

# Merlin



## Long-Range Counter Unmanned Aircraft System (C-UAS) Detect and Defeat System

Drones are a dynamic and pervasive threat to U.S. and Allied Forces, creating significant challenges for agencies responsible for public safety. Merlin rises to this challenge with industry-leading long-range detection and lightning-fast, automated, non-kinetic countermeasures. Merlin keeps people safe and infrastructure protected against the threats of today and tomorrow.

For more information about CACI's C-UxS technology suite, please contact [cuxs@caci.com](mailto:cuxs@caci.com) or visit [caci.com/CUXS](http://caci.com/CUXS)

### Full spectrum automated detect and defeat

- Enable 24/7 automated sensing.
- Achieve precise, non-kinetic defeat with low/no-collateral impact.
- Detect UAS at longest range available, yielding more decision-making time.
- Detect and defeat Group 1-5 UAS, including new cellular drones.

Artificial intelligence paired with actual intelligence: Merlin uses the world’s most comprehensive threat data to find the adversary first

Adversarial unmanned systems hide in the noise — Merlin uncovers them fast. Merlin is backed by the world’s most comprehensive collection of threat data with over 1,000 unique global unmanned systems. Merlin integrates RF, radar, and EO/IR sensors to automatically detect and defeat Group 1-5 UAS from up to 75+ km away. The result is a layered drone defense that enables more decision-making time.



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| Interoperable | Merlin is interoperable with existing U.S. government Command and Control (C2) and security systems, providing a layered C-UxS defense.                         |
| Autonomous    | Merlin operates autonomously 24/7 at various classification levels from any location.                                                                           |
| Agile         | Merlin’s software-defined architecture enables rapid integration of new capabilities through over-the-air updates to stay ahead of constantly evolving threats. |
| Comprehensive | Merlin supports both passive and active unmanned threat detection.                                                                                              |
| Surgical      | Merlin delivers precision defeats across the full spectrum.                                                                                                     |
| Proven        | Merlin’s advanced technologies have been successfully employed for decades.                                                                                     |

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| <b>SEARCH/TRACK/IDENTIFY</b> <ul style="list-style-type: none"><li><b>RF/line of site C2 link</b><br/>Detect range: ~75+ km, 360° coverage; 200 MHz – 8 GHz with no band-breaks; COTS and non-COTS UAS (Group 1–5)</li><li><b>RF/cellular C2 link</b><br/>Detect range: ~15km; 4G and 5G capable; protocol tracking without user data analysis</li><li><b>Active radar</b><br/>Detect and track range: ~25 km; Tip and cue to EO/IR system; provides target position for drone capture; dark drone detection</li><li><b>EO/IR Camera</b><br/>Detect range: ~5-7 km; integrated ATR for drone detection, tracking, and ID; dark drone detection</li></ul> | <b>LOW/NO-COLLATERAL DEFEAT</b> <ul style="list-style-type: none"><li><b>RF/line of site C2 link defeat</b><br/>Effective range: ~75+ km (150–1,500W); AI – automated sense and shoot algorithms; broad range of RF defeat from broadband to smart jam to command inject (crash, graveyard, change waypoint, etc.)</li><li><b>RF/cellular defeat</b><br/>Effective range: ~15 km; intelligent, “in-protocol” defeats; temporary, semi-persistent, and cyber-enabling effects; minimizes impact to network/subscribers</li><li><b>Drone capture</b><br/>Effective range: 3–6 km; capture and disposal of targets &lt;55 lbs at high speeds; ~4 sec from cueing to launch; autonomous engagements; reusable after reloading net entanglement system</li></ul> |
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EXPERTISE and TECHNOLOGY  
for National Security

At CACI International Inc (NYSE: CACI), our 25,000 talented and dynamic employees are ever vigilant in delivering distinctive expertise and differentiated technology to meet our customers’ greatest challenges in national security. We are a company of good character, relentless innovation, and long-standing excellence. Our culture drives our success and earns us recognition as a *Fortune* World’s Most Admired Company. CACI is a member of the *Fortune* 500 Largest Companies, the Russell 1000 Index, and the S&P MidCap 400 Index. For more information, visit us at [www.caci.com](http://www.caci.com).

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