



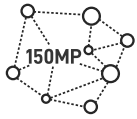
FJD Trion™ O1

AerialMapper

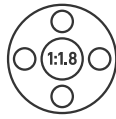
printed by aerial-survey-base

A NEW WAY TO AERIAL-MAP THE WORLD

FJD Trion O1 is a large-format aerial solution that captures photogrammetric images of superior quality, resolution, and clarity. It has four oblique RGB cameras and one nadir camera, 150 MP each, making itself one of the most efficient all-in-one solutions for wide-area mapping and 3D city modeling.



150MP Resolution per Camera



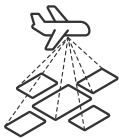
1.8X Focal Length Ratio (Oblique-Nadir)



2 FPS Capture Rate



Up to 1/2500s Shutter Speed



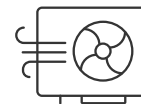
650km/h @5cm GSD & 80% Forward Overlap



5*2TB SSD Mass Memory

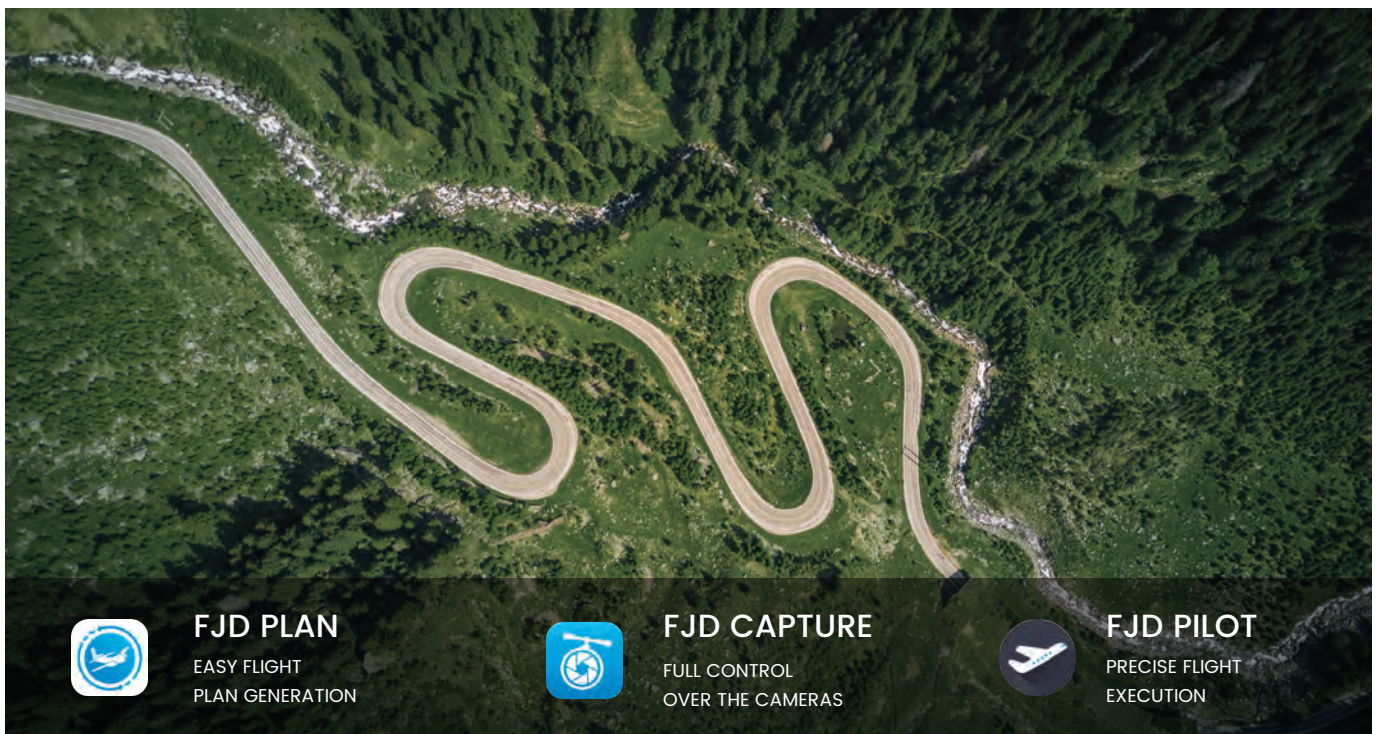


Multi-platform Compatibility



Smart Cooling System

ONE OF THE WORLD'S MOST ADVANCED AERIAL PHOTOGRAMMETRY SYSTEMS



FJD PLAN

EASY FLIGHT
PLAN GENERATION



FJD CAPTURE

FULL CONTROL
OVER THE CAMERAS



FJD PILOT

PRECISE FLIGHT
EXECUTION

RECORD IMAGES OF 1.5 BILLION PIXELS IN 1 SECOND

ULTRA-HIGH RESOLUTION IMAGE

90 mm oblique lens;
150 MP image every 0.5 seconds;
1.5 billion geo-spatial pixels in 1 second

ULTRA-HIGH PRECISION COLLECTION

High-precision inertial navigation system;
5 thousandths angle measurement accuracy ;
Every exposure point a control point.

MULTI-PLATFORM COMPATIBILITY

Applicable in fixed-wing aircrafts and helicopters;
One-man operation with the help of the specifically
designed pod lifter.

ADAPT TO FASTER FLIGHT SPEED

Adapts to flight speed as fast as 650 km/h
@ 5 cm GSD and 80% overlap along the track;
Reduces flight cost.

SMART AND STABLE OPERATION

Smart cooling system;
Stable operation across a wide temperature
range.

OUTSTANDING PROCESSING

5 industrial cameras;
Internal and external parameters precisely
calibrated and processed;
Instant complete image production.



QUICK SPECS

SENSOR SYSTEM

Nadir RGB Camera	1*150MP industrial camera
Oblique RGB Camera	4*150MP industrial camera
IMU	Applanix IMU-46
Maximum frame rate	0.5 sec (2 fps)
Nadir-Oblique focus rate	1 : 1.8
Sample flying height	665 m AGL@5 cm GSD

CONTROLLER

Processor	64-bit WIN 10, 32 GB RAM, 120 GB SSD, USB 3.0, SATA 3.0
GNSS	Integrated with Controller, Trimble BD992, 50 Hz update rate
Storage	5*2TB SSD
Storage capability	3h data record

ELECTRICAL

Average power	440 W/28 VDC
Peak power	570 W/28 VDC
Power fuse	40 A recommended

CAMERA SYSTEM

Nadir RGB lenses	50 mm focal length, 56.21° FOV across track, 43.65° FOV along track
Oblique RGB lenses	90 mm focal length, 33.05° FOV across track, 25.09° FOV along track
Image size	14204 x 10652 pixels
Pixel size	3.76 µm, back-illuminated CMOS
Dynamic range	83 dB
ADC	14-bit
Data channel	14-bit dedicated compression
Spectral range	R (580-660 nm) G (480-590 nm) B (420-510 nm)
Shutter	Mechanical central shutter Max speed: Nadir 1/2500 sec, Oblique 1/2000 sec
Aperture	Exchangeable, Up to 500,000 cycle Automatically controlled
Lens mount	Mechanical bayonet connection

WEIGHT

Weight (without lifter)	48 kg
Weight (with lifter)	66 kg
Height/Diameter	663 mm/400 mm



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FJDynamics.com 🔍



CREATE FOR A BETTER WORLD

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