



Clifton Cameras Product Specification

DJI Inspire 3 Combo

Aircraft	Model	T740
Aircraft	Aircraft Weight	Approx. 3,995 g (includes gimbal camera, two batteries, lens, PROSSD, and propellers)
Aircraft	Max Takeoff Weight	Approx. 4,310 g
Aircraft	Hovering Accuracy Range	Vertical: ± 0.1 m (with vision positioning) ± 0.5 m (with GNSS positioning) ± 0.1 m (with RTK positioning) Horizontal: ± 0.3 m (with vision positioning) ± 0.5 m (with GNSS positioning) ± 0.1 m (with RTK positioning)
Aircraft	RTK Positioning Accuracy (RTK fix)	1 cm + 1 PPM (horizontal) 1.5 cm + 1 PPM (vertical)
Aircraft	Max Angular Velocity	Pitch: 200°/s Roll: 200°/s Yaw: 150°/s
Aircraft	Max Tilt Angle	N Mode: 35° S Mode: 40° A Mode: 35° T Mode: 20° Emergency Brake: 55°
Aircraft	Max Ascent Speed	8 m/s ^{Measured when flying in a windless environment at sea level, with gimbal camera and lens attached to the aircraft and without other accessories. This data is for reference only.}
Aircraft	Max Descent Speed	Vertical: 8 m/s Tilt: 10 m/s ^{Measured when flying in a windless environment at sea level, with gimbal camera and lens attached to the aircraft and without other accessories. This data is for reference only.}
Aircraft	Max Horizontal Speed	94 kph ^{Measured when flying in a windless environment at sea level, with gimbal camera and lens attached to the aircraft and without other accessories. This data is for reference only.}
Aircraft	Max Service Ceiling Above Sea Level	Standard Propellers: 3800 m High-Altitude Propellers: 7000 m ^{Measured in an environment with light wind with the gimbal camera and lens attached to the aircraft and without other accessories. This data is for reference only.}
Aircraft	Max Wind Resistance	Takeoff/land: 12 m/s In-flight: 14 m/s

		^{Measured when flying at sea level, with gimbal camera and lens attached to the aircraft and without other accessories. This data is for reference only.}
Aircraft	Max Hovering Time	Approx. 25 minutes ^{Measured when hovering in a windless environment at sea level with gimbal camera and lens attached to the aircraft and without other accessories, with landing gear raised, and recording 4K/24fps H.264 (S35) video until the battery reached 0%. This data is for reference only. Please refer to the actual values in the app.}
Aircraft	Max Flight Time	Approx. 28 minutes (landing gear lowered) Approx. 26 minutes (landing gear raised) ^{Measured when flying forward at a constant speed of 36 kph in a windless environment at sea level, with gimbal camera and lens attached to the aircraft and without other accessories, and recording 4K/24fps H.264 (S35) video until the battery reached 0%. This data is for reference only. Please refer to the actual values in the app.}
Aircraft	Motor Model	DJI 3511s
Aircraft	Global Navigation Satellite System	GPS + Galileo + BeiDou
Aircraft	Propeller Model	Standard Propellers: DJI 1671 High-Altitude Propellers: DJI 1676
Aircraft	Operating Temperature	-20° to 40° C (-4° to 104° F)
Aircraft	Diagonal Distance	Landing Gear Raised: 695 mm Landing Gear Lowered: 685 mm
Aircraft	Travel Mode Dimensions	Height: 176 mm Width: 709.8 mm Length: 500.5 mm
Gimbal Camera	Sensor	35mm full-frame CMOS
Gimbal Camera	Max Resolution	Photo: 8192x5456 Video: 8192x4320
Gimbal Camera	Video Resolution	View detailed list
Gimbal Camera	Supported Lens	DL 18 mm F2.8 ASPH Lens DL 24 mm F2.8 LS ASPH Lens DL 35 mm F2.8 LS ASPH Lens DL 50 mm F2.8 LS ASPH Lens
Gimbal Camera	Photo Format	JPG, DNG
Gimbal Camera	Video Format	MOV, CinemaDNG
Gimbal Camera	Operation Mode	Capture, Record, Playback
Gimbal Camera	Exposure Mode	P, A, S, M
Gimbal Camera	Shutter Type	Electronic shutter
Gimbal Camera	Shutter Speed	8-1/8000 s
Gimbal Camera	White Balance	AWB MWB (2000K-10000K)
Gimbal Camera	ISO Range	Photo ISO: 100-25600 Video EI: 200-6400

Gimbal Camera	Anti-flicker	Capture Mode: Auto, 50 Hz, 60 Hz, OFF
Gimbal Camera	Angular Vibration Range	Hovering: $\pm 0.002^\circ$ Flying: $\pm 0.004^\circ$
Gimbal Camera	Installation Method	Quick release
Gimbal Camera	Mechanical Range	Tilt: -128° to +110° (landing gear lowered) -148° to +90° (landing gear raised) Roll: -90° to +230° Pan: $\pm 330^\circ$
Gimbal Camera	Controllable Range	Tilt (landing gear lowered): Before gimbal pitch limit extension: -90° to +30° After gimbal pitch limit extension: -115° to +100° Tilt (landing gear raised): Before gimbal limit extension: -90° to +30° After gimbal limit extension: -140° to +75° Roll: $\pm 20^\circ$ Pan: $\pm 300^\circ$
Gimbal Camera	Max Control Speed	With DJI RC Plus: Tilt: 120°/s Roll: 180°/s Pan: 270°/s With DJI Master Wheels: Tilt: 432°/s Roll: 432°/s Pan: 432°/s
Gimbal Camera	Weight	Approx. 516 g (without lens)
Video Transmission	Video Transmission System	O3 Pro
Video Transmission	Live View Quality	FPV Camera: Up to 1080p/60fps Gimbal Camera: Up to 1080p/60fps, 4K/30fps
Video Transmission	Max Live Video Bitrate	50 Mbps
Video Transmission	Max Transmission Distance	Single Control Mode: FPV Camera: approx. 15 km (FCC), 8 km (CE/SRRC/MIC) Gimbal Camera (1080p/60fps live feeds): approx. 13 km (FCC), 7 km (CE/SRRC/MIC) Gimbal Camera (4K/30fps live feeds): approx. 5 km (FCC), 3 km (CE/SRRC/MIC) Dual-Control Mode: FPV Camera: approx. 12 km (FCC), 6.4 km (CE/SRRC/MIC) Gimbal Camera (1080p/60fps live feeds): approx. 11.2 km (FCC), 5.6 km (CE/SRRC/MIC) Gimbal Camera (4K/30fps live feeds): approx. 4 km (FCC), 2.4 km (CE/SRRC/MIC) ^{Measured in an unobstructed outdoor environment free of interference, with gimbal camera and lens attached to the aircraft and without other accessories. The above data shows the farthest communication range for one-way, non-return flights under each standard. During your flight, please pay attention to reminders in the app.}
Video Transmission	Lowest Latency	FPV Camera: 90 ms Gimbal Camera: 90 ms ^{The lowest latency of the gimbal camera was measured when recording 4K/60fps ProRes RAW video. The lowest latency of the FPV camera was measured with strong video transmission signals.}

Video Transmission	Operating Frequency	2.4000-2.4835 GHz 5.150-5.250 GHz (CE: 5.170-5.250 GHz) 5.725-5.850 GHz ^{In some countries and regions, the 5.1 and 5.8GHz frequencies are prohibited, or the 5.1GHz frequency is only allowed for indoor use. Please refer to local laws and regulations.}
Video Transmission	Transmitter Power (EIRP)	2.4 GHz: <33 dBm (FCC), <20 dBm (CE/SRRC/MIC) 5.1 GHz: <23 dBm (CE) 5.8 GHz: <33 dBm (FCC), <30 dBm (SRRC), <14 dBm (CE)
Battery	Model	TB51 Intelligent Battery
Battery	Capacity	4280 mAh
Battery	Nominal Voltage	23.1 V
Battery	Type	Li-ion
Battery	Chemical System	LiCoO2
Battery	Energy	98.8 Wh
Battery	Weight	Approx. 470 g
Battery	Operating Temperature	-20° to 40° C (-4° to 104° F)
Battery	Charging Temperature	-20° to 40° C (-4° to 104° F) ^{If the temperature of the battery is lower than 10° C (50° F), the battery will trigger an auto-heating function. Charging in a low-temperature environment below 0° C (32° F) may shorten battery life.}
Battery	Max Charging Power	411 W
Battery	Charge via Aircraft	Not supported
Battery Charging Hub	Input	100-240 V AC, max 8 A
Battery Charging Hub	Output	26.4 V, 7.8 A
Battery Charging Hub	Total Rated Output	476 W, including 65W PD fast charging of USB-C port
Battery Charging Hub	Charging Time	Fast Mode: Approx. 35 minutes to 90% Standard Mode: Approx. 55 minutes to 100% Silent Mode: Approx. 80 minutes to 100% ^{Tested at a room temperature of 25° C (77° F) and in a well-ventilated environment. In Fast mode, each battery pair is charged to 90% in sequence, and then eight batteries are charged together to 100%.}
Battery Charging Hub	Charging Temperature	-20° to 40° C (-4° to 104° F)
Battery Charging Hub	Weight	Approx. 1,680 g
Memory Card	Memory Card Type	DJI PROSSD 1TB

Sensing	Forward	Measurement Range: 1.5-48 m Effective Sensing Speed: ≤15 m/s FOV: Horizontal 90°, Vertical 103° (landing gear raised) Horizontal 72°, Vertical 103° (landing gear lowered)
Sensing	Backward	Measurement Range: 1.5-48 m Effective Sensing Speed: ≤15 m/s FOV: Horizontal 90°, Vertical 103°
Sensing	Lateral	Measurement Range: 1.5-42 m Effective Sensing Speed: ≤15 m/s FOV: Horizontal 90°, Vertical 85°
Sensing	Upward	Measurement Range: 0.2-13 m Effective Sensing Speed: ≤6 m/s FOV: Front and Back 100°, Left and Right 90°
Sensing	Downward	Measurement Range: 0.3-18 m Effective Sensing Speed: ≤6 m/s FOV: Front and Back 130°, Left and Right 160°
Sensing	Operating Environment	Forward, Backward, Left, Right, and Upward: surfaces with discernible patterns and adequate lighting (lux >15) Downward: surfaces with discernible patterns and diffuse reflectivity >20% (e.g., walls, trees, people); adequate lighting (lux >15) ^{Obstacle sensing is disabled while the landing gear is in the process of being raised or lowered.}
Sensing	ToF Infrared Sensor Measurement Range	0-10 m
Remote Controller	Model	RM700B
Remote Controller	Operating Time	Built-in Batteries: approx. 3.3 hours Built-in Batteries Plus External Battery: approx. 6 hours
Remote Controller	Operating Frequency	2.4000-2.4835 GHz 5.725 GHz-5.850 GHz ^{In some countries and regions, 5.1GHz and 5.8GHz frequencies are prohibited, or the 5.1GHz frequency is only allowed for indoor use. Please refer to local laws and regulations.}
Remote Controller	Video Output Port	HDMI
Remote Controller	Power Supply	Built-in batteries or external battery
Remote Controller	Coordinated Operation	Supports dual controls and coordination between multiple operators
Remote Controller	Power Consumption	12.5 W
Remote Controller	Operating Temperature	-20° to 50 °C (-4° to 122° F)
Remote Controller	Storage Temperature	-30° to 45° C (-22° to 113° F) (within one month) -30° to 35° C (-22° to 95° F) (one to three months) -30° to 30° C (-22° to 86° F) (three months to one year)
Remote Controller	Battery	Built-in Battery: 3250mAh-7.2V (a set) External Battery: WB37 Intelligent Battery

Remote Controller	Wi-Fi Protocol	Wi-Fi 6
Remote Controller	Wi-Fi Operating Frequency	2.4000-2.4835 GHz 5.150-5.250 GHz 5.725-5.850 GHz
Remote Controller	Wi-Fi Transmitter Power (EIRP)	2.4 GHz: <26 dBm (FCC), <20 dBm (CE/SRRC/MIC) 5.1 GHz: <26 dBm (FCC), <23 dBm (CE/SRRC/MIC) 5.8 GHz: <26 dBm (FCC/SRRC), <14 dBm (CE)
Remote Controller	Bluetooth Protocol	Bluetooth 5.1
Remote Controller	Bluetooth Operating Frequency	2.4000-2.4835 GHz
Remote Controller	Bluetooth Transmitter Power (EIRP)	< 10 dBm
App	App	DJI Pilot 2
FPV Camera	FOV	161°
FPV Camera	Resolution	1920x1080@60fps