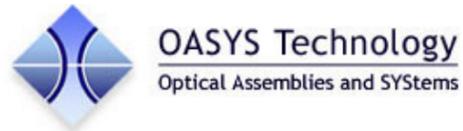




OASYS Technology
Optical Assemblies and SYStems

oasis-technology.com



The OASYS Technology, LLC mission is to provide innovative solutions to customers who have need of complex, rugged, and cost-effective electro-optical systems or components. OASYS achieves this mission through a combination of a highly talented design staff and a vertically integrated fabrication capability which generates finished products from raw material stock. Our products range from standalone complex optical components, such as aspheric lenses and off-axis mirrors, to fully integrated electro-optical systems such as motorized zoom lenses, night vision rifle scopes, and head-mounted displays. OASYS is particularly adept at contracting with the Federal Government, with over five SBIR programs and at least two major production contracts in which OASYS is the prime.

Core Competencies

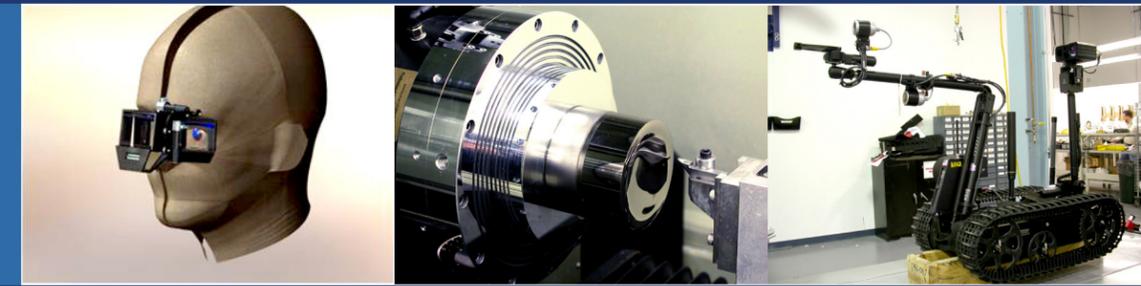
OASYS provides a broad range of core competencies which enable solutions to be custom-made to suit customer needs. Capabilities include the following:

Design & Engineering. OASYS employs a staff of highly trained electrical, mechanical, and optical engineers who have access to all the industry standard software tools and CAD programs such as Zemax, NVTHERM, ProEngineer, and Xilinx /Actel development tools. In many cases, the engineering also generates its own software with Graphical User Interfaces for such things as zoom lens motor controls and optical MTF measurement systems. The engineering group runs multiple test labs and also has a stereo-lithographic printing machine for making prototype parts.

Single Point Diamond Turning. OASYS has a significant diamond turning facility consisting of over ten lathes and two flycutters, each capable of generating complex surfaces on crystalline or plastic materials such as Germanium, Zinc Selenide, Gallium Arsenide, Acrylic, and Polycarbonate. A recent achievement has been generation of off-axis components using a slow-tool servo, 3-axis diamond turning lathe. This process allows very large diameter components to be made with non-rotationally symmetric profiles, thus enabling OASYS to manufacture a class of optics not normally made with conventional diamond turning. The diamond turning shop is equipped with precision metrology equipment to inspect finished components and ensure compliance with customer specifications.

Precision Machining. In addition to optical components, OASYS also operates a high-precision machine shop containing two 4-axis vertical milling centers and two high-output lathes. These CNC controlled machines routinely fabricate tight-tolerance housings and mechanical parts out of conventional materials such as aluminum, hard metals, and plastics.

System Integration & Production. OASYS features an ever-growing system assembly facility which includes several thousand square feet of floor space containing ventilated assembly workstations, electro-optical test equipment, and an environmental test lab. With over seven full time staff members and the ability to scale all processes, OASYS can provide production rates from as low as a single unit per month up to rates higher than 500 units per month.



Corporate Infrastructure. Of course, OASYS also provides a complete corporate infrastructure governed by ISO 9001 processes which cover business operations such as quality management, contract management, accounting, inventory control, program management, business development, warranty support, and a host of other activities which permit OASYS to meet customer needs quickly and efficiently.

Products / Services / Other Application Areas of Technology

OASYS Technology has the experience and solutions expertise to design and manufacture electro-optical systems and subsystems for Aerospace, Defense, Industrial, and Commercial markets. Many of our products are designed to meet military environments. A partial list of products and research programs is listed as follows:

Head-Mounted Display. In response to the US Army's need for a head-mounted display compatible with the Cupola Protective Ensemble, OASYS created the RED-I™ family of display systems. The product line features an advanced "cube" optical element which permits viewing of the video image overlaid with a "see-through" view of the natural world. The system can be tailored for monochrome, color, and HDTV video resolutions and runs off of commercially available batteries. There are currently over 2,000 RED-I units in use by US soldiers overseas and in the U.S., and over the next several years approximately 20,000 more units will be delivered.

Universal Night Sight - Thermal (UNS-T). OASYS has independently developed its own version of the Universal Night Sight (UNS) which replaces the intensifier tube with an uncooled bolometer. The UNS-T™ thus provides night-vision capability 24 hours a day under any lighting conditions in a lightweight package which mounts easily in front of existing day scopes. Units are made available on a custom order basis and be configured for long range (LR) or short range (SR) wide field optics.

Wireless Night Vision Goggle Simulator. The final product of this Phase II SBIR program with the US Air Force is a high-definition wireless night vision goggle simulator. This prototype device provides a wireless link to transmit either 720p HDTV or SXGA resolution imagery to a goggle-style headset which emulates the look and feel of the aviator night vision goggle (AN/PVS-9). The headset display is battery powered and thus completely self-contained, just like an intensifier goggle.

SkeetIR™. This new device from OASYS Technology, LLC., is a credit card size thermal monocular that displays a true 320x240 (Detector) resolution using one (1) DL123 battery. With an operational runtime of more than 3 hours and a system weight of 0.4lbs the SkeetIR-VO™ exceeds competitive products specifications and performance. A simple menu function featuring a single button press allows for essential operation of the SkeetIR-VO™ eliminating the need to remember locations on the device for different functions while operating the system in darkness.

UTB™ [Universal Thermal Binocular]. This night vision device from OASYS Technology, LLC., is currently the highest performance/smallest thermal binocular available featuring true 640x480 resolution. The UTB™ provides dual band laser pointers in both visible and infrared [Optional]. Access and change mission essential controls with a single button press without accessing internal sub menus. The UTB™ provides narrow, medium or wide FOV lenses for different mission options.

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Markets / Customers

OASYS primary market is Defense & Aerospace, whether as a vendor/supplier or directly as a prime to the US Government. OASYS Technology supports our warfighters by providing a variety of highly effective, suitable, and reliable vision, communication, and control systems. Rugged and reliable products are developed and manufactured to meet the most demanding environmental conditions of land, sea, air, and space.

Partial List of DoD/Aerospace Clients:

Raytheon	L-3 Communications	US Army TACOM
DRS	ITT	NVESD
BAE Systems	Goodrich	Navy NSWC Crane
Lockheed Martin	Knight's Armament	Los Alamos National Labs
FLIR Systems	AFRL	

OASYS also provides electro-optical services and products for Industrial & Commercial markets. Typical market sectors include medical devices, security sensors, camera optics

Profile (brief history)

OASYS Technology was Founded in April 2004 and has enjoyed rapid growth in the past few years.

Vadim Plotsker, President

VP Engineering & Programs, Insight Technology

Brett Rosner, COO

Director/GM, LMC Santa Barbara Focalplane
President, Janos Technology

Mike Couture, CEO

Manager, Raytheon Missiles Optics Group
Director of Engineering, OPTICS 1, Inc.

Scott Payette, Director, Precision Optical Components

Co-Founder Diamond Turning Incorporated

James Wing, Director, Precision Optical Components

Co-Founder Diamond Turning Incorporated

Core Advantage

OASYS provides a vast array of electro-optical design and fabrication services under one roof. Many customers come with no more than a need statement or a basic system sketch, and so OASYS frequently provides the full spectrum of concept exploration, specification development, prototype design, production hardware, and in-house manufacturing. The large degree of vertical integration reduces not only cycle time, but also technical risk since nearly all the critical technologies are managed in-house. OASYS is ISO-9001 certified.