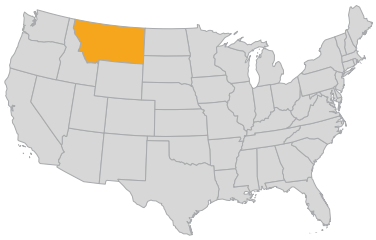
PHOTONICS



Montana has one of the largest optics and photonics clusters in the U.S. The high density of industry, along with strong support from the State and a leading research institution, has fostered a culture of innovation and entrepreneurship. Montana has core competency in five areas: optical materials, laser manufacturing, remote sensing, autonomous systems and quantum.

Goals

- Create relationships with organizations representing industry in the optics, photonics and quantum areas.
- Meet companies in the Smart Photonic Sensing space that may have an interest in collaborating and/or partnering with the Montana ecosystem.
- Meet companies looking to establish a foothold in the U.S. and convince them to consider Montana.

Growth Opportunities

Companies have chosen Montana has as a place to invest because of its business-friendly policies, proven ecosystem of innovation, talented and stable workforce, cost effectiveness and high quality of life. These companies have invested in two ways: through purchase of companies or new operations. All purchased companies have maintained their Montana operations.

New Operations

Applied Materials, Silicon Valley

appliedmaterials.com

Applied Materials, one of the largest suppliers of semiconductor equipment, began precision manufacturing in Montana in 2009 and now has more than 700 employees in the state.

PHIX, the Netherlands

phix.com

PHIX provides assembly and manufacturing for photonic integrated circuits across many platforms. Its only U.S. office is located in Bozeman, Montana.

VACOM, Germany

vacom.net

VACOM specializes in manufacturing ultra-clean vacuum components and environments used in the photonics and quantum industries. The company recently built a facility in Lewistown, Montana.

Aquisitions

Aurora Innocations, Silicon Valley

aurora.tech

Aurora Innovations purchased Blackmore, a leading LiDAR developer, in 2024 to enhance its autonomous long-haul trucking technology.

Lumibird, France

lumibird.com

Lumibird purchased Quantel Lasers in 2018 for its high performance pulsed and turnable laser technology and manufacturing capabilities.

Atlas Copco, Sweden

atlascopco.com

Atlas Copco purchased Montana Instruments in 2025 for its advanced cryogenic technology and manufacturing of used quantum computing systems.

Research and Support Organizations

Montana Photonics and Quantum Alliance

mpqa.org

The nonprofit Montana Photonics and Quantum Alliance connects companies, labs and universities to drive growth in optics, photonics and quantum. With 80-plus members, MPQA represents leading organizations in quantum and optical technologies. It recently received a $14.7 million federal award to establish infrastructure that allows companies to commercialize next-generation smart photonic sensing using integrated photonics.

Headwaters Tech Hub

headwaterstechhub.com

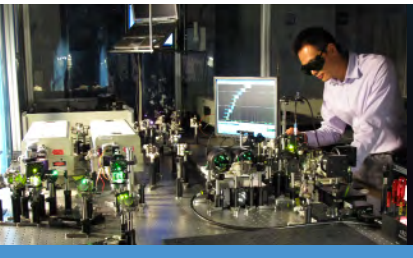
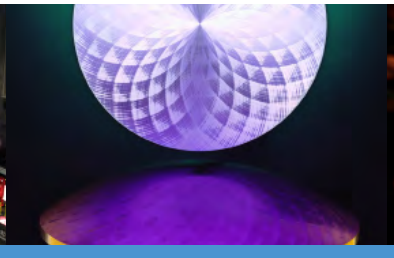
The Headwaters Tech Hub, which received $41 million from the U.S. government, is focused on developing smart photonic sensing to be deployed in autonomous systems and applied to critical defense, resource management and disaster prevention.

Montana State University

montana.edu

Montana State University is a top-tier research institution performing applied research and development of opto-electronic technologies emerging from the university laboratories. MSU helps these technologies become commercially viable companies. The Montana University System has received over $160 million in grants and contracts to fund research programs based on optics, photonics and quantum technology.

Images courtesy of Montana Department of Commerce, Lattice Materials and NWB Sensors, Inc.

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