CIRCLE OPTICS
Real-Time Spherical Image Systems
This is 360 Degree Imaging Today – Barbaric!

360° Spherical Capture Today

- Multiple Cameras
- Uses overlapping fields of view
- Parallax issues in every frame

- High post processing burden
- Not Real-Time
- Intensive SWaP
The Fundamental Problem - Parallax
Higher Resolution = Bigger Parallax
A Problem That’s Worth Solving

Capturing Errorless, Real-Time, Spherical Video is Not Possible with Today’s Systems:

- Poor Circular capture. No Spherical Capture
- Manual Post Processing and Image Stitching
- Insecure Data Pipeline Integrity

Holding Back Realization of Edge AI and Real-Time Situation Awareness.

The Industry is begging for better capture methods so that Edge Analytics and Immersive Remote Situational Awareness can be made practical.
Our Solution: New Imaging Technology

“You press the button; we do the rest”
- George Eastman

Polygonal Lens Systems

From Our Very First Hardware Prototype - 360° Image Produced Without Any Stitching!
Spherical Imaging Systems by Circle Optics

Our Technological Edge

• Method of Aligning Polygonal Fields of View to Fill 360° Sphere
• Real-Time Image Fusion and Object Detection
• Camera Systems Development Know-How
• Manufacturing Methods and Design Patents
• Platform that is extensible with Technology Partners

Doing “Physics Right” enables

• Volumetric and Other Physical Analytics
• Accurate 3D / Spherical Mapping
• Image Feature Extraction Accuracy and Edge Analytics
• Secure Data Pipeline Beginning at the Source of Capture
Our Differentiators

Our Defensible Technology and Approach

• Closely held Optics Design and Sub-pixel Image Alignment Algorithms
• Methods for aligning Polygonal Fields of View to fill 360° and Spherical space
• Manufacturing and Design Patents

• Extensibility of the Physics and the Platform
• World-class Optics and Imaging Technology Supply Chain
• Camera Development Know-how
We will miniaturize, ruggedize, and/or customize for different Markets, including IR, UV, and LIDAR.
Medusa Applications
Our Team – Experts in Camera Technology

- LUC VINCENT: Advisor, Creator of Google Street View
- IAN GAUGER: Chief Operating Officer
- ALLEN KRISILOFF: Director of Engineering
- ANDY KURTZ: Director of Research & Development
- TED SCHILOWITZ: Advisor, Founder of RED Digital Cinema
- ZAK NIAZI: Chief Executive Officer & Founder

- +8 Others with Backgrounds Including IMAX, Kodak, L3 Harris, etc.
- HQ in “The Imaging Capital of the World” - Rochester, NY, USA
- Circle Optics is a privately held Delaware Benefit Corporation
CIRCLE OPTICS

Real-Time Spherical Image Systems