realizes the remote viewing and control operation of the agricultural production process through the communication network.

4 Abbreviations

The following abbreviations apply to this document.