

ICS 49.020
CCS V 36



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

GB/T 45678-2025

**General requirements for civil tethered unmanned aircraft
system**

民用系留无人机系统通用要求

Issued on: April 25, 2025

Implemented on: November 1, 2025

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

Table of Contents

Preface	III
1 Scope	1
2 Normative references	1
3 Terms and Definitions	1
4 General Requirements	2
4.1 System composition	2
4.2 Performance requirements	2
4.3 Environmental adaptability requirements	3
4.4 Reliability Requirements	4
4.5 Security Requirements	4
4.6 Testability requirements	4
4.7 Maintainability requirements	4
4.8 Security requirements	5
4.9 Electromagnetic compatibility requirements	5
4.10 Requirements for tower connection	5
4.11 Human-computer interaction requirements	5
4.12 Interchangeability requirements	5
4.13 Material requirements	5
4.14 Standard Parts Requirements	5
5 Tethered Drone	6
5.1 Body	6
5.2 Powertrain	6
5.3 Aircraft electrical system	7
5.4 Flight Control and Navigation System	7
6 Data Link	8
6.1 Function	8
6.2 Performance	8
7 Ground Equipment	8
7.1 Tethered Cable	8
7.2 Pay-off and retracting device	9
7.3 Ground Control System	9
7.4 Ground Power Supply System	9

8 Mission Payload	10
9 Experimental Verification	10
9.1 Test Purpose	10
9.2 Test content	10

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.

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 National Aircraft Standardization Technical Committee (SAC/TC435).

This document was drafted by: Shenzhen Saiwei Intelligent Technology Co., Ltd., China Aviation Technology Research Institute, Shenzhen DJI Innovations Technology Ltd.

The main drafters of this document are: Huang Taoli, Tang Jian, Zhou Qiru, Shu Zhenjie, Wang Qiuyang, Hu Yingdong, Zhao Yu, Li Linlin, Chen Pingping, Wang Jiuyuan, Zhang Zejing.

General requirements for civil tethered unmanned aerial vehicle systems

1 Scope

This document specifies the general requirements for civil tethered UAV systems, tethered UAVs, data links, ground equipment, mission payloads and test validation. Certificate requirements.

This document applies to the design, manufacture and test verification of civil tethered UAV systems.

2 Normative references

GB/T 3956

GB/T 7424.1

GB/T 15972.10

GB/T 34989

GB/T 38909

GB/T 38924.2

GB/T 38924.3

GB/T 38924.5

GB/T 38924.6

GB/T 38924.8

GB/T 38924.9

GB/T 38924.10

GB/T 38924.11

GB/T 38930

GB/T 38997

3 Terms and definitions

The following terms and definitions apply to this document.

3.1

A device that automatically/manually controls the reeling, arranging and releasing of moored cables.

3.2

The high-voltage direct current output from the ground power supply is converted to provide long-term and stable power supply for airborne electrical equipment.