

中国民用航空局  
CIVIL AVIATION ADMINISTRATION OF CHINA

型号合格证数据单  
TYPE CERTIFICATE DATA SHEET

编号/No: TC0091A-ZN  
版次/Revision: 00  
型别/Model:  
E2MTR-30A  
批准人/Approved By:  
  
职务/Title: 副局长  
日期/date: 2024-11-18

本数据单是型号合格证（编号：TC0091A-ZN）的组成部分，它规定了获得该型号合格证的产品满足中国民用航空规章相关适航要求的条件和限制。

This data sheet, which is part of Type Certificate (No:TC0091A-ZN), prescribes condition and limitation under which the product for which the Type Certificate was issued meets the airworthiness requirements of the Chinese Civil Aviation Regulation.

型号合格证持有人/Type Certificate Holder:

深圳市大疆创新科技有限公司/ SZ DJI Technology Co., Ltd.

深圳市南山区西丽街道西丽社区仙元路53号大疆天空之城T2大堂/Lobby of T2, DJI Sky City,  
No. 53 Xianyuan Road, Xili Community, Xili Street, Nanshan District, Shenzhen

第一部分：E2MTR-30A 型别技术数据/ SECTION A: Model E2MTR-30A TECHNICAL DATA

A I. 概述/ General

1. 产品型别/Model:
- E2MTR-30A
2. 类别/Category:
- 限用类航空器/ Restricted category aircraft
3. 型号合格证申请日期/Date of Application for TC:
- 2023-07-28
4. 型号合格证批准日期/TC Issue Date:
- 2024-11-18

A II. 生产依据 Production Basis

依据生产许可证（PC）生产，生产许可证编号：PC0067A-ZN/ Production in accordance with the Production Certificate (PC), Production Certificate Number: PC0067A-ZN

A III. 审定基础/Certification Basis

《中型民用无人驾驶航空器系统适航标准及符合性指导材料（试行）》（民航适函〔2024〕52号）中适用的适航要求 / Applicable airworthiness requirements in *Medium Civil Unmanned Aircraft Systems Airworthiness Standard and Compliance Guidance Materials (Trail)* (CAAC AW Letter [2024] No.52)

A IV. 技术特性和使用限制/Technical Characteristics and Operational Limitations

|                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1. 设计定义/Design Definition                                                                                                                                                                                                                                                                                                                                                                                                                         |
| 详见《DJI-FC30 产品设计说明》（DAFC30-AWD-DJI-001，版本 1.3 及后续批准版次）<br>Details in DJI-FC30 Product Design Specification (DAFC30-AWD-DJI-001, Version 1.3 and the subsequent approved versions)                                                                                                                                                                                                                                                                 |
| 2. 航空器/Aircraft                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| a. 外形尺寸/Dimension <div>a) 货箱模式/ Cargo Mode<br/>2800×3085×947 mm（机臂、桨叶展开/with arms and propellers unfolded）<br/>1590×1900×947 mm（机臂展开、桨叶折叠/with arms unfolded and propellers folded）<br/>1115×760×1027 mm（机臂折叠/with arms folded）<br/>b) 空吊模式/ Winch Mode<br/>2800×3085×820 mm（机臂、桨叶展开/with arms and propellers unfolded）<br/>1590×1900×820 mm（机臂展开、桨叶折叠/with arms unfolded and propellers folded）<br/>1115×760×900 mm（机臂折叠/with arms folded）</div> |
| b. 重量/Weight <div>a) 最大起飞重量（海平面附近）/Max. take-off weight-NSL:<br/>95kg</div>                                                                                                                                                                                                                                                                                                                                                                       |

- b) 最大载重（海平面附近）/Max. payload-NSL:  
30kg（标准双电池模式/Standard Dual Battery Mode）  
40kg（应急单电池模式/Emergency Single Battery Mode）
- c) 最大起飞重量（最大起飞海拔高度处）/Max. take-off weight (at Max. take-off altitude):  
65kg（标准双电池模式/Standard Dual Battery Mode）  
53.75kg（应急单电池模式/Emergency Single Battery Mode）
- d) 最大载重（最大起飞海拔高度处）/Max. payload (at Max. take-off altitude):  
0kg
- c. 重心范围/C.G. range  
详见《DJI FlyCart 30 用户手册》（文件编号：DAFC30-OA-MC1-DR-007，版本 1.2 及后续经批准的版本）  
Details in DJI FlyCart 30 User Manual (DAFC30-OA-MC1-DR-007, Version 1.2 and the subsequent approved versions)
- d. 飞行模式/Flight Mode
- a) 手动飞行（手动控制）/Manual flight (manual control):  
N 挡（普通）、S 挡（运动）、F 挡（空吊）/N mode (Normal), S mode (Sport), F mode (Winch system)
- b) 航线飞行（自动控制）/Route flight (automatic control):  
N 挡（普通）/N mode (Normal)
- e. 飞行精度/Flight control accuracy
- a) 偏航距离/Track accuracy:  
 $\leq 5\text{ m}$ （水平和垂直方向/horizontal and vertical）
- b) 速度偏差/Velocity accuracy:  
 $\leq 1\text{ m/s}$
- f. 最大起飞海拔高度/ Max. take-off altitude (above sea level)  
4500m
- g. 最大飞行海拔高度/ Max. flight altitude (above sea level)  
6000m（空载/ Empty weight）
- h. 最大飞行真高/Max. flight height (above ground level)  
1500m AGL
- i. 最大运行真高/Max. operating height (above ground level)  
500m AGL

## j. 最大航程/Max. operating range

16km (标准双电池模式满载/Standard Dual Battery Mode with max. payload)

8km (应急单电池模式满载/Emergency Single Battery Mode with max. payload)

## k. 最大俯仰角度/Max. tilt angle

30°

## l. 速度/Speed

## a) 最大作业飞行速度 (航线飞行) /Max. operating speed (Route flight):

15m/s

## b) 最大飞行速度 (GNSS 信号良好) /Max. flight speed (with good GNSS signals):

20m/s

## c) 最大爬升速度/Max. climb speed:

5m/s

## d) 最大垂直下降速度/Max. vertical descent speed:

3m/s

## e) 开伞后的最大下降速度/ Max. falling speed after opening the parachute:

6m/s

## m. 最大可承受风速/Max. wind resistance

12m/s

## n. 环境温度限制/Environmental Temperature Limit

-20℃~45℃

## o. 整机防护等级/Dust and Water-resistance rating

IP55 (GB/T4208-2017)

## p. 电机/Motor

类型/Type:

permanent magnets

永磁无刷直流电机/Brushless DC electric motor with

型别/Model:

10033D

装机数量/No. of Installed Units:

8

KV 值/KV value:

48rpm/V

最大功率/Max. power:

4000W/motor

最大转速/Max. PRM:

2000rpm

电机最高安全温度/ T\_max (safe.):

180℃

## q. 电调/ESC

类型/Type:

无感三相永磁同步电机驱动器/Non-inductive

|                                                       |                                                                   |
|-------------------------------------------------------|-------------------------------------------------------------------|
| three-phase permanent magnet synchronous motor driver |                                                                   |
| 型别/Model:                                             | TA101-ESC                                                         |
| 装机数量/No. of Installed Units:                          | 8                                                                 |
| 最大工作电流（持续）/ I <sub>max</sub> (cont.):                 | 100A                                                              |
| 最大工作电压/V <sub>max</sub> :                             | 60V                                                               |
| 电调最高温度/T <sub>max</sub> :                             | 120℃                                                              |
| <b>r. 螺旋桨/Propeller</b>                               |                                                                   |
| 类型/Type:                                              | 可折叠非快拆固定螺距螺旋桨 /Foldable, non-quick-release, fixed-pitch propeller |
| 型别/Model:                                             | R5420                                                             |
| 装机数量/No. of Installed Units:                          | 8 对/8 pairs                                                       |
| 直径/ Diameter×螺距/ pitch:                               | 54 in × 20 in                                                     |
| <b>s. 动力电池/Battery</b>                                |                                                                   |
| 类型/Type:                                              | 锂离子电池/Li-ion                                                      |
| 型别/Model:                                             | DB2000                                                            |
| 装机数量/No. of Installed Units:                          | 1 或 2/1 or 2                                                      |
| 标称电池电压/V <sub>nom</sub> :                             | 52.22V                                                            |
| 电池额定容量/C <sub>rated</sub> :                           | 38000mAh with 0.5Cmin (25℃)                                       |
| 工作环境温度/T <sub>amb</sub> :                             | -20℃~45℃                                                          |
| 电池自加热/Battery self-heating:                           | 是/Yes                                                             |
| <b>t. ADS-B</b>                                       |                                                                   |
| 类型/Type:                                              | ADS-B IN                                                          |
| 型别/Model:                                             | D1                                                                |
| 装机数量/No. of Installed Units:                          | 1                                                                 |
| 接收频率/Receiving frequency:                             | 978MHz, 1090MHz                                                   |
| 接收范围/Receiving range:                                 | 15km                                                              |
| <b>u. 降落伞/Parachute</b>                               |                                                                   |
| 类型/Type:                                              | 方形降落伞/Square parachute                                            |
| 型别/Model:                                             | DJI Parachute                                                     |
| 装机数量/No. of Installed Units:                          | 1                                                                 |
| 开伞方式/Parachute opening mode:                          | 手动和自动开伞/Manual and Automatic trigger                              |
| 最低开伞高度/ Min. opening height:                          | 60m AGL                                                           |
| <b>v. 负载/Payload</b>                                  |                                                                   |
| 类型/Type:                                              | 货箱/ Cargo box                                                     |
| 型别/Model:                                             | /                                                                 |
| 装机数量/No. of Installed Units:                          | 1                                                                 |
| 内部容积/Internal volume:                                 | 70L                                                               |
| 类型/Type:                                              | 电动空吊/ Electric winch                                              |
| 型别/Model:                                             | A2EWH-30A                                                         |
| 装机数量/No. of Installed Units:                          | 1                                                                 |

|                                                                                                |     |
|------------------------------------------------------------------------------------------------|-----|
| 线缆长度/Cable length:                                                                             | 20m |
| 3. 遥控器/Remote controller                                                                       |     |
| a. 型别/Model<br>DJI RC PLUS                                                                     |     |
| b. 控制模式/Control mode<br>一机一控、一机双控/Single control in one aircraft, Dual control in one aircraft |     |
| c. 最小飞行机组/Minimum Flight Crew<br>1 人/机 (1 pilot/UAS)                                           |     |
| 4. 指挥控制数据链路/Command and Control Data Link                                                      |     |
| a. 视距链路/Direct data link                                                                       |     |
| a) 工作频率/Operating frequency:<br>2.400-2.4835 GHz<br>5.725-5.850 GHz                            |     |
| b) 有效作用距离 (无干扰、无阻挡) /ETR (w/o interference and blockage):<br>FCC: 20 km<br>CE/SRRC/MIC: 8 km   |     |
| b. 4G                                                                                          |     |
| a) 网络制式/Network Mode:<br>FDD/TDD/WCDMA/GSM                                                     |     |
| 5. 使用限制/Operational Limitations                                                                |     |

- a. 航空器载货运行/ Aircraft cargo operations
- b. 禁止载人/Prohibited from carrying people
- c. 视距内运行和视距外运行/ VLOS and BVLOS
- d. 不在已知风速超过 12m/s、大雨、中/大雪、轻/中/重强度结冰或极端天气（包括但不限于闪电）环境运行/ Operation is prohibited in environments with known wind speed exceeding 12m/s, heavy rain, moderate/heavy snow, light/moderate/severe icing or extreme weather (including but not limited to lightning)
- e. 昼间和夜间运行/ Daytime and nighttime operation
- f. 不在人口密集区域上空飞行/Not flying over densely populated areas.
- g. 除非经空中交通管理部门批准，不在融合空域飞行/ Non-converged airspace unless approved by the Air Traffic Management authority.

其他限制详见《DJI FlyCart 30 用户手册》（文件编号：DAFC30-OA-MC1-DR-007，版本 1.2 及后续经批准的版本）

Other Limitations please refer to DJI FlyCart 30 User Manual (DAFC30-OA-MC1-DR-007, Version 1.2 and the subsequent approved versions)

注 1 /Note 1: 本数据单中参数，如无条件特别说明，均按静止空气和海平面标准大气条件给出/ The parameters in this datasheet, unless otherwise specified, are given under conditions of still air and standard atmospheric conditions at sea level.

注 2 /Note 2: 未列出的其他技术参数，可详见《DJI-FC30 产品设计说明》（DAFC30-AWD-DJI-001，版本 1.3 及后续批准版次）/For the other parameters not listed, please refer to DJI-FC30 Product Design Specification (DAFC30-AWD-DJI-001, Version 1.3 and the subsequent approved versions).

注 3 /Note 3: 无人机空机重量制造误差为  $\pm 3\%$  / The manufacturing tolerance for the empty weight of the drone is  $\pm 3\%$ .

#### A V. 批准的技术资料/Approved Technical Documents

1. 《DJI FlyCart 30 用户手册》（文件编号：DAFC30-OA-MC1-DR-007，版本 1.2 及后续经批准的版本）  
DJI FlyCart 30 User Manual (DAFC30-OA-MC1-DR-007, Version 1.2 and the subsequent approved versions)
2. 《DJI FlyCart 30 空吊系统使用说明》（文件编号：DAFC30-OA-MC1-DR-008，版本 1.0 及后续经批准的版本）  
DJI FlyCart 30 Winch System User Guide (DAFC30-OA-MC1-DR-008, Version 1.0 and the subsequent approved versions)
3. 《DJI FlyCart 30 免责声明和安全操作指引》（文件编号：DAFC30-OA-MC1-OD-010，版本 1.0 及后续经批准的版本）  
DJI FlyCart 30 Safety Guidelines and Disclaimer (DAFC30-OA-MC1-OD-010, Version 1.0 and the subsequent approved versions)
4. 《DJI-FC30 持续适航文件清单》（文件编号：DAFC30-OA-MC1-DR-009，版本 1.4 及后续经批准的版本）  
DJI-FC30 Continuous Airworthiness Documents List (DAFC30-OA-MC1-DR-009, Version

- 1.4 and the subsequent approved versions)
5. 《DJI-FC30 产品设计说明》（DAFC30-AWD-DJI-001，版本 1.3 及后续批准版次）  
DJI-FC30 Product Design Specification (DAFC30-AWD-DJI-001, Version 1.3 and the subsequent approved versions)

A VI. 注释/Notes  
注释

第二部分：管理信息/SECTION B: ADMINISTRATIVE INFORMATION

B I. 型号持有人记录/Type Certificate Holder Record  
深圳市大疆创新科技有限公司  
SZ DJI Technology Co., Ltd.

B II. 修订记录/ Change Records

| 型号合格证数据单编号 | 版次 | 主要修订内容 | 修订日期             |
|------------|----|--------|------------------|
| TC0091A-ZN | 00 | 初次颁发   | 2024 年 11 月 18 日 |