

THE PREMIER PROVIDER OF HIGH ENERGY LASER CONTROL SYSTEMS AND COMPONENTS

For more than 20 years, L3Harris has been the premier provider of beam director assemblies, components and controls for High Energy Laser (HEL) weapon systems for all branches of the U.S. Department of Defense (DoD).

SUPPORTING WARFIGHTERS

In the air, on land or at sea, L3Harris is proud to support the defense and protection of our warfighters. Our laser weapon systems have reliably supported successful and extended demonstrations, including U.S. Navy deployment of the sailor-operated LaWS system in the Persian Gulf region. The EMI/RFI and environmentally hardened beam director is the “gun” that points and shoots the laser “bullet.” Ruggedized for all weather operation, our equipment finds the moving target and stabilizes the beam on the target with extreme precision.



STATE-OF-THE-ART DESIGNS

L3Harris has been advancing the state-of-the-art in beam director technology by combining time-tested optical designs with new materials and optical processes that increase the effectiveness, range and power-on-target of the laser weapon.

In addition to optical improvements, L3Harris has been setting new standards for the speed and precision of the beam director, enabling the system to engage swarms of UASs and volleys of mortars. The ability to quickly and precisely project this lethal energy onto maneuvering and fast-moving targets that are difficult to engage with conventional munitions is a critical advantage of laser weapon systems. Other key factors are low cost per shot and high number of target engagements that can be completed before refueling.

OPTICS AND TRACKING SYSTEM EXPERTISE APPLIED TO LASER TECHNOLOGY

L3Harris has continued to advance the benchmark for exceptional quality, ruggedness and reliability in laser weapon beam directors through incorporation of time-tested military range tracking designs. Several of our prototype systems continue to support field operations more than 10 years after delivery.



HEL Programs

Advancing the State-of-the-Art

- > Laser Weapon System (LaWS)
- > Solid State Laser Technology Maturation – Laser Weapon System Demonstrator (SSL-TM/LWSD)
- > Ground Based Air Defense (GBAD)
- > Light Weight Beam Director (LWBD)
- > High Energy Laser Mobile Demonstrator (HELMD)
- > Tactical High Energy Laser (THEL)
- > Airborne Laser (ABL)
- > Advanced Tactical Laser (ATL)

STATE-OF-THE-ART DESIGNS

Laser Technology has now advanced to the point where HEL Weapon Systems can address modern threats and augment our military forces in completing their mission. Therefore, the military services are accelerating the deployment of laser weapons to the field allowing them to address the emerging threats. L3Harris is prepared to support our Armed Forces in bringing this technology to the field and can support the rapid transition from experimental demonstration systems to mission-capable, field-ready systems in production quantities. Our past performance in delivering high power systems for technology demonstrations will facilitate the incorporation of HEL weapons into the options available to soldiers, sailors, airmen and marines when countering today's threats.

These new and ongoing projects continue to push the bounds of HEL weapon technologies and capabilities, preparing them for integration into the DoD's weapons inventory and battlefield tactics. Building on the expertise gained over 20 years of Directed Energy system development and 130 years of experience with optical and tracking systems, L3Harris plays a valuable role in national security by ensuring that our men and women in uniform are equipped with the most innovative solutions available. They are the reason we come to work, and we honor their service and sacrifices by doing our best every day.

Previously completed programs have demonstrated success against targets such as:

- > Mortars
- > Artillery
- > Rockets/missiles
- > Long range rockets
- > Small boats
- > UASs
- > Unexploded ordnance
- > IEDs

THE PREMIER PROVIDER OF HIGH ENERGY LASER CONTROL SYSTEMS AND COMPONENTS

- > Beam directors
- > Stabilized gimbals
- > Ruggedized optical systems
- > Beam expander telescopes
- > Fast steering mirrors

SETTING NEW BENCHMARKS IN:

- > Integrated control systems
- > Kilowatt to megawatt power class
- > Fast precision pointing/tracking
- > Stable, low-jitter tracking
- > High Energy Laser optics
- > Beam stabilization
- > Sensor integration



High Energy Laser Control Systems

© 2020 L3Harris Technologies, Inc. | 03/2020

Data contained herein consists of L3Harris Technologies Corporation general capabilities information that does not contain controlled technical data as defined within the International Traffic in Arms Regulations (ITAR) part 120.10, or Export Administration Regulation (EAR) Part 734.7-11. Data, including specifications, contained within this document are summary in nature and subject to change at any time without notice at L3Harris' discretion. Call for latest revision. All brand names and product names referenced are trademarks, registered trademarks, or trade names of their respective holders.

L3Harris Technologies is an agile global aerospace and defense technology innovator, delivering end-to-end solutions that meet customers' mission-critical needs. The company provides advanced defense and commercial technologies across air, land, sea, space and cyber domains.



L3HARRIS™
FAST. FORWARD.

1025 W. NASA Boulevard
Melbourne, FL 32919
t 412 967 7700 | f 412 967 7973
Sales.Brashear@L3Harris.com