

NEWSPACE MARKET · COMPANY PROFILE

UMBRA

Umbra Lab Inc.

United States · founded 2015 · umbra.space

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as of 20 August 2026



Umbra Lab Inc.

Umbra Lab Inc. is an American space technology company founded in 2015 and headquartered in Santa Barbara, California, with an additional office in Arlington, Virginia. Co-founded by David Langan (CEO) and Gabe Dominocielo, Umbra designs, builds, tests, and operates commercial SAR (Synthetic Aperture Radar) satellite systems, offering high-resolution radar imagery under any weather condition and at any time of day. Umbra's SAR constellation is one of the world's most capable commercial radar remote sensing networks, delivering imagery products tailored for defense, intelligence, and commercial geospatial applications through Spotlight, Dwell, and Scan imaging modes, with open-data licensing available. Beyond imagery, Umbra Space Systems manufactures and sells flight-proven, American-made satellite hardware — including power systems (battery modules, deployable solar arrays, integrated power packages), attitude control components (magnetorquers, reaction wheels, magnetometer/sun-sensor packages), communication systems (S-band radios, network switches) and deployment mechanisms (low-shock separation systems) — components that are qualified on Umbra's own multi-satellite constellation before being offered externally to other spacecraft operators. The company is 100% U.S. owned, engineered, and operated.

This profile is generated from the live NewSpace Market catalogue. Specifications are as published by the manufacturer; every product links to a page where a request for quotation reaches the company directly.

SERVICES

Services

Mission Solutions

Umbra offers custom solutions tailored for the world's most urgent missions, building secure, mission-specific systems without compromise.

Space Systems (Hardware for Customers)

Umbra offers its flight-proven, American-made hardware components, designed and built in-house, to customers to enable their missions.

Product catalogue



UMBRA LAB INC.

Umbra Battery Module (8S1P/8S2P)

Flight-proven lithium-ion battery module for small satellites, available in 8S1P (125 Wh) and 8S2P (250 Wh) configurations.

Battery Voltage Range	22 V to 31 V
Battery Voltage Nominal	28 V
Chemistry	Lithium Ion
Nameplate Energy Capacity (8S1P)	125 Wh (4.25 Ah)
Nameplate Energy Capacity (8S2P)	250 Wh (8.5 Ah)
Maximum Discharge Rate (8S1P)	15 A
Maximum Discharge Rate (8S2P)	20 A

price on request [datasheet](#)



UMBRA LAB INC.

Umbra Dwell SAR Imagery

Extended-collection SAR product using Umbra's agile squint capability to reduce speckle and detect/classify moving objects, including SAR video up to 25 seconds.

Sensor Type	Synthetic Aperture Radar (SAR)
Product Types	Enhanced-detail GeoTIFF, Color Sub-Aperture Image (CSI), SAR video
Max SAR Video Length	25 seconds
Delivery Format	Cloud Optimized GeoTIFF
Footprint / Price	5x5 km – \$4,750 (CSI and SAR video add 40% premium)

\$4 750



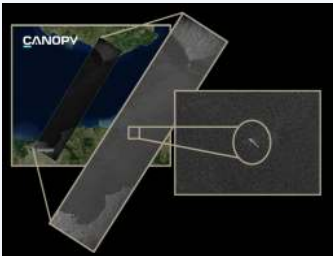
UMBRA LAB INC.

Umbra SAR Satellite

Umbra's flagship 70 kg X-band SAR microsatellite delivers the highest-resolution commercial synthetic aperture radar imagery available, operating in a growing sun-synchronous const

Mass	~70 kg per satellite
Design life	5 years
Frequency band	X-band
Antenna	Center-fed parabolic mesh reflector, 10 m² deployed
Transmit power	300 W solid-state power amplifier
Best demonstrated resolution	16 cm (highest-resolution commercial SAR image released, Aug 2023)
Standard resolutions	25 cm, 35 cm, 50 cm, and 1 m

price on request



UMBRA LAB INC.

Umbra Scan Wide-Area SAR Imagery

Cross-track, wide-area SAR imagery with resolutions from 50 cm to 2 m and footprints up to 8 km x 100 km, unbound from the satellite ground track.

Sensor Type	Synthetic Aperture Radar (SAR)
Resolution Range	50 cm to 2 m
Footprint	Up to 8 km x 100 km
Collection Geometry	Cross-track (off ground-track) collection
Price (25-50 km, 2.0 m)	\$1,250
Price (25-50 km, 1.0 m)	\$2,500
Price (25-50 km, 0.5 m)	\$4,000

\$1 250



UMBRA LAB INC.

Umbra Space Systems

Umbra Space Systems offers American-made, flight-proven hardware and software components for space missions, including power systems, attitude control, communication links, and dep

Flight Heritage **Proven on orbit**

price on request [datasheet](#)



UMBRA LAB INC.

Umbra Spotlight SAR Imagery

Record-breaking-resolution commercial SAR imagery, delivering true 25 cm ground-projected resolution with up to 1200 MHz bandwidth.

Sensor Type	Synthetic Aperture Radar (SAR)
Best Resolution	25 cm (ground-projected)
Resolution Options	25 cm, 35 cm, 0.5 m, 1.0 m
Bandwidth	1200 MHz
Scene Size	5x5 km to 10x10 km (up to 10x14 km natural footprint)
Multi-look	Up to 10x
Delivery Formats	GeoTIFF, SICD, metadata JSON; CPHD available on request

\$675

Contact Umbra Lab Inc.

Open the company profile on NewSpace Market to see full specifications and datasheets, and to send a request for quotation that reaches the manufacturer directly.

<https://newspacemarket.com/companies/umbra-lab/>

<https://umbra.space>

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