

FlyCart 30 Tethered Drone System Solution

DJI FlyCart 30





MYUAV Tethered Station

Highlights of DJI FlyCart 30



DJI FlyCart 30 is a civil large payload UAV that combines large payload, long range, strong signal and high intelligence.

FlyCart 30 can provide **stable and reliable** solutions for various application scenarios.

The fuselage is equipped with front and rear active phased array radar and binocular vision system, which can realise multi-directional, all-weather and all-time intelligent obstacle avoidance during flight.

The UAV comes standard with a built-in parachute to ensure flight safety, and is equipped with a compact folding storage design to meet the needs of **ordinary vehicle transit**.

MYUAV FlyCart 30 Tethered

Heavier loads, More configurations, Higher efficiency







- Redundant load design to ensure stable power supply and long flight duration
- Ultra-precise voltage regulator circuit, accuracy ±1%, higher than the industry level
- Original battery design, plug-and-fly, seamless switching in case of power failure
- Patented rainproof IP54/waterproof IP68 design, more scenes without fear of wind and rain



Focus on tethering technology to improve user experience



Patented rainproof design



50-350m flight height



Original battery design, plug and fly



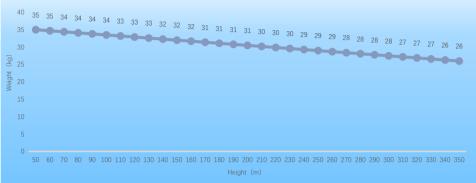
Bigger loading capacity



4 selections for scenarios

MYUAV FlyCart 30 Tethered





Model	Height	Max. Out	Scenarios
FC30T	50~240m	20kw	High Power Mount
FC30X	50~120m	16kw	Building Cleaning Fire Fighting
FC30M	50~350m	16kw	Public Safety Public Grid Communication Grid Spraying
FC30S	50~240m	12kw	Emergency Lighting Self-organising network relay Emergency Search and Rescue

Application Scenarios

Abundant payloads for different scenarios



Building cleaning



Emergency lighting



Grid Spraying



Fire fighting



Communication relay



Dust control

FC30S Basic Parameters





Item		Technical parameters
	Input Voltage	AC 380±10%, three-phase four-wire system, compatible with utility power, generators and other equipment power supply
	Output Voltage	Rated DC750V
	Output power	Rated 15kw, Max. 20kW
Tethered	Take-up speed	0 ~ 3m/s adjustable
case	Size	L×W×H: external size 68.6x44.8x49.2cm
	Weight	42kg without cable, 52kg with tethered cable
	Material	Aerospace Aluminium Alloy
	Protection	With strong and weak power separation design, with protection function when input under voltage, input over voltage, output over voltage, output over current, output short circuit, output over temperature;
	Operating current	Max.20A
Tethered cable	Tensile strength	≥300kg Cable breaking tension ≥300kg
	Cable Length	Bollard length 240m, maximum support 350m, resistance to repeated retractions ≥ 1000 times
	Compressive	Input and output withstand voltage ≥ 3000vdc, cable insulation withstand voltage ≥ 3500vdc
	Cable Weight	3.45kg/100m

	Input Voltage	DC 750V
	Output Voltage	DC 14S 58.5-59.5V constant regulated output, voltage fluctuation is less than ±1%, with input over-voltage, under-voltage protection and output over-voltage, over-current, short-circuit, over-temperature protection function
Onboard	Output power	12kW (rated long-time power)
Power	Size	L×W×H: 311×138×279mm Same as original battery size
	Weights	4.5kg
	Installation	Replace one FlyCart 30 drone battery, plug and play installation
	Protection	Protection grade ≥ IP54 tethered power supply mode, the aircraft can fly and land normally when the power supply is interrupted during flight.

FC30M Basic Parameters





Item		Technical parameters
	Input Voltage	AC 380±10%, three-phase four-wire system, compatible with utility power, generators and other equipment power supply
	Output Voltage	Rated DC1000V
Tethere	Output d power	Rated 20kw, Max.30kW
case	speed	0 ~ 3m/s adjustable
	Size	L×W×H: external size 68.6x44.8x49.2cm
	Weight	50kg without cable, 60kg with tethered cable
	Material	Aerospace Aluminium Alloy
	Protection	With strong and weak power separation design, with protection function when input under voltage, input over voltage, output over voltage, output over current, output short circuit, output over temperature;
	Operating current	Max.20A
	Tensile strength	≥300kg Cable breaking tension ≥300kg
Tethere cable	d Cable Length	Binding length 350m, resistance to repeated retraction and release times ≥ 1000 times
	Compressive	Input and output withstand voltage ≥ 3000vdc, cable insulation withstand voltage ≥ 3500vdc
	Cable Weight	3.45kg/100m
Input Voltage		DC 1000V
	Output Voltage	DC 14S 58.5-59.5V constant regulated output Voltage fluctuation below $\pm 1\%$ with input over-voltage, under-voltage protection and output over-voltage, over-current, short-circuit, over-temperature protection.
Onboar d Power	Output power	16kW (rated long-time power)
	Size	L×W×H: 311×138×279mm Same as original battery size
	Weight	6.4kg
	Installation	Replace one FlyCart 30 drone battery, plug and play installation
	Protection	Protection grade ≥ IP54 tethered power supply mode, the aircraft can fly and land normally when the power supply is interrupted during flight.

FC30T Basic Parameters



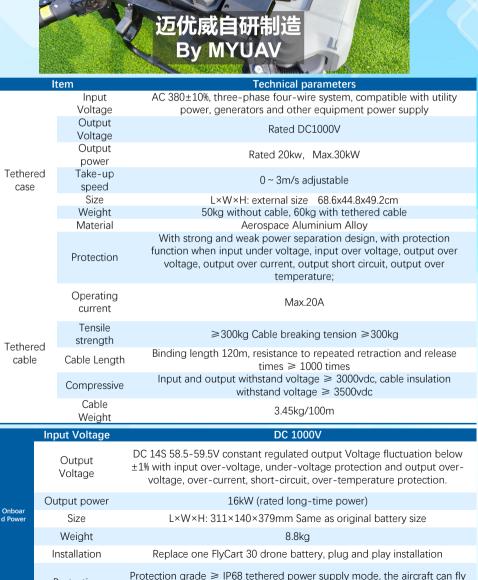


Item		l echnical parameters
	Input Voltage	AC 380±10%, three-phase four-wire system, compatible with utility power, generators and other equipment power supply
Tethered case	Output Voltage	Rated DC1000V
	Output power	Rated 25kw, Max.30kW
	Take-up speed	0 ~ 3m/s adjustable
	Size	L×W×H: external size 68.6x44.8x49.2cm
	Weight	50kg without cable, 60kg with tethered cable
	Material	Aerospace Aluminium Alloy
	Protection	With strong and weak power separation design, with protection function when input under voltage, input over voltage, output over voltage, output over current, output short circuit, output over temperature;
	Operating current	Max.25A
	Tensile strength	≥300kg Cable breaking tension ≥300kg
Tethere cable	d Cable Length	Binding length 240m, resistance to repeated retraction and release times ≥ 1000 times
	Compressive	Input and output withstand voltage ≥ 3000vdc, cable insulation withstand voltage ≥ 3500vdc
	Cable Weight	3.95kg/100m
	Input Voltage	DC 1000V
	Output Voltage	DC 14S 58.5-59.5V constant regulated output Voltage fluctuation below ±1% with input over-voltage, under-voltage protection and output over-voltage, over-current, short-circuit, over-temperature protection.
Onboard	Output power	20kW (rated long-time power)
Power	Size	L×W×H: 311×138×279mm Same as original battery size
	Weight	6.42kg
	Installation	Replace one FlyCart 30 drone battery, plug and play installation
	Protection	Protection grade ≥ IP54 tethered power supply mode, the aircraft can fly and land normally when the power supply is interrupted during flight.

FC30X Basic Parameters

Protection





and land normally when the power supply is interrupted during flight.

Building cleaning drones





MYUAV FC30X building cleaning tethered drone, using the original ground water supply and power supply solution, in the state of continuous water supply and power supply, can work continuously for up to 8-10 hours, the operating area of up to 10,000m²/ day.



About 20 times the spider cleaning efficiency, (conventional efficiency 1-2 square meter/minute.)

Building cleaning drones



Before After

	MYUAV FC30X Tethered Drone
Water supply	Ground tether water supply ✓
Electricity supply	Ground tether power supply for 8-10 hours of continuous operation ✓
Volume of water	500-900L/hour, unlimited water supply at ground level ✓
Economics	Batteries are for backup only, no drain ✔
Waterproof	IP68 waterproof ✓

Honours & Qualifications



Self-developed and manufactured

PCB design



3D design



UAV design



CNC manufacturing





Software



Test



Training









T: +86 25 6952 1609
M: myuav@myuav.com.cn
W: www.myuav.com.cn
A: China - Nanjing - Jianye



