



# Skydio X2D Color/Thermal



## Unmatched autonomy that turns every operator into an expert pilot


Skydio X2D Color/Thermal is the ultimate UAS solution for aerial reconnaissance and situational awareness. X2D is powered by Skydio Autonomy Enterprise, an AI-driven autonomous flight engine that enables unparalleled 360° obstacle avoidance, autonomous tracking, GPS-denied navigation, and complete workflow automation. X2D is designed with a ruggedized, foldable airframe, GPS-based night flight, strobing lights in visible and IR wavelength, and a dual sensor payload with a 12MP color camera and FLIR® 320x256 thermal sensor. Built to exceed the Short-Range Reconnaissance (SRR) requirements for the U.S. Army, Skydio X2D is designed and assembled in the USA, and is compliant with the National Defense Authorization Act (NDAA).

## Optional add-ons

- ⊕ **Skydio 3D Scan™.** Adaptive scanning to automate the image capture process to document complex structures and generate 3D models with comprehensive coverage and ultra-high resolution. Perform higher quality inspections and documentation faster and with minimal pilot training.



RUGGED, PORTABLE, DEPLOYS IN UNDER 75 SECONDS



FLIR® THERMAL WITH 8X ZOOM



VISION-BASED NAVIGATION FOR GPS-DENIED OPERATIONS

### WIRELESS RANGE

1.8 GHz: up to 6.2 mi / 10 km  
5 GHz: up to 3.7 mi / 6 km

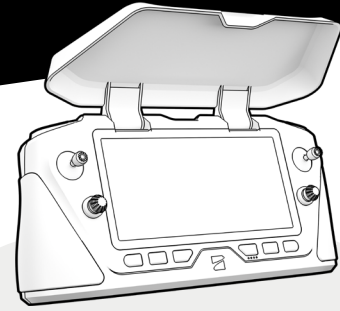
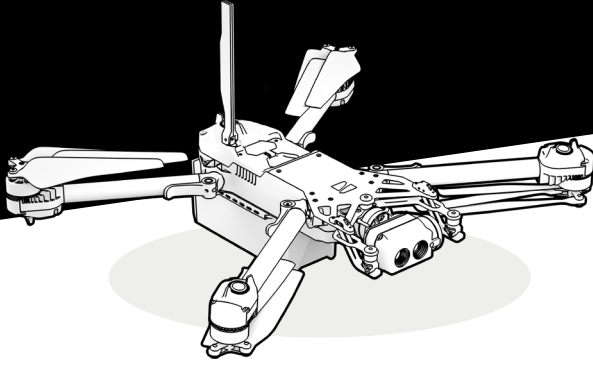
### FLIGHT TIME

Up to 35 min

### CYBERSECURITY

AES-256 wireless encryption

# X2D Color/Thermal & Controller Specs



## AIRCRAFT

<b>DIMENSIONS (UNFOLDED, FLYING)</b>	26.1" X 22.4" X 8.3" (66 x 56 x 20 cm)
<b>DIMENSIONS (FOLDED, NO BATTERY)</b>	11.9" X 5.5" X 3.6" (30 x 15 x 10 cm)
<b>WEIGHT (WITH BATTERY)</b>	1325 g
<b>FLIGHT TIME</b>	Up to 35 minutes
<b>MAX FLIGHT SPEED (SEA LEVEL, NO WIND)</b>	25 mph (40 km/h)
<b>MAX WIND SPEED RESISTANCE</b>	23 mph
<b>MAX SERVICE CEILING (ABOVE SEA LEVEL)</b>	Up to 12,000 ft
<b>OPERATIONAL TEMPERATURE RANGE</b>	-10°C to 43°C

## CONTROLLER

<b>DIMENSIONS</b>	10.75" x 5.25 x 3.0"
<b>WEIGHT</b>	1130 g
<b>APPLICATIONS</b>	Skydio Enterprise App (offline), Skydio QGroundControl
<b>WIRED LINKS</b>	USB, (via dongle) HDMI
<b>OPERATING FREQUENCIES</b>	1.8 / 5 GHz
<b>MAX RANGE</b>	Up to 10 km (1.8 GHz) / Up to 6 km (5 GHz)
<b>VIDEO FEED</b>	720p at 30 fps

## SKYDIO AUTONOMY ENTERPRISE

<b>MAIN PROCESSOR</b>	NVIDIA Tegra X2 SOC
<b>CAMERA CONFIGURATION</b>	6x cameras in trinocular configuration top and bottom
<b>ENVIRONMENT COVERAGE</b>	True 360°
<b>OBSTACLE AVOIDANCE COVERAGE</b>	Omnidirectional
<b>3D WORLD MODEL UPDATE RATE</b>	> 1 million points per second
<b>WORLD MODEL-TO-ACTION UPDATE RATE</b>	500 iterations per second
<b>ONBOARD AI</b>	9 custom deep networks used in flight
<b>USER-SELECTABLE SUBJECTS FOR TRACKING</b>	People and motor vehicles
<b>OBJECT TRACKING AND IDENTIFICATION</b>	Up to 20 simultaneous objects of interest
<b>CALIBRATION</b>	Automated calibration of lens parameters, cameras, wind speed, and air density
<b>ADVANCED AI-PILOT ASSISTANCE</b>	360 Superzoom, Close Proximity, Obstacle Avoidance, Point-of-Interest Orbit, Track-in-Place, Vertical View, Visual Return-to-Home

## PRIMARY CAMERA SYSTEM

<b>COLOR SENSOR TYPE</b>	Sony IMX577 1/2.3" 12.3MP CMOS
<b>COLOR LENS FOCAL LENGTH</b>	41mm (35mm format equivalent)
<b>COLOR VIDEO RESOLUTION</b>	4K / 60 fps with 16x digital zoom
<b>COLOR VIDEO FORMAT</b>	MPEG-4 (AVC/H.264, HEVC/H.265)
<b>COLOR STILL RESOLUTION</b>	4056x3040 (12 MP)
<b>COLOR DYNAMIC RANGE</b>	13 stops
<b>PITCH CONTROLLABLE RANGE</b>	-110° to +45° (-110° to +90° with AEF)
<b>THERMAL SENSOR TYPE</b>	FLIR Uncooled VOx microbolometer
<b>THERMAL RESOLUTION</b>	320x256
<b>THERMAL LENS FOCAL LENGTH</b>	9.1mm
<b>THERMAL FRAMERATE</b>	30fps

## SYSTEM SECURITY

<b>WIRELESS ENCRYPTION</b>	AES-256
<b>FIRMWARE</b>	Signed and encrypted
<b>MEDIA ENCRYPTION</b>	Encrypted SD Cards with physical security key
<b>CONTROLS</b>	Ability to provision and deprovision devices
<b>INFRASTRUCTURE</b>	Key provisioning burned-in at time of manufacture



Contact [enterprise@skydio.com](mailto:enterprise@skydio.com) today to learn more about integrating Skydio X2.

Designed and assembled in the USA