Skydio X2D

RUGGED, FOLDED AIRFRAME

FLIR® THERMAL IMAGER WITH 8X ZOOM

4K60P HDR COLOR WITH 16X DIGITAL ZOOM

Skydio X2D uses unmatched AI to turn every operator into an expert pilot

Skydio X2D is the ultimate reconnaissance tool. X2D pairs breakthrough autonomy software with a ruggedized airframe with folding arms for easy "pack and go" transportation, and up to 35 minutes of flight time. X2D is equipped with six 4k navigation cameras for 360 degree obstacle avoidance and a dual sensor payload that includes a 12MP color camera and FLIR® 320x256 thermal sensor. Built to exceed the Short-Range Reconnaissance (SRR) requirements for the U.S. Army, X2D helps military operators and federal agencies perform reconnaissance, search and rescue, and security patrol missions. Designed, assembled, and supported in the USA, X2D turns anyone into an expert pilot.
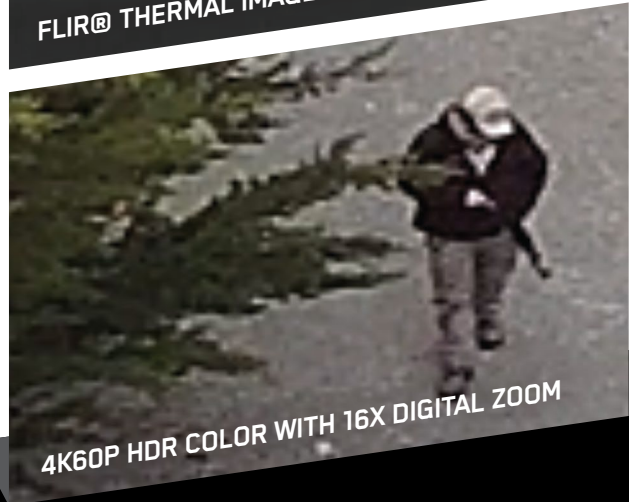
Optional add-ons

- **Skydio Autonomy™ Enterprise Foundation:** 360 Superzoom, Close Proximity Obstacle Avoidance, 180 Vertical View and more.
- **Skydio 3D Scan™.** First-of-its-kind digital scan software for inspections of complex structures, such as bridges, energy infrastructure, or crash and crime scenes.

RANGE	OBSTACLE AVOIDANCE	FLIGHT TIME
up to **10** km	**True 360°**	up to **35** min

X2D & Controller Specs
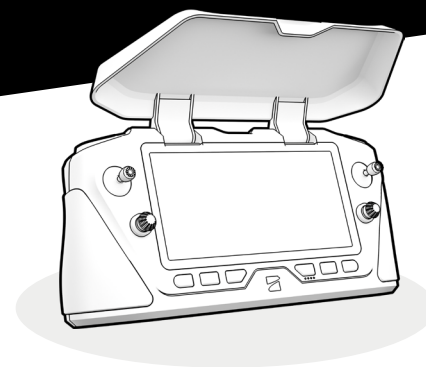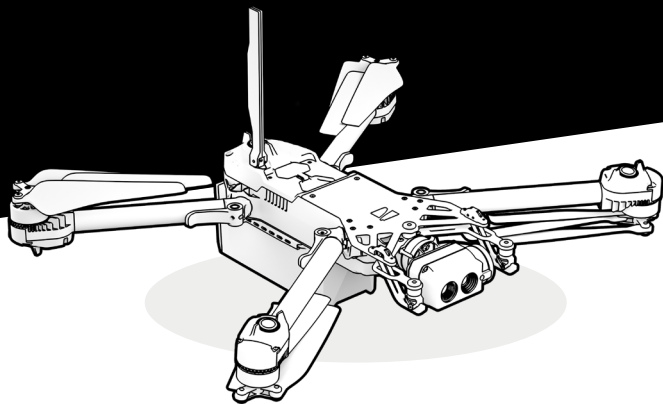
AIRCRAFT

DIMENSIONS (UNFOLDED, FLYING)	26.1" X 22.4" X 8.3"
DIMENSIONS (FOLDED, NO BATTERY)	11.9" X 5.5" X 3.6"
WEIGHT (WITH BATTERY)	1325 g
COLOR CAMERA	4K/60fps Video with 16x digital zoom
THERMAL CAMERA	FLIR Boson® 320P thermal imager with 8x digital zoom

SKYDIO AUTONOMY

MAIN PROCESSOR	NVIDIA Tegra X2 SOC
GPU	256-core NVIDIA Pascal™ GPU
CPU	Dual-Core NVIDIA Denver 2 64-bit CPU Quad-Core ARM®-A57 MPCore
RAM	4 GB 128-bit LPDDR4
OBSTACLE AVOIDANCE COVERAGE	Omnidirectional and above/below super fisheye lenses for 360° view
3D WORLD MODEL UPDATE RATE	> 1 million points per second
WORLD MODEL-TO-ACTION UPDATE RATE	500 iterations per second
ONBOARD AI	9 custom deep networks used in flight
USER-SELECTABLE SUBJECTS FOR TRACKING	People and motor vehicles
OBJECT TRACKING AND IDENTIFICATION	Up to 10 simultaneous objects of interest
CALIBRATION	Automated online calibration of lens parameters, camera rotations, wind speed, and air density

HANDSET

DIMENSIONS	10.75" x 5.25 x 3.0"
WEIGHT	1130 g
INPUT	Dual 2-axis joysticks, dual rockers & 10 buttons
SENSORS	GPS, Barometer, Compass, Gyro, ACC
MEMORY	256 GB
PROCESSOR	Qualcomm Snapdragon 855

CONTROLLER SOFTWARE

APPLICATIONS	Skydio Enterprise (offline), Skydio QGroundControl
WIRED LINKS	USB 3.1, (via dongle) HDMI
OPERATING FREQUENCIES	1.8 / 5 GHz
MAX RANGE	Expected up to 10 km / expected up to 6 km
BANDWIDTH SELECTION	4 / 8 MHz (1.8GHz radio) and 5 / 20 MHz (5GHz radio)
VIDEO	720p/30fps

SYSTEM SECURITY

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