



CONTRAST[®]

OPTICAL DESIGN & ENGINEERING

...redefining the boundary between light & dark...

By:

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Chief Technical Officer

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CONTRAST
OPTICAL DESIGN & ENGINEERING, INC.
... redefining the boundary between light and dark ...

Contact us:

505.286.8338

www.contrastoptical.com

info@contrastoptical.com



Mission Statement

We are dedicated to providing state-of-the-art optical system design and analysis to our customers

World-class Optical Engineering

- Cradle-to-grave system design
 - Product development
 - Rapid prototyping
 - No job too big or too small
- Employing the best engineers in the industry
- Cost-effective alternative to hiring full-time staff
 - 19+ years of experience
- 3 Patents pending for optical and mechanical designs

Let us design your optical system right the FIRST time!



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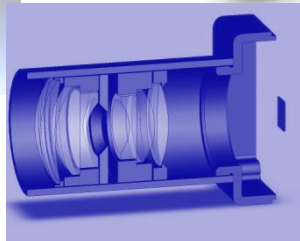
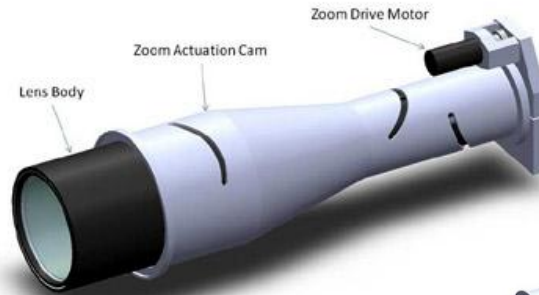
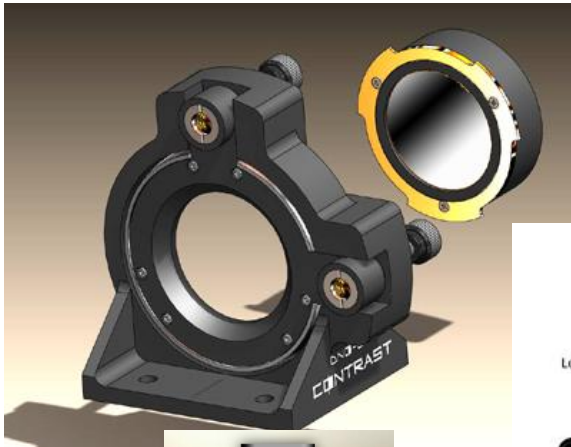
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OPTO-MECHANICAL DESIGN

- Finite-Element Analysis of Components
- Lightweight Optical Designs
- Custom Lens Mount Design
- Fast-Steering Mirror Mount Analysis and Design
- Optical Enclosures
- Flight Hardware
- Harsh Environment Design
- Fiber Optic Mounting
- Custom Alignment Tooling Design
- Cryostatic Mechanisms
- SolidWorks and COSMOS software tools



System Integration Experience



HARDWARE INTEGRATION

- Cradle-to-grave system design and integration
- Rapid prototyping
- Optical alignment and assembly of complex systems including interferometers, telescopes, off-axis systems, aspheres.
- Troubleshooting of existing, in-situ systems via analysis or hands-on testing
- Able to build on-the-fly diagnostics, such as interferometers, electrical components and software for alignment or testing purposes
- Facility with alignment and optical testing equipment for prototyping and integration



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- Contrast was awarded a Phase I SBIR contract in July 2008
 - Navy contract number N66001-08-M-0176
 - “High-speed, multi-spool, fiber optic payout for undersea communication at depth”
 - Successfully completed January 2009
- Suggested topics for future AFRL SBIRs:
 - Implementation of a combined-FOV (wide/narrow) imaging system for simultaneous acquisition and tracking with a single FPA sensor (based on Contrast’s proprietary Fovegon® imaging lens)
 - Eliminating glint and other saturation sources during target acquisition and tracking (based on Contrast’s proprietary ECHO® camera system)
 - 360 degree surveillance acquisition/ tracking (based on Contrast’s proprietary Panoramic lens designs and ATP background)



Contrast Optical Contact Info



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