

Technical Specifications

DJI O4 Ground Station — Complete Product Specifications

PARAMETER	SPECIFICATION DETAILS
Model	DJI O4 Ground Station
Video Transmission System	DJI O4 Enterprise Enhanced Video Transmission System
Operating Modes	Gateway Mode / Relay Mode
GNSS Frequencies	GPS: L1C/A, L2C, L5 BDS: B1I, B2I, B3I, B1C, B2a, B2b Galileo: E1, E5a, E5b, E6 GLONASS: L1, L2 QZSS: L1C/A, L2C, L5 L-Band
Single Point Accuracy	Horizontal: 1.5 m RMS Vertical: 3.0 m RMS
Satellite-Based Differential Accuracy	Convergence time: 20 min Horizontal: 30 cm RMS Vertical: 40 cm RMS
Network RTK Accuracy	Horizontal: 1.0 cm RMS + 1 ppm Vertical: 3.0 cm RMS + 1 ppm
Max Transmission Distance Without Obstacles	IC: up to 40 km with DJI Matrice 400 / up to 30 km with other compatible aircraft SRRC: up to 25 km with DJI Matrice 400 / up to 18 km with other compatible aircraft CE: up to 25 km with DJI Matrice 400 / up to 18 km with other compatible aircraft
Relay Mode Range	Between the controller or DJI Dock 3 and DJI O4 Ground Station: recommended within 1 km, maximum 3 km under IC/SRRC standards; recommended within 300 m, maximum 1 km under CE standard
Range With Interference	Strong interference: approx. 1.8-6 km Medium interference: approx. 6-18 km Weak interference: approx. 18-40 km
Antennas	4 OcuSync 4 Pro external directional antennas 8 OcuSync 4 Pro internal directional antennas 2.4G / 5.2G / 5.8G: 2T4R Sub2G: 2T2R
Network Access	

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	Ethernet: adaptive Ethernet port, minimum 100 Mbps bandwidth and latency up to 100 ms required 4G: requires DJI Cellular Dongle 2
Power Interface	PoE Ethernet port WAN: PoE-in LAN: PoE-in
Ethernet Cable Requirements	Outdoor-rated Cat 6 or above waterproof twisted-pair cable, maximum length 100 m, outer diameter 5.5-6.5 mm
Power Consumption - Gateway Mode	Maximum power consumption with heating: 65 W Typical power consumption without heating: 17.1 W Low-power mode: 7 W
Power Consumption - Relay Mode	Maximum power consumption with heating: 65 W Typical power consumption with DJI Dock 3 / DJI Matrice 4 Series: 31.7 W Typical power consumption with DJI Matrice 400: 37.9 W
Supported Power Supply	DJI Dock 3 PoE Output Port PoE++ IEEE 802.3bt Type 4: 52-57 V, max. 99.9 W per port PoE++ IEEE 802.3bt Type 3: 50-57 V, max. 60 W per port PoE+ IEEE 802.3at Type 2: 50-57 V, max. 30 W per port
Backup Battery	LiPo, 3250 mAh, 23.4 Wh
Backup Battery Operating Time	When powered via PoE and sudden power loss occurs: approx. 45 min in Gateway Mode / approx. 30 min in Relay Mode
Backup Battery Charging	Supports 9 V or 12 V PD charging DJI 65W Portable Charger recommended 65 W PD charging time: approx. 2.5 h Operating time after full charge in Gateway Mode: approx. 2 h
Ethernet Surge Protection	WAN/LAN ports: protection up to 10 kA total discharge current, compliant with EN/IEC 61643-21 Category C
Operating Temperature	PoE++ IEEE 802.3bt Type 4: -40°C to 55°C PoE++ IEEE 802.3bt Type 3: -30°C to 55°C PoE+ IEEE 802.3at Type 2: -20°C to 55°C
PoE Auto Wake-Up	Supported when connected to Type 2 or higher PoE power supply
Cold-Weather Heating Startup	From -40°C to -20°C with PoE power supply of 60 W or higher
Maximum Operating Altitude	6000 m
Ingress Protection Rating	IP67
Impact Protection Rating	IK07

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Dimensions	170 × 170 × 352 mm
Weight	2.68 kg
Mounting	Expansion bolts: $\phi 6 \times 70$ mm M6 screw mounting: 60 mm hole spacing
Supported Applications	DJI Enterprise app for deployment and commissioning using an Android phone
Supported Platforms	DJI FlightHub 2 FlightHub 2 On-Premises Version FlightHub 2 FlightHub Sync DJI Cloud API
External Device Support	Cameras using ONVIF and GB/T 28181 protocols Up to 4 simultaneous 1080p H.264 video streams
Open Ecosystem	ESDK 2.0