

Endurance

Precision

Power

Applicable Models: DJI FC100

System Advantages

- High Power Support: 30 kW / 200 kg class tethered system, supports full-power operation with 80 kg payload, optimized wind resistance.
- High-Voltage Supply: Ground station uses stable 1000V DC power, compatible with industrial, generator, and tram power sources; optimized high-temp tether $\geq 300^{\circ}\text{C}$.
- Intelligent Voltage Stabilization: Onboard power efficiency $\geq 96\%$, voltage fluctuation $\leq \pm 1\%$, dynamic compensation ensures stable supply under complex conditions.

Applications

Urban Firefighting

Provides high-altitude aerial support for building fires, industrial complexes, and urban emergency response.

Forest Fire Control

Enables rapid deployment and targeted firefighting in forested areas with fire-extinguishing bombs and water/foam agents.

Disaster Response & Rescue

Supports operations during natural disasters, traffic accidents, and hazardous incidents, offering real-time aerial observation.

Nighttime Operations

High-brightness LED lighting modules provide long-duration illumination for night rescue and firefighting.

Specification

Product Configuration

- 40 kW tethered box with tether cable – 1 set
- Fully waterproof onboard power (biomimetic battery design) – 1 unit
- 380V AC power cable – 1 piece
- Various payload mounts – 1 set

Tethered Ground Station Specifications

Input Voltage: AC 380 $\pm 10\%$, three-phase, compatible with mains, generator, or other sources

Output Voltage: DC 1000V (rated)

Output Power: Rated 30 kW, Max 40 kW

Reel Speed: 0–2 m/s (adjustable)

Dimensions (L×W×H): 68.6 × 44.8 × 49.2 cm

Weight: 60 kg

Material: Aviation aluminum alloy

Protection: Strong/weak current separation, input undervoltage/overvoltage, output overvoltage/overcurrent/short circuit/overtemperature, Bluetooth control

Tether Cable

Rated Current: 30 A, Max 35 A

Tensile Strength: ≥ 3000 N

Max Cable Length: 160 m

Durability: ≥ 1000 reeling cycles

Voltage Withstand: ≥ 3000 VDC (input/output), cable insulation ≥ 3500 VDC

Weight: 4.8 kg / 100 m

Firefighting Payloads

Fire Extinguishing Bomb Launcher

- Size: 480 × 260 × 145 mm | Weight: 3 kg
- Mount: Quick-release | Peak Power: ≤ 60 W
- Max Load: 2 middle hooks 80 kg / 4 corners 50 kg
- Deployment: Sequential electronic control, single or multi-path
- Altitude Measurement: UAV radar-based
- Safety: Switches and status display
- Communication: DJI FlyCart 100 E-Port Lite | Control: PSDK

Fire Hose Kit (40 mm)

- Dimensions: 2480 × 55 × 140 mm | Spray Gun Length: 2500 mm | Weight: 1.1 kg
 - Mount: Quick-release | Spray Angle: Adjustable
 - Extinguishing Agent: Foam / Water
 - Recommended Altitude: 0–70 m | Hose Length: 90 m
 - Pressure: 2.5 MPa | Burst Pressure: 3.2 MPa
- ### Window-Breaking Hose 2-in-1 Kit
- Dimensions: 2480 × 120 × 140 mm | Weight: 1.95 kg
 - Spray Angle: Adjustable | Peak Power: ≤ 15 W
 - Launch: Single / Double | Laser Aiming | Spray Effective Range: 10–15 m
 - Communication & Power: DJI FlyCart 100 E-Port Lite

Dry Powder Fire Extinguisher

- Dimensions: H 44 mm × R 375 mm | Net Weight: 19.25 kg | Capacity: 20 L
- Mount: Quick-release | Peak Power: ≤ 50 W | Operating Temp: -20°C to $+45^{\circ}\text{C}$
- Spray Distance: 5 m | Spray Time ≤ 60 s | Material: Ultra-fine dry powder
- Coverage: Max 100 m³ | Rating: 02.5A/13B/E/5F
- Control: Electromagnetic valve, PSDK, reusable refillable canister

Soft Water Bucket

- Diameter: 55 cm | Height: 52 cm | Capacity: 80 L | Weight: 11.5 kg
- Cable Length: 20 m | Communication: Wireless | Emergency Drop Max Load: 200 kg
- Fill: Top intake | Valve Response ≤ 3 s | Flow Rate ≥ 20 L/s
- Safety: One-button release, water release, and safety switch

Contact Us:

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Safety

Versatility

Reliability

C.FC100XF Firefighting Tethered Drone System



The C.FC100XF is a high-end tethered firefighting drone system designed for long-duration aerial operations. With 30 kW onboard power, high-strength tether, and versatile firefighting payloads, it provides stable, precise, and safe support for urban, forest, and industrial emergency response.

Key Features:

- Provides ≥ 6 hours continuous power, supporting 80 kg payload at full power
- Firefighting capability: 40 mm hose, water up to 80 m, foam up to 160 m
- Total system weight ≤ 80 kg with quick-deploy frame and AC 380V tether
- Onboard 30 kW biomimetic power, MTOW 200 kg, $\geq 96\%$ efficiency, $\pm 1\%$ voltage stability
- Tether cable rated ≥ 3000 N, high-temp resistant $\geq 300^{\circ}\text{C}$; core IP68 waterproof
- System failure ≤ 1 per 100 flights; supports power interruption protection and auto-return
- Ground station supports 160 m tether, 380V AC, 30 kW rated / 40 kW max output
- Full system deployable in under 10 minutes

System Highlights

- Rapid Deployment: 0–160 m altitude in 5 minutes.
- Modular Design: Onboard power 14 kg, ground station ≤ 60 kg, quick assembly/disassembly.
- Enhanced Safety: Automatic voltage compensation, seamless power switching, IP67 waterproof, emergency parachute system.



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