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THE
**DIRECTED
ENERGY**
SOURCEBOOK

About the Directed Energy Sourcebook

The Directed Energy Sourcebook is a publication of the NDIA Emerging Technologies Institute (ETI) designed to provide a publicly available index of companies, government entities, and select universities related to directed energy. For the purposes of this report, the term “directed energy” includes both high energy lasers (HEL) and high-power microwaves (HPM). By compiling this directory as a comprehensive reference to the field, ETI hopes to direct agencies and companies who are looking for specific directed energy solutions towards providers who have demonstrated proficiency in a wide variety of directed energy components, materials, systems, and testing infrastructure. Many of the companies listed in this sourcebook have domain expertise in a wide range of potential defense and civilian applications, and defense is not necessarily their primary source of revenue.

April 2024

First published in 2024 by NDIA’s affiliate, the Emerging Technologies Institute. 2101 Wilson Blvd, Suite 700, Arlington, VA 22201, United States of America. (703)522-1820

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This report is made possible by our sponsor companies and general support to NDIA and the Emerging Technologies Institute. This report is produced by NDIA, a non-partisan, non-profit, educational association that has been designated by the IRS as a 501(c)(3) non-profit organization – not a lobby firm – and was founded to educate its constituencies on all aspects of national security. Its research is nonpartisan.

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For more information please visit our website: EmergingTechnologiesInstitute.org

Written by Rebecca Wostenberg, Wilson Miles, and Jordan Chase. The authors are grateful for the entire ETI team, past and present, for their input.

Typeset and produced by Hannah Meushaw, Alexander Feeser, and Eve Dorris.

Edited by Jacob Trask.

Media Queries: please email Media@NDIA.org

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Foreword

After many years of relegation to the realms of science fiction, directed energy weapon (DEW) technologies have advanced to the point of near-term fielding for use by operational forces in multiple domains. While DEW systems are still primarily developed as prototypes, advancements in critical technologies such as adaptive optics, beam control, microwave generation, and energy storage have resulted in a variety of systems that are ready, or nearly ready, for production and deployment. For the Department of Defense (DoD), the integration of DEWs promises to revolutionize warfighting capabilities, providing cost effective solutions to the most challenging global threats, including, for example, extensive counter – unmanned aircraft system (C-UAS) capabilities. The widespread integration of DEW systems will optimize mission effectiveness, mitigate risks, and ultimately contribute to the preservation of lives.

The evolution of DEW capabilities has been accompanied by significant investments from industry, academia, and government agencies in research and development, testing, and the prototyping of new and improved weapon systems. The utility of directed energy technology extends far beyond defense applications, providing an opportunity for DoD to articulate a strategic vision and a corresponding demand signal, that can benefit the Directed Energy (DE) industrial base as well as multiple commercial sectors. DEW's potentially transformative impact on defense holds crucial importance amid the era of great power competition, challenging government agencies and decision-makers to keep pace with a myriad of companies, both new and established, some primarily commercial and some primarily focused on defense customers, capable of advancing their missions through directed energy solutions. As military services and government agencies seek to modernize, the need to connect with potential suppliers and solution providers capable of accelerating this transformation becomes imperative.

This Directed Energy Sourcebook, initiated by NDIA's Emerging Technologies Institute (ETI), aims to facilitate connections between directed energy suppliers and government agencies, providing a valuable tool for those seeking directed energy solutions. ETI anticipates that this sourcebook will serve as a guide to explore innovative ways of incorporating and leveraging highly effective directed energy capabilities.



General (Ret.) John E. Hyten, USAF
11th Vice Chairman of the Joint Chiefs of Staff



The Honorable Ellen M. Lord
Former Under Secretary of Defense
for Acquisition and Sustainment

What is the Directed Energy Sourcebook?

The 2024 Directed Energy Sourcebook builds upon NDIA's commitment to illuminating the complex supply chains surrounding directed energy technologies. This work began by publishing *Directed Energy Supply Chains: Securing the Path to the Future*, and continues in this sourcebook. By compiling this comprehensive directory, we aim to guide agencies, companies, and organizations in search of specific directed energy solutions toward providers showcasing proven proficiency in the field, thereby reducing uncertainties that currently surround this emerging defense technology.

The Directed Energy Sourcebook categorizes companies offering directed energy solutions and services using an ontology designed for directed energy technologies. It divides the broad field of directed energy into two primary categories: High Energy Lasers and High-Power Microwaves. Within each category, companies are further characterized using the categories in the Directed Energy Ontology. Each category encompasses components integral to directed energy as a technology. Additionally, many companies featured in this sourcebook possess domain expertise applicable to a wide range of potential commercial and defense applications, although not explicitly identified as such. While these aspects may not cover the entirety of the field, they form the foundational elements of directed energy solutions.

Methodology

All information presented in the Directed Energy Sourcebook was gathered by ETI staff through open-source research and requests for information. The ETI staff also conducted outreach to NDIA membership and worked closely with the Directed Energy Professional Society (DEPS) to help identify key companies and organizations working in DE. Additionally, ETI staff used *Leadership Connect*. Among several tools available, *Leadership Connect* provides unclassified U.S. Department of Defense contract information which was queried to identify companies with previous or current DE-related contracts. Utilizing the Directed Energy Ontology and the company's offerings, the ETI staff identified the primary aspect in which each company exhibited proficiency or expertise. Every company in the Directed Energy Sourcebook is categorized by its Primary Aspect and listed alphabetically. For companies that focus on particular sub-system components, those groupings can also be found

below. A small list of universities is also provided in the Sourcebook. While countless universities across the country and around the world contribute to DE research and educating the future workforce, these three universities are unique in that they have directed energy testing facilities that can be rented out by industry or government, thereby providing a very particular service. Finally, a list of U.S. government entities involved in Directed Energy is also provided in the Sourcebook as a resource for industry and academia.

Directed Energy Ontology

- **All Companies**
- **High Energy Lasers Companies**
 - Systems Integrators
 - Research & Development
 - Testing & Evaluation
 - Sub-system Categories:
 - **Battle Damage Assessment**
 - **Coatings**
 - **Diodes**
 - **Electronics/Sensors**
 - **Energy Supply**
 - **Gain Medium**
 - **Gimbal & Tracking System**
 - **Laser Source**
Pulsed diode lasers, fiber lasers, etc
 - **Optics & Beam Control**
Fast-Steering Mirrors, Adaptive Optics
 - **Thermal Management**
- **High-Power Microwave Companies**
 - Systems Integrators
 - Research & Development
 - Testing & Evaluation
 - Sub-System Categories:
 - **Antenna**
 - **Battle Damage Assessment**
 - **Energy Supply**
 - **Pulsed Power/Microwave Generation**
 - **Thermal Management**
- **U.S. Government Entities**
- **Select Universities**

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today.



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All Companies

Name of Company	Company URL	HEL or HPM	Role in Directed Energy
Active Optical Systems, LLC	aos-llc.com	HEL	Optics & Beam Control (Adaptive Optics)
Adsys Controls	adsyscontrols.com	HEL	Optics & Beam Control (Fast-Steering Mirrors)
Advanced Cooling Technologies	1-act.com	HEL & HPM	Thermal Management
Advanced Thin Films	idexot.com	HEL	Optics
AIM Defence	aimdefence.com	HEL	System Integrator
American Systems	americansystems.com	HEL & HPM	Research & Development
Applied Energetics	appliedenergetics.com	HEL	Laser Source
Applied Research Associates	ara.com	HEL & HPM	Research & Development
Archer Laboratories	thearcherlabs.com	HPM	Antenna • Pulsed Power Generation
ARKA	arka.org	HEL	Optics & Beam Control • Coatings
BAE Systems	baesystems.com	HEL & HPM	Systems Integrator
Barber-Nichols, LLC	barber-nichols.com	HEL & HPM	Thermal Management • Energy Supply
BlueHalo	bluehalo.com	HEL	Systems Integrator • Beam Control • Tracking
BluGlass	bluglass.com	HEL	Diodes
Boeing	boeing.com/defense/missile-defense/directed-energy	HEL	Systems Integrator
Booz Allen Hamilton	boozallen.com	HEL & HPM	Research & Development • Testing & Evaluation
Bren-Tronics, Inc	bren-tronics.com	HEL & HPM	Energy Supply
CAES	caes.com	HEL	Beam Control
Candent Technologies	candent-technologies.com	HEL & HPM	Energy Supply
Coherent	coherent.com	HEL	Optics & Beam Control • Gain Medium • Coatings • Laser Source
Communications & Power Industries, LLC	cpii.com	HPM	Pulsed Power/Microwave Generation
EaglePicher Technologies	eaglepicher.com	HEL & HPM	Energy Supply

Eclipse Energy Systems	eclipsethinfilms.com	HEL & HPM	Coatings • Antenna • Pulsed Power/ Microwave Generation
Empower RF Systems	empowerrf.com	HPM	Pulsed Power/Microwave Generation
EO Solutions	e-o.solutions	HEL	Beam Control • Laser Source • Research & Development • Testing & Evaluation
EOS Defense Systems USA	eosdsusa.com	HEL	Optics & Beam Control (Fast-Steering Mirrors, Adaptive Optics) • Gimbal & Tracking System • Coatings • Laser Source (Pulsed Diode Lasers, Fiber Lasers) • Battle Damage Assessment • Electronics/Sensors • Research & Development • Testing & Evaluation
Epir, Inc.	epirtech.com	HEL	Electronics/Sensors
Epirus, Inc.	epirusinc.com	HPM	Thermal Management • Antenna • Pulsed Power/Microwave Generation • Testing & Evaluation • Research & Development
Excelitas Technologies	excelitas.com	HEL	Optics
Ferrite Microwave Technologies	ferriteinc.com	HPM	Pulsed Power/Microwave Generation
FiberBridge Photonics	fiberbridge-photonics.com	HEL	Systems Integrator • Research & Development • Testing & Evaluation • Optics & Beam Control • Laser Source
Fibertek, Inc.	fibertek.com	HEL	Laser Source
FiveNine Optics	fivenineoptics.com	HEL	Optics & Beam Control
Forward Photonics	forwardphotonics.com	HEL	Diodes
Freedom Photonics	freedomphotonics.com	HEL	Electronics/Sensors • Diodes • Research & Development
G&H	gandh.com	HEL	Optics & Beam Control
General Atomics Electromagnetic Systems	ga.com/advanced-weap- ons-technology/ laser-weapon-systems	HEL	Systems Integrator
Gentec-EO	gentec-eo.com	HEL	Testing & Evaluation • Electronics/Sensors
Heraeus Conamic	herae.us/optics	HEL	Optical Material
High Point Aerotechnologies	highpointaerotech.com	HEL	Systems Integrator
Honeywell	honeywell.com/us/en	HEL & HPM	Thermal Management • Energy Supply
HRL Laboratories	hrl.com	HEL	Laser Source
Intellisense Systems	intellisenseinc.com	HEL	Electronics/Sensors

HIGH ENERGY LASER WEAPON SYSTEMS

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300 kW and Beyond for Extended Engagement Ranges

Pulsed and Continuous Wave Systems Available



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ELECTROMAGNETICS

Kord Technologies	kordtechnologies.com	HEL	Systems Integrator • Optics & Beam Control • Energy Supply • Thermal Management • Gimbal & Tracking System • Electronics/Sensors • Research & Development • Testing & Evaluation
Kratos Defense & Security Solutions	kratosdefense.com	HEL & HPM	Systems Integrator • Testing & Evaluation
KULR Technology Corporation	kulrtechnology.com	HEL & HPM	Thermal Management
L3Harris ATI	l3harris.com	HPM	Pulsed Power Generation • Antenna
Leidos	leidos.com	HEL & HPM	Systems Integrator
Leonardo DRS	leonardodrs.com	HEL & HPM	Systems Integrator
LightPath Technologies	lightpath.com	HEL	Optics & Beam Control
Lockheed Martin	lockheedmartin.com/en-us/capabilities/directed-energy.html	HEL & HPM	System Integrator • Optics & Beam Control • Thermal Management • Laser Source
Mainstream Engineering	mainstream-engr.com	HEL & HPM	Thermal Management • Energy Supply
ManTech	mantech.com	HEL & HPM	Research & Development
Moog, Inc.	moog.com	HEL	Gimbal & Tracking System
MTSI	mtsi-va.com	HEL	Testing & Evaluation
MZA Associates Corporation	mza.com	HEL	System Integrator • Research & Development • Testing & Evaluation • Optics & Beam Control (Fast-Steering Mirrors, Adaptive Optics) • Gimbal & Tracking System
NanoElectromagnetics	nanoelectromagnetics.com	HPM	Pulsed Power • Antenna
Nanohmics	nanohmics.com	HEL & HPM	Electronics/Sensors • Coatings • Pulsed Power/Microwave Generation
Navitas Systems	navitassys.com	HEL & HPM	Energy Supply
NKT Photonics	nktphotonics.com	HEL	Laser Source (Fiber Lasers)
nLight	nlight.net	HEL	System Integrator • Optics & Beam Control (Adaptive Optics) • Gimbal & Tracking System • Gain Medium • Diodes • Laser Source (Fiber Lasers) • Electronics/Sensors • Research & Development • Testing & Evaluation
Nokomis	nokomisinc.com	HEL & HPM	Battle Damage Assessment
Northrop Grumman	northropgrumman.com	HEL & HPM	Systems Integrator
NP Photonics	npphotonics.com	HEL	Optics • Laser Source

Nuburu	nuburu.net	HEL	Optics • Laser Source
NYFORS	nyfors.com	HEL	Laser Source (Fiber Lasers)
OFS	ofsoptics.com	HEL	Optics
Optimax Systems	optimaxsi.com	HEL	Optics & Beam Control (Fast-Steering Mirrors) • Coatings
Pacific Antenna Systems	pasantennas.com	HPM	Systems Integrators • Antenna • Thermal Management • Battle Damage Assessment • Testing & Evaluation • Research & Development
Parsons	parsons.com	HEL	Systems Integrator
Photonic Cleaning Technologies	photoniccleaning.com	HEL	Optics (Protecting and Cleaning)
Physical Sciences, Inc.	psicorp.com/our-company	HEL	Optics • Laser Source
Plymouth Grating Laboratory, Inc.	plymouthgrating.com	HEL	Optics & Beam Control • Coatings
Power Photonic	powerphotonic.com	HEL	Beam Control
Qinetiq	qinetiq.com	HEL	Systems Integrator
Quantic ECI	quanticeci.com	HPM	Energy Supply
Radiance Technologies	radiancetech.com	HEL & HPM	Systems Integrator • Testing & Evaluation • Research & Development • Optics & Beam Control • Energy Supply • Thermal Management • Gimbal & Tracking System • Battle Damage Assessment • Electronics/Sensors • Antenna • Pulsed Power/Microwave Generation
Radiasoft	radiasoft.net	HEL	Research & Development
Rafael Advanced Defense Systems	rafael.co.il	HEL	Systems Integrator
Rheinmetall AG	rheinmetall.com/de	HEL	Systems Integrator
Rolls Royce	rolls-royce.com	HEL & HPM	Energy Supply • Thermal Management
RTX	rtx.com	HEL & HPM	Systems Integrator • Research & Development
SAIC	saic.com	HEL & HPM	Research & Development
SCDUSA/QI	scdusa-ir.com/quantum-imaging	HEL	Electronics/Sensors
SCHOTT	schott.com/en-us	HEL & HPM	Optics • Pulsed Power/Microwave Generation • Thermal Management

SemQuest	semquest.com	HEL	Testing & Evaluation
Sem-Sol	sem-sol.com	HPM	Pulsed Power/Microwave Generation • Antenna • Research & Development • System Integrator
SIE	siecompany.com	HEL & HPM	Research & Development
Spectral Energies	spectralenergies.com	HEL	Laser Source (Pulsed High-Energy Laser Source)
Spica Technologies	spicatech.com	HEL	Optics • Testing & Evaluation
SRI International	sri.com	HPM	Microwave Generation
Stellar Science	stellarscience.com	HPM	Testing & Evaluation
Teknicare	teknicare.com	HEL & HPM	Testing & Evaluation • Research & Development
Telaztec, LLC	telaztec.com	HEL	Coatings
Thales UK	thalesgroup.com/en/countries/europe/thales-united-kingdom	HEL	Research & Development
Thermo Analytics	thermoanalytics.com	HEL & HPM	Thermal Management
Torrent Photonics LLC	torrentphotonics.com	HEL	Optics • Coatings
Verus Research	verusresearch.net	HEL & HPM	Research & Development
VTG Defense	vtgdefense.com	HEL	Systems Integrator
Zygo	zygo.com	HEL	Optics & Beam Control (Fast-Steering Mirrors, Adaptive Optics) • Coatings • Testing & Evaluation

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The Health and Readiness of the Defense Industrial Base

High Energy Laser Companies (by Categories)

Name of Company	Company URL	HEL or HPM	Role in Directed Energy
Systems Integrator			
AIM Defence	aimdefence.com	HEL	System Integrator
BAE Systems	baesystems.com/en/home	HEL & HPM	Systems Integrator
BlueHalo	bluehalo.com	HEL	Systems Integrator • Beam Control • Tracking
Boeing	boeing.com/defense/missile-defense/directed-energy	HEL	Systems Integrator
FiberBridge Photonics	fiberbridge-photonics.com	HEL	Systems Integrator • Research & Development • Testing & Evaluation • Optics & Beam Control • Laser Source
General Atomics Electromagnetic Systems	ga.com/advanced-weapons-technology/laser-weapon-systems	HEL	Systems Integrator
High Point Aerotechnologies	highpointaerotech.com	HEL	Systems Integrator
Kord Technologies	kordtechnologies.com	HEL	Systems Integrator • Optics & Beam Control • Energy Supply • Thermal Management • Gimbal & Tracking System • Electronics/Sensors • Research & Development • Testing & Evaluation
Kratos Defense & Security Solutions	kratosdefense.com	HEL & HPM	Systems Integrator • Testing & Evaluation
Leidos	leidos.com	HEL & HPM	Systems Integrator
Leonardo DRS	leonardodrs.com	HEL & HPM	Systems Integrator
Lockheed Martin	lockheedmartin.com/en-us/capabilities/directed-energy.html	HEL & HPM	System Integrator • Optics & Beam Control • Thermal Management • Laser Source
MZA Associates Corporation	mza.com	HEL	System Integrator • Research & Development • Testing & Evaluation • Optics & Beam Control (Fast-Steering Mirrors, Adaptive Optics) • Gimbal & Tracking System
nLight	nlight.net	HEL	System Integrator • Optics & Beam Control (Adaptive Optics) • Gimbal & Tracking System • Gain Medium • Diodes • Laser Source (Fiber Lasers) • Electronics/Sensors • Research & Development • Testing & Evaluation
Northrop Grumman	northropgrumman.com	HEL & HPM	Systems Integrator
Parsons	parsons.com	HEL	Systems Integrator
Qinetiq	qinetiq.com	HEL	Systems Integrator

Radiance Technologies	radiancetech.com	HEL & HPM	Systems Integrator • Testing & Evaluation • Research & Development • Optics & Beam Control • Energy Supply • Thermal Management • Gimbal & Tracking System • Battle Damage Assessment • Electronics/Sensors • Antenna • Pulsed Power/Microwave Generation
Rafael Advanced Defense Systems	rafael.co.il	HEL	Systems Integrator
Rheinmetall AG	rheinmetall.com/de	HEL	Systems Integrator
RTX	rtx.com	HEL & HPM	Systems Integrator • Research & Development
VTG Defense	vtgdefense.com	HEL	Systems Integrator

Research & Development

American Systems	americansystems.com	HEL & HPM	Research & Development
Applied Research Associates	ara.com	HEL & HPM	Research & Development
Booz Allen Hamilton	boozallen.com	HEL & HPM	Research & Development • Testing & Evaluation
EO Solutions	e-o.solutions	HEL	Beam Control • Laser Source • Research & Development • Testing & Evaluation
EOS Defense Systems USA	eosdsusa.com	HEL	Optics & Beam Control (Fast-Steering Mirrors, Adaptive Optics) • Gimbal & Tracking System • Coatings • Laser Source (Pulsed Diode Lasers, Fiber Lasers) • Battle Damage Assessment • Electronics/Sensors • Research & Development • Testing & Evaluation
FiberBridge Photonics	fiberbridge-photonics.com	HEL	Systems Integrator • Research & Development • Testing & Evaluation • Optics & Beam Control • Laser Source
Freedom Photonics	freedomphotonics.com	HEL	Electronics/Sensors • Diodes • Research & Development
Kord Technologies	kordtechnologies.com	HEL	Systems Integrator • Optics & Beam Control • Energy Supply • Thermal Management • Gimbal & Tracking System • Electronics/Sensors • Research & Development • Testing & Evaluation
ManTech	mantech.com	HEL & HPM	Research & Development
MZA Associates Corporation	mza.com	HEL	System Integrator • Research & Development • Testing & Evaluation • Optics & Beam Control (Fast-Steering Mirrors, Adaptive Optics) • Gimbal & Tracking System
nLight	nlight.net	HEL	System Integrator • Optics & Beam Control (Adaptive Optics) • Gimbal & Tracking System • Gain Medium • Diodes • Laser Source (Fiber Lasers) • Electronics/Sensors • Research & Development • Testing & Evaluation



DIRECTED ENERGY WEAPON SUPPLY CHAINS REPORT

SECURING THE PATH TO THE FUTURE

Directed energy weapons (DEWs), including high energy lasers (HELs) and high-power microwaves (HPMs), have emerged as potentially transformative weapons on the modern battlefield. Recent advancements have made DEWs more capable than ever, with many systems possessing the power and range necessary to engage a wide variety of threats, more affordably than current systems. Recent conflicts in the Middle East and Europe have highlighted the importance of munitions capacity as well as the need to both efficiently and effectively counter different kinetic threats. The ability of some DEW systems to engage many targets at once with an “unlimited” magazine could yield enormous economic and tactical benefits. However, the DoD has often wavered in its commitment to fielding DEWs at scale. As such, current DEW supply chains, including critical raw materials, the manufacturing base and workforce, and testing infrastructure, are incapable of supporting

DEW deployment at scale. The current DEW supply chains are only able to produce small quantities of systems with long lead times. Without a clear and sustained demand signal from DoD, and therefore a return on investment, industry is hesitant to make the investments necessary to have secure, healthy, and resilient DEW supply chains. While addressing these vulnerabilities is a formidable task, it is not insurmountable. To strengthen DEW supply chains and fulfill the potential of these cutting-edge technologies, a series of concrete steps by government, industry, and academia are necessary.



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Radiasoft	radiasoft.net	HEL	Research & Development
RTX	rtx.com	HEL & HPM	Systems Integrator • Research & Development
SAIC	saic.com	HEL & HPM	Research & Development
SIE	siecompany.com	HEL & HPM	Research & Development
Teknicare	teknicare.com	HEL & HPM	Testing & Evaluation • Research & Development
Thales UK	thalesgroup.com/en/countries/europe/thales-united-kingdom	HEL	Research & Development
Verus Research	verusresearch.net	HEL & HPM	Research & Development

Testing & Evaluation

Booz Allen Hamilton	boozallen.com	HEL & HPM	Research & Development • Testing & Evaluation
EO Solutions	e-o.solutions	HEL	Beam Control • Laser Source • Research & Development • Testing & Evaluation
EOS Defense Systems USA	eosdsusa.com	HEL	Optics & Beam Control (Fast-Steering Mirrors, Adaptive Optics) • Gimbal & Tracking System • Coatings • Laser Source (Pulsed Diode Lasers, Fiber Lasers) • Battle Damage Assessment • Electronics/Sensors • Research & Development • Testing & Evaluation
FiberBridge Photonics	fiberbridge-photonics.com	HEL	Systems Integrator • Research & Development • Testing & Evaluation • Optics & Beam Control • Laser Source
Gentec-EO	gentec-eo.com	HEL	Testing & Evaluation • Electronics/Sensors
Kord Technologies	kordtechnologies.com	HEL	Systems Integrator • Optics & Beam Control • Energy Supply • Thermal Management • Gimbal & Tracking System • Electronics/Sensors • Research & Development • Testing & Evaluation
Kratos Defense & Security Solutions	kratosdefense.com	HEL & HPM	Systems Integrator • Testing & Evaluation
MTSI	mtsi-va.com	HEL	Testing & Evaluation
MZA Associates Corporation	mza.com	HEL	System Integrator • Research & Development • Testing & Evaluation • Optics & Beam Control (Fast-Steering Mirrors, Adaptive Optics) • Gimbal & Tracking System

nLight	nlight.net	HEL	System Integrator • Optics & Beam Control (Adaptive Optics) • Gimbal & Tracking System • Gain Medium • Diodes • Laser Source (Fiber Lasers) • Electronics/Sensors • Research & Development • Testing & Evaluation
Radiance Technologies	radiancetech.com	HEL & HPM	Systems Integrator • Testing & Evaluation • Research & Development • Optics & Beam Control • Energy Supply • Thermal Management • Gimbal & Tracking System • Battle Damage Assessment • Electronics/Sensors • Antenna • Pulsed Power/Microwave Generation
SemQuest	semquest.com	HEL	Testing & Evaluation
Spica Technologies	spicatech.com	HEL	Optics • Testing & Evaluation
Teknicare	teknicare.com	HEL & HPM	Testing & Evaluation • Research & Development
Zygo	zygo.com	HEL	Optics & Beam Control (Fast-Steering Mirrors, Adaptive Optics) • Coatings • Testing & Evaluation

Battle Damage Assessment

EOS Defense Systems USA	eosdsusa.com	HEL	Optics & Beam Control (Fast-Steering Mirrors, Adaptive Optics) • Gimbal & Tracking System • Coatings • Laser Source (Pulsed Diode Lasers, Fiber Lasers) • Battle Damage Assessment • Electronics/Sensors • Research & Development • Testing & Evaluation
Nokomis	nokomisinc.com	HEL & HPM	Battle Damage Assessment
Radiance Technologies	radiancetech.com	HEL & HPM	Systems Integrator • Testing & Evaluation • Research & Development • Optics & Beam Control • Energy Supply • Thermal Management • Gimbal & Tracking System • Battle Damage Assessment • Electronics/Sensors • Antenna • Pulsed Power/Microwave Generation

Coatings

ARKA	arka.org	HEL	Optics & Beam Control • Coatings
Coherent	coherent.com	HEL	Optics & Beam Control • Gain Medium • Coatings • Laser Source
Eclipse Energy Systems	eclipsethinfilms.com	HEL & HPM	Coatings • Antenna • Pulsed Power/Microwave Generation
Nanohmics	nanohmics.com	HEL & HPM	Electronics/Sensors • Coatings • Pulsed Power/Microwave Generation
Optimax Systems	optimaxsi.com	HEL	Optics & Beam Control (Fast-Steering Mirrors) • Coatings

Plymouth Grating Laboratory, Inc.	plymouthgrating.com	HEL	Optics & Beam Control • Coatings
Telaztec, LLC	telaztec.com	HEL	Coatings
Torrent Photonics LLC	torrentphotonics.com	HEL	Optics • Coatings
Zygo	zygo.com	HEL	Optics & Beam Control (Fast-Steering Mirrors, Adaptive Optics) • Coatings • Testing & Evaluation

Diodes

BluGlass	bluglass.com	HEL	Diodes
Forward Photonics	forwardphotonics.com	HEL	Diodes
Freedom Photonics	freedomphotonics.com	HEL	Electronics/Sensors • Diodes • Research & Development
nLight	nlight.net	HEL	System Integrator • Optics & Beam Control (Adaptive Optics) • Gimbal & Tracking System • Gain Medium • Diodes • Laser Source (Fiber Lasers) • Electronics/Sensors • Research & Development • Testing & Evaluation

Electronics/Sensors

EOS Defense Systems USA	eosdsusa.com	HEL	Optics & Beam Control (Fast-Steering Mirrors, Adaptive Optics) • Gimbal & Tracking System • Coatings • Laser Source (Pulsed Diode Lasers, Fiber Lasers) • Battle Damage Assessment • Electronics/Sensors • Research & Development • Testing & Evaluation
Epir, Inc.	epirtech.com	HEL	Electronics/Sensors
Freedom Photonics	freedomphotonics.com	HEL	Electronics/Sensors • Diodes • Research & Development
Gentec-EO	gentec-eo.com	HEL	Testing & Evaluation • Electronics/Sensors
Intellisense Systems	intellisenseinc.com	HEL	Electronics/Sensors
Kord Technologies	kordtechnologies.com	HEL	Systems Integrator • Optics & Beam Control • Energy Supply • Thermal Management • Gimbal & Tracking System • Electronics/Sensors • Research & Development • Testing & Evaluation
Nanohmics	nanohmics.com	HEL & HPM	Electronics/Sensors • Coatings • Pulsed Power/Microwave Generation
nLight	nlight.net	HEL	System Integrator • Optics & Beam Control (Adaptive Optics) • Gimbal & Tracking System • Gain Medium • Diodes • Laser Source (Fiber Lasers) • Electronics/Sensors • Research & Development • Testing & Evaluation

Radiance Technologies	radiancetech.com	HEL & HPM	Systems Integrator • Testing & Evaluation • Research & Development • Optics & Beam Control • Energy Supply • Thermal Management • Gimbal & Tracking System • Battle Damage Assessment • Electronics/Sensors • Antenna • Pulsed Power/Microwave Generation
SCDUSA/QI	scdusa-ir.com/quantum-imaging	HEL	Electronics/Sensors

Energy Supply

Barber-Nichols, LLC	barber-nichols.com	HEL & HPM	Thermal Management • Energy Supply
Bren-Tronics, Inc	bren-tronics.com	HEL & HPM	Energy Supply
Candent Technologies	candent-technologies.com	HEL & HPM	Energy Supply
EaglePicher Technologies	eaglepicher.com	HEL & HPM	Energy Supply
Honeywell	honeywell.com	HEL & HPM	Thermal Management • Energy Supply
Kord Technologies	kordtechnologies.com	HEL	Systems Integrator • Optics & Beam Control • Energy Supply • Thermal Management • Gimbal & Tracking System • Electronics/Sensors • Research & Development • Testing & Evaluation
Mainstream Engineering	mainstream-engr.com	HEL & HPM	Thermal Management • Energy Supply
Navitas Systems	navitassys.com	HEL & HPM	Energy Supply
Radiance Technologies	radiancetech.com	HEL & HPM	Systems Integrator • Testing & Evaluation • Research & Development • Optics & Beam Control • Energy Supply • Thermal Management • Gimbal & Tracking System • Battle Damage Assessment • Electronics/Sensors • Antenna • Pulsed Power/Microwave Generation
Rolls Royce	rolls-royce.com	HEL & HPM	Energy Supply • Thermal Management



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Gain Medium			
Coherent	coherent.com	HEL	Optics & Beam Control • Gain Medium • Coatings • Laser Source
nLight	nlight.net	HEL	System Integrator • Optics & Beam Control (Adaptive Optics) • Gimbal & Tracking System • Gain Medium • Diodes • Laser Source (Fiber Lasers) • Electronics/Sensors • Research & Development • Testing & Evaluation

Gimbal & Tracking System			
BlueHalo	bluehalo.com	HEL	Systems Integrator • Beam Control • Tracking
EOS Defense Systems USA	eosdsusa.com	HEL	Optics & Beam Control (Fast-Steering Mirrors, Adaptive Optics) • Gimbal & Tracking System • Coatings • Laser Source (Pulsed Diode Lasers, Fiber Lasers) • Battle Damage Assessment • Electronics/Sensors • Research & Development • Testing & Evaluation
Kord Technologies	kordtechnologies.com	HEL	Systems Integrator • Optics & Beam Control • Energy Supply • Thermal Management • Gimbal & Tracking System • Electronics/Sensors • Research & Development • Testing & Evaluation
Moog, Inc.	moog.com	HEL	Gimbal & Tracking System
MZA Associates Corporation	mza.com	HEL	System Integrator • Research & Development • Testing & Evaluation • Optics & Beam Control (Fast-Steering Mirrors, Adaptive Optics) • Gimbal & Tracking System
nLight	nlight.net	HEL	System Integrator • Optics & Beam Control (Adaptive Optics) • Gimbal & Tracking System • Gain Medium • Diodes • Laser Source (Fiber Lasers) • Electronics/Sensors • Research & Development • Testing & Evaluation
Radiance Technologies	radiancetech.com	HEL & HPM	Systems Integrator • Testing & Evaluation • Research & Development • Optics & Beam Control • Energy Supply • Thermal Management • Gimbal & Tracking System • Battle Damage Assessment • Electronics/Sensors • Antenna • Pulsed Power/Microwave Generation

Laser Source			
Applied Energetics	appliedenergetics.com	HEL	Laser Source
Coherent	coherent.com	HEL	Optics & Beam Control • Gain Medium • Coatings • Laser Source
EO Solutions	e-o.solutions	HEL	Beam Control • Laser Source • Research & Development • Testing & Evaluation

EOS Defense Systems USA	eosdsusa.com	HEL	Optics & Beam Control (Fast-Steering Mirrors, Adaptive Optics) • Gimbal & Tracking System • Coatings • Laser Source (Pulsed Diode Lasers, Fiber Lasers) • Battle Damage Assessment • Electronics/Sensors • Research & Development • Testing & Evaluation
FiberBridge Photonics	fiberbridge-photonics.com	HEL	Systems Integrator • Research & Development • Testing & Evaluation • Optics & Beam Control • Laser Source
Fibertek, Inc.	fibertek.com	HEL	Laser Source
HRL Laboratories	hrl.com	HEL	Laser Source
Lockheed Martin	lockheedmartin.com/en-us/capabilities/directed-energy.html	HEL & HPM	System Integrator • Optics & Beam Control • Thermal Management • Laser Source
NKT Photonics	nktphotonics.com	HEL	Laser Source (Fiber Lasers)
nLight	nlight.net	HEL	System Integrator • Optics & Beam Control (Adaptive Optics) • Gimbal & Tracking System • Gain Medium • Diodes • Laser Source (Fiber Lasers) • Electronics/Sensors • Research & Development • Testing & Evaluation
NP Photonics	npphotonics.com	HEL	Optics • Laser Source
Nuburu	nuburu.net	HEL	Optics • Laser Source
NYFORS	nyfors.com	HEL	Laser Source (Fiber Lasers)
Physical Sciences, Inc.	psicorp.com/our-company	HEL	Optics • Laser Source
Spectral Energies	spectralenergies.com	HEL	Laser Source (Pulsed High-Energy Laser Source)

Optics & Beam Control

Active Optical Systems, LLC	aos-llc.com	HEL	Optics & Beam Control (Adaptive Optics)
Adsys Controls	adsyscontrols.com	HEL	Optics & Beam Control (Fast-Steering Mirrors)
Advanced Thin Films	idexot.com	HEL	Optics
ARKA	arka.org	HEL	Optics & Beam Control • Coatings
BlueHalo	bluehalo.com	HEL	Systems Integrator • Beam Control • Tracking
CAES	caes.com	HEL	Beam Control
Coherent	coherent.com	HEL	Optics & Beam Control • Gain Medium • Coatings • Laser Source
EO Solutions	e-o.solutions	HEL	Beam Control • Laser Source • Research & Development • Testing & Evaluation



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EOS Defense Systems USA	eosdsusa.com	HEL	Optics & Beam Control (Fast-Steering Mirrors, Adaptive Optics) • Gimbal & Tracking System • Coatings • Laser Source (Pulsed Diode Lasers, Fiber Lasers) • Battle Damage Assessment • Electronics/Sensors • Research & Development • Testing & Evaluation
Excelitas Technologies	excelitas.com	HEL	Optics
FiberBridge Photonics	fiberbridge-photonics.com	HEL	Systems Integrator • Research & Development • Testing & Evaluation • Optics & Beam Control • Laser Source
FiveNine Optics	fivenineoptics.com	HEL	Optics & Beam Control
G&H	gandh.com	HEL	Optics & Beam Control
Heraeus Conamic	herae.us/optics	HEL	Optical Material
Kord Technologies	kordtechnologies.com	HEL	Systems Integrator • Optics & Beam Control • Energy Supply • Thermal Management • Gimbal & Tracking System • Electronics/Sensors • Research & Development • Testing & Evaluation
LightPath Technologies	lightpath.com	HEL	Optics & Beam Control
Lockheed Martin	lockheedmartin.com/en-us/capabilities/directed-energy.html	HEL & HPM	System Integrator • Optics & Beam Control • Thermal Management • Laser Source
MZA Associates Corporation	mza.com	HEL	System Integrator • Research & Development • Testing & Evaluation • Optics & Beam Control (Fast-Steering Mirrors, Adaptive Optics) • Gimbal & Tracking System
nLight	nlight.net	HEL	System Integrator • Optics & Beam Control (Adaptive Optics) • Gimbal & Tracking System • Gain Medium • Diodes • Laser Source (Fiber Lasers) • Electronics/Sensors • Research & Development • Testing & Evaluation
NP Photonics	np Photonics.com	HEL	Optics • Laser Source
Nuburu	nuburu.net	HEL	Optics • Laser Source
OFS	ofsoptics.com	HEL	Optics
Optimax Systems	optimaxsi.com	HEL	Optics & Beam Control (Fast-Steering Mirrors) • Coatings
Photonic Cleaning Technologies	photoniccleaning.com	HEL	Optics (Protecting and Cleaning)
Physical Sciences, Inc.	psicorp.com/our-company	HEL	Optics • Laser Source
Plymouth Grating Laboratory, Inc.	plymouthgrating.com	HEL	Optics & Beam Control • Coatings

Power Photonic	powerphotonic.com	HEL	Beam Control
Radiance Technologies	radiancetech.com	HEL & HPM	Systems Integrator • Testing & Evaluation • Research & Development • Optics & Beam Control • Energy Supply • Thermal Management • Gimbal & Tracking System • Battle Damage Assessment • Electronics/Sensors • Antenna • Pulsed Power/Microwave Generation
SCHOTT	schott.com	HEL & HPM	Optics • Pulsed Power/Microwave Generation • Thermal Management
Spica Technologies	spicatech.com	HEL	Optics • Testing & Evaluation
Torrent Photonics LLC	torrentphotonics.com	HEL	Optics • Coatings
Zygo	zygo.com	HEL	Optics & Beam Control (Fast-Steering Mirrors, Adaptive Optics) • Coatings • Testing & Evaluation

Thermal Management

Advanced Cooling Technologies	1-act.com	HEL & HPM	Thermal Management
Barber-Nichols, LLC	barber-nichols.com	HEL & HPM	Thermal Management • Energy Supply
Honeywell	honeywell.com	HEL & HPM	Thermal Management • Energy Supply
Kord Technologies	kordtechnologies.com	HEL	Systems Integrator • Optics & Beam Control • Energy Supply • Thermal Management • Gimbal & Tracking System • Electronics/Sensors • Research & Development • Testing & Evaluation
KULR Technology Corporation	kulrtechnology.com	HEL & HPM	Thermal Management
Lockheed Martin	lockheedmartin.com/en-us/capabilities/directed-energy.html	HEL & HPM	System Integrator • Optics & Beam Control • Thermal Management • Laser Source
Mainstream Engineering	mainstream-engr.com	HEL & HPM	Thermal Management • Energy Supply
Radiance Technologies	radiancetech.com	HEL & HPM	Systems Integrator • Testing & Evaluation • Research & Development • Optics & Beam Control • Energy Supply • Thermal Management • Gimbal & Tracking System • Battle Damage Assessment • Electronics/Sensors • Antenna • Pulsed Power/Microwave Generation
Rolls Royce	rolls-royce.com	HEL & HPM	Energy Supply • Thermal Management
SCHOTT	schott.com	HEL & HPM	Optics • Pulsed Power/Microwave Generation • Thermal Management
Thermo Analytics	thermoanalytics.com	HEL & HPM	Thermal Management

High-Power Microwave Companies

(by Categories)

Name of Company	Company URL	HEL or HPM	Role in Directed Energy
Systems Integrator			
BAE Systems	baesystems.com	HEL & HPM	Systems Integrator
Kratos Defense & Security Solutions	kratosdefense.com	HEL & HPM	Systems Integrator • Testing & Evaluation
Leidos	leidos.com	HEL & HPM	Systems Integrator
Leonardo DRS	leonardodrs.com	HEL & HPM	Systems Integrator
Lockheed Martin	lockheedmartin.com/en-us/capabilities/directed-energy.html	HEL & HPM	System Integrator • Optics & Beam Control • Thermal Management • Laser Source
Northrop Grumman	northropgrumman.com	HEL & HPM	Systems Integrator
Pacific Antenna Systems	pasantennas.com	HPM	Systems Integrators • Antenna • Thermal Management • Battle Damage Assessment • Testing & Evaluation • Research & Development
Radiance Technologies	radiancetech.com	HEL & HPM	Systems Integrator • Testing & Evaluation • Research & Development • Optics & Beam Control • Energy Supply • Thermal Management • Gimbal & Tracking System • Battle Damage Assessment • Electronics/Sensors • Antenna • Pulsed Power/Microwave Generation
RTX	rtx.com	HEL & HPM	Systems Integrator • Research & Development
Sem-Sol	sem-sol.com	HPM	Pulsed Power/Microwave Generation • Antenna • Research & Development • System Integrator

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Research & Development

American Systems	americansystems.com	HEL & HPM	Research & Development
Applied Research Associates	ara.com	HEL & HPM	Research & Development
Booz Allen Hamilton	boozallen.com	HEL & HPM	Research & Development • Testing & Evaluation
Epirus, Inc.	epirusinc.com	HPM	Thermal Management • Antenna • Pulsed power/microwave generation • Testing & Evaluation • Research & Development
ManTech	mantech.com	HEL & HPM	Research & Development
Pacific Antenna Systems	pasantennas.com	HPM	Systems Integrators • Antenna • Thermal Management • Battle Damage Assessment • Testing & Evaluation • Research & Development
Radiance Technologies	radiancetech.com	HEL & HPM	Systems Integrator • Testing & Evaluation • Research & Development • Optics & Beam Control • Energy Supply • Thermal Management • Gimbal & Tracking System • Battle Damage Assessment • Electronics/Sensors • Antenna • Pulsed Power/Microwave Generation
RTX	rtx.com	HEL & HPM	Systems Integrator • Research & Development
SAIC	saic.com	HEL & HPM	Research & Development
Sem-Sol	sem-sol.com	HPM	Pulsed Power/Microwave Generation • Antenna • Research & Development • System Integrator
SIE	siecompany.com	HEL & HPM	Research & Development
Teknicare	teknicare.com	HEL & HPM	Testing & Evaluation • Research & Development
Verus Research	verusresearch.net	HEL & HPM	Research & Development

Testing & Evaluation

Booz Allen Hamilton	boozallen.com	HEL & HPM	Research & Development • Testing & Evaluation
Epirus, Inc.	epirusinc.com	HPM	Thermal Management • Antenna • Pulsed Power/Microwave Generation • Testing & Evaluation • Research & Development
Kratos Defense & Security Solutions	kratosdefense.com	HEL & HPM	Systems Integrator • Testing & Evaluation
Pacific Antenna Systems	pasantennas.com	HPM	Systems Integrators • Antenna • Thermal Management • Battle Damage Assessment • Testing & Evaluation • Research & Development

Radiance Technologies	radiancetech.com	HEL & HPM	Systems Integrator • Testing & Evaluation • Research & Development • Optics & Beam Control • Energy Supply • Thermal Management • Gimbal & Tracking System • Battle Damage Assessment • Electronics/Sensors • Antenna • Pulsed Power/Microwave Generation
Stellar Science	stellarscience.com	HPM	Testing & Evaluation
Teknicare	teknicare.com	HEL & HPM	Testing & Evaluation • Research & Development

Antenna

Archer Laboratories	thearcherlabs.com	HPM	Antenna • Pulsed Power Generation
Eclipse Energy Systems	eclipsethinfilms.com	HEL & HPM	Coatings • Antenna • Pulsed Power/Microwave Generation
Epirus, Inc.	epirusinc.com	HPM	Thermal Management • Antenna • Pulsed Power/Microwave Generation • Testing & Evaluation • Research & Development
L3Harris ATI	l3harris.com	HPM	Pulsed Power Generation • Antenna
NanoElectromagnetics	nanoelectromagnetics.com/home.html	HPM	Pulsed Power • Antenna
Pacific Antenna Systems	pasantennas.com	HPM	Systems Integrators • Antenna • Thermal Management • Battle Damage Assessment • Testing & Evaluation • Research & Development
Radiance Technologies	radiancetech.com	HEL & HPM	Systems Integrator • Testing & Evaluation • Research & Development • Optics & Beam Control • Energy Supply • Thermal Management • Gimbal & Tracking System • Battle Damage Assessment • Electronics/Sensors • Antenna • Pulsed Power/Microwave Generation
Sem-Sol	sem-sol.com	HPM	Pulsed Power/Microwave Generation • Antenna • Research & Development • System Integrator

Battle Damage Assessment

Nokomis	nokomisinc.com	HEL & HPM	Battle Damage Assessment
Pacific Antenna Systems	pasantennas.com	HPM	Systems Integrators • Antenna • Thermal Management • Battle Damage Assessment • Testing & Evaluation • Research & Development
Radiance Technologies	radiancetech.com	HEL & HPM	Systems Integrator • Testing & Evaluation • Research & Development • Optics & Beam Control • Energy Supply • Thermal Management • Gimbal & Tracking System • Battle Damage Assessment • Electronics/Sensors • Antenna • Pulsed Power/Microwave Generation

Energy Supply

Barber-Nichols, LLC	barber-nichols.com	HEL & HPM	Thermal Management • Energy Supply
Bren-Tronics, Inc	bren-tronics.com	HEL & HPM	Energy Supply
Candent Technologies	candent-technologies.com	HEL & HPM	Energy Supply
EaglePicher Technologies	eaglepicher.com	HEL & HPM	Energy Supply
Honeywell	honeywell.com	HEL & HPM	Thermal Management • Energy Supply
Mainstream Engineering	mainstream-engr.com	HEL & HPM	Thermal Management • Energy Supply
Navitas Systems	navitassys.com	HEL & HPM	Energy Supply
Quantic ECI	quanticeci.com	HPM	Energy Supply
Radiance Technologies	radiancetech.com	HEL & HPM	Systems Integrator • Testing & Evaluation • Research & Development • Optics & Beam Control • Energy Supply • Thermal Management • Gimbal & Tracking System • Battle Damage Assessment • Electronics/Sensors • Antenna • Pulsed Power/Microwave Generation
Rolls Royce	rolls-royce.com	HEL & HPM	Energy Supply • Thermal Management

Pulsed Power/Microwave Generation

Archer Laboratories	thearcherlabs.com	HPM	Antenna • Pulsed Power Generation
Communications & Power Industries, LLC	cpii.com	HPM	Pulsed Power/Microwave Generation
Eclipse Energy Systems	eclipsethinfilms.com	HEL & HPM	Coatings • Antenna • Pulsed Power/Microwave Generation
Empower RF Systems	empowerrf.com	HPM	Pulsed Power/Microwave Generation
Epirus, Inc.	epirusinc.com	HPM	Thermal Management • Antenna • Pulsed Power/Microwave Generation • Testing & Evaluation • Research & Development
Ferrite Microwave Technologies	ferriteinc.com	HPM	Pulsed Power/Microwave Generation
L3Harris ATI	l3harris.com	HPM	Pulsed Power Generation • Antenna
NanoElectromagnetics	nanoelectromagnetics.com/home.html	HPM	Pulsed Power • Antenna
Nanohmics	nanohmics.com	HEL & HPM	Electronics/Sensors • Coatings • Pulsed Power/Microwave Generation

Radiance Technologies	radiancetech.com	HEL & HPM	Systems Integrator • Testing & Evaluation • Research & Development • Optics & Beam Control • Energy Supply • Thermal Management • Gimbal & Tracking System • Battle Damage Assessment • Electronics/Sensors • Antenna • Pulsed Power/Microwave Generation
SCHOTT	schott.com	HEL & HPM	Optics • Pulsed Power/Microwave Generation • Thermal Management
Sem-Sol	sem-sol.com	HPM	Pulsed Power/Microwave Generation • Antenna • Research & Development • System Integrator
SRI International	sri.com	HPM	Microwave Generation

Thermal Management

Advanced Cooling Technologies	1-act.com	HEL & HPM	Thermal Management
Barber-Nichols, LLC	barber-nichols.com	HEL & HPM	Thermal Management • Energy Supply
Epirus, Inc.	epirusinc.com	HPM	Thermal Management • Antenna • Pulsed Power/Microwave Generation • Testing & Evaluation • Research & Development
Honeywell	honeywell.com	HEL & HPM	Thermal Management • Energy Supply
KULR Technology Corporation	kulrtechnology.com	HEL & HPM	Thermal Management
Lockheed Martin	lockheedmartin.com/en-us/capabilities/directed-energy.html	HEL & HPM	System Integrator • Optics & Beam Control • Thermal Management • Laser Source
Mainstream Engineering	mainstream-engr.com	HEL & HPM	Thermal Management • Energy Supply
Pacific Antenna Systems	pasantennas.com	HEL & HPM	Systems Integrators • Antenna • Thermal Management • Battle Damage Assessment • Testing & Evaluation • Research & Development
Radiance Technologies	radiancetech.com	HEL & HPM	Systems Integrator • Testing & Evaluation • Research & Development • Optics & Beam Control • Energy Supply • Thermal Management • Gimbal & Tracking System • Battle Damage Assessment • Electronics/Sensors • Antenna • Pulsed Power/Microwave Generation
Rolls Royce	rolls-royce.com	HEL & HPM	Energy Supply • Thermal Management
SCHOTT	schott.com/en-us	HEL & HPM	Optics • Pulsed Power/Microwave Generation • Thermal Management
Thermo Analytics	thermoanalytics.com	HEL & HPM	Thermal Management

U.S. Government Entities

Name of Entity	URL	HEL or HPM
Services		
Air Force Research Laboratory	afrl.af.mil	HEL & HPM
Office of Naval Research	nre.navy.mil	HEL & HPM
Naval Surface Warfare Center Dahlgren Division	navsea.navy.mil/Home/Warfare-Centers/NSWC-Dahlgren/	HEL & HPM
U.S. Army Space and Missile Defense Command Technical Center's DESIL	t2.army.mil/T2-Laboratories/Designated-Laboratories/Space-and-Missile-Defense-Command-Technical-Center/	HEL & HPM
Army Rapid Capabilities and Critical Technologies Office	army.mil/rccto	HEL & HPM
Letterkenny Army Depot	letterkenny.army.mil	HEL & HPM

Department of Energy/National Labs		
U.S. Department of Energy	energy.gov	HEL & HPM
Lawrence Livermore National Labs	llnl.gov	HEL & HPM
Los Alamos National Labs	lanl.gov	HEL & HPM
Sandia National Laboratories	sandia.gov	HEL & HPM

Office of Secretary of Defense Entities		
OUSD A&S, Industrial Base Policy	businessdefense.gov	HEL & HPM
OUSD A&S, Acquisition Integration and Interoperability (AI2)	acq.osd.mil/asda/ai2/index.html	HEL & HPM
OUSD R&E, Principal Director for Directed Energy	N/A	HEL & HPM
OUSD R&E, Joint Directed Energy Transition Office	N/A	HEL & HPM
Office of the Secretary of Defense Manufacturing Technology	dodmantech.mil/JDMTP/OSD-ManTech/	HEL & HPM
OUSD Policy, Force Development and Emerging Capabilities	policy.defense.gov/OUSSDP-Offices/ASD-for-Strategy-Plans-and-Capabilities/Force-Development-and-Emerging-Capabilities/	HEL & HPM

DOD Manufacturing Innovation Institutes

DOD Manufacturing Innovation Institutes (Power America)	poweramericainstitute.org	HEL & HPM
DOD Manufacturing Innovation Institutes (AIM Photonics)	dodmantech.mil/About-Us/Manufacturing-Innovation-Institutes-MIIs/ AIM-Photonics/	HEL & HPM

Other DOD Agencies

Missile Defense Agency	mda.mil	HEL & HPM
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Select Universities

Per the methodology (pg 5), only universities providing DE testing facilities that can be rented out by industry or government were included.

Name of University	URL	HEL or HPM
Texas A&M University	tamu.edu	HEL
University of Alabama in Huntsville	uah.edu	HEL
University of Central Florida	ucf.edu	HEL



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