

# SiLC Technologies Advances Machine Vision, Bridging the AI Gap with Bionic Vision

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Unveils Four Tailored Versions of Its Eyeonic Vision System for Applications Requiring Vision that Ranges from Short to Ultra-Long Distances

MONROVIA, Calif.--(BUSINESS WIRE)-- In a world increasingly driven by artificial intelligence (AI), the need for machines to perceive and understand their surroundings in the same way as humans has never been more pressing. Addressing this need, **SiLC Technologies** (SiLC), a leader in silicon photonics, today announces the availability of four specialized Eyeonic™ Vision Systems. Engineered for vision detection capabilities that span from short distances to over 1,250 meters, these systems utilize FMCW LiDAR technology to meet the diverse application needs across various sectors.

SiLC Technologies has introduced four versions of its Eyeonic Vision System, optimized for a variety of AI and machine vision applications. (Graphic: Business Wire)

Current machine vision systems largely rely on camera systems that capture a mere snapshot of

the available data. This necessitates resource-intensive computing to compensate for the missing pieces and inherently falls short of genuine vision.

Introduced last year, the **Eyeonic Vision System** delivers unparalleled vision perception to machines – offering not only the capability to identify objects even beyond a kilometer away but also providing per-pixel velocity and polarization information, unprecedented precision, and interference-free operation.

“Since the launch of the Eyeonic Vision System, our collaboration with various OEMs revealed distinct vision requirements, necessitating multiple versions of our solution,” said Mehdi Asghari, SiLC founder and CEO.

SiLC's refined Eyeonic Vision System portfolio includes:

- Short Range – Designed for vision detection up to 50 meters, this version is ideal for AI machine vision tasks requiring high precision, such as pallet and truck loading or product inspection.
- Medium Range – For vision detection up to 150 meters, suited to home security and factory automation applications.
- Long Range – Providing vision detection up to 300 meters, this version is tailored for ADAS and autonomous vehicles.
- Ultra-Long Range – For vision detection that exceeds 1,250 meters and is targeted to drone tracking, perimeter security and airplane ground control.

To date, SiLC is the only company that has built a chip-integrated FMCW LiDAR solution, which is critical for machine vision to emulate the human eye. "Our mission is to change the current state of machine vision, empowering the next generation of machines to integrate seamlessly into our society," added Asghari. "As AI continues its upward trajectory, SiLC is poised to further innovate in response to market demand. The Eyeonic Vision System is just the start. We're focused on enhancing angular resolution and embedding solid-state scanning into our single-chip solution."

All Eyeonic Vision System variants feature the company's unique technology benefits: robust, compact, scalable, and unaffected by complex, unpredictable environments, conditions, and interferences. Each Eyeonic Vision System variant provides highly precise range, velocity, and polarization modes. With the global machine vision and robotics market forecasted to soar to \$12 billion by 2030, SiLC's solutions are set to reshape industries from autonomous vehicles to augmented reality.

## Pricing and Availability

SiLC's Eyeonic Vision System – in all four variants – is immediately available and shipping worldwide. Pricing varies depending on configuration. For detailed information and specifications, please contact SiLC at [sales@silc.com](mailto:sales@silc.com). To learn more about the company, please visit [www.silc.com](http://www.silc.com).

## About SiLC Technologies

On a mission to enable machines to see like humans, SiLC Technologies is bringing forth its deep expertise in silicon photonics to advance market deployment of FMCW LiDAR solutions. The company's breakthrough 4D+ Eyeonic™ Chip integrates all photonics functions needed to enable a coherent vision sensor, offering a tiny footprint while addressing the need for low cost and low power. SiLC's innovations are targeted to robotics, autonomous vehicles, biometrics, security, industrial automation and other leading markets.

SiLC was founded in 2018 by silicon photonics industry veterans with decades of commercial product development and manufacturing experience. SiLC's 4D LiDAR chip has been recognized by Frost & Sullivan as ideally positioned to disrupt the global LiDAR market and the company has been named a Cool Vendor in Silicon Photonics by Gartner. Investors in SiLC include Dell Technology Capital, Sony Innovation Fund by IGV, FLUXUNIT – ams OSRAM Ventures, UMC Capital, Alter Ventures and Epson.

For more information, visit [www.silc.com](http://www.silc.com) or connect with the company on [LinkedIn](#).

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