

NEWSPACE MARKET · COMPANY PROFILE



Optisys

United States · founded 2016 · optisys.com

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as of 20 August 2026



Optisys

Optisys is a Salt Lake City, Utah-based aerospace antenna company that uses direct metal laser sintering (DMLS) additive manufacturing to produce high-performance RF antenna systems for satellites and defense platforms. Founded in 2016, the company's approach replaces conventionally machined multi-part antenna assemblies with single-piece printed metal structures that achieve the same or better RF performance at dramatically lower mass and complexity. By designing antennas specifically for additive manufacturing, Optisys can integrate waveguide structures, feed networks, and radiating elements into a single monolithic part — eliminating assembly labor, reducing mass by 50–90% compared to traditional designs, and achieving geometries impossible to machine conventionally. These advantages are particularly valuable for small satellite applications where every gram of mass matters. Optisys produces antenna systems for communications, radar, and sensing applications across LEO, GEO, and military satellite programs, including phased array antennas, horn feeds, waveguide networks, and custom aperture designs. Supported by partnerships with leading satellite manufacturers and US government customers, Optisys represents a new generation of space hardware manufacturer enabled by advanced additive manufacturing technology.

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

Custom Antenna Design

Optisys engineers and designs high-performance RF solutions, including custom antennas, for aerospace, defense, and terrestrial communications applications.

SWaP-C Optimization

Optisys optimizes designs to minimize Size, Weight, Power, and Cost (SWaP-C) by strategically placing metal only where it enhances RF or mechanical performance.

Total Integration

Optisys integrates multiple RF components like filters, combiners, and waveguide switches into a single, optimized structure.

Product catalogue



OPTISYS

Antenna Feeds & Feed Clusters

Patented additively manufactured antenna feeds spanning L-band through Q-band, with rapid customization from a growing library of predesigned components.

Technology	Patented additively manufactured feeds
Frequency range	L-band through Q-band
Configurations	Single-band, multi-band; standalone or integrated with reflector
Key benefit	Rapid customization from pre-designed library; faster development with full-rate production

price on request



OPTISYS

Complex RF Assemblies

Monolithic additively manufactured complex RF assemblies integrating switches, waveguide routing, filter banks, and mechanical structure — proven in space, lunar, and multi-orbit applications

Technology	Additively manufactured monolithic RF assemblies
Integrated functions	Switches, waveguide routing, filter banks, thermal features, mechanical structure
Heritage	Flown in space, lunar, and multi-orbit applications
Key benefits	Significant SWaP reduction; improved repeatability; reduced supply-chain risk

price on request



OPTISYS

Horn Arrays

Production-proven, additively manufactured horn arrays with multiple designs on orbit — compact, monolithic, scalable across frequency and gain.

Technology	Additively manufactured monolithic waveguide and horn structures
Frequency range	L-band through Q-band (customizable)
Heritage	Multiple designs on orbit
Key benefits	Significant SWaP reduction; reduced part count; repeatable production

price on request



OPTISYS

Slot Arrays

Additively manufactured slot array antennas for space and aerospace platforms — monolithic design with integrated waveguide, combiners, diplexers, and mounting interfaces.

Technology	Additively manufactured monolithic slot array
Integrated features	Waveguide, combiners, diplexers, mounting interfaces in single structure
Key benefit	Non-traditional aperture shapes; reduced part count and assembly risk

price on request



OPTISYS

Wideband Arrays

Ultra-wideband electronically steered arrays with up to 6:1 bandwidth for multi-band, multi-orbit missions — ground, airborne, and space.

Bandwidth	Up to 6:1
Beamforming	Analog or digital beamforming supported
Applications	Multi-band, multi-orbit; ground, airborne, space
Technology	Proprietary wideband array and waveguide launch, additively manufactured

price on request

Contact Optisys

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.

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