

# CaMEO Laser Weapon Diagnostics Suite

Confidence is key.  
Laser weapon beam diagnostics is our mission.



## Build warfighter confidence through increased HEL system repetitions.

- Rapid assessment of laser weapon system performance with near real-time diagnostic feedback on the range.
- Survivable system, able to take multiple high power, high peak irradiance shots to diagnose laser weapon system health and performance.

## Versatile diagnostics suite able to be employed for multiple use cases.

- Dynamically deployable with platform agnostic mounting configurations.
- Able to provide diagnostic data via radio data link, direct fiber connection, or through onboard data recording.

## Proven diagnostics that is easy to deploy.

- CaMEO systems have been engaged hundreds of times at different laser weapon power and peak irradiance levels.
- The CaMEO system is packable and transportable in a small Pelican case.
- Basic CaMEO system and software training is simple and can take just a couple hours.

## Easy to use HEL diagnostics

### Proven in both static and dynamic uses

Our Cruise Missile Electro-Optic target form factor delivers simple, reusable, HEL beam diagnostic capability to the user. This easy to transport unit may be used in both static or dynamic HEL diagnostics through direct measurement of a HEL beam.

Whether measuring HEL performance on a brand-new HEL system or checking the performance of a deployed HEL system CaMEO targets are ready to meet your HEL diagnostics needs.

GUI Display  
For near real time laser spot viewing



## SLIM 8 Setup

1. Install SemQuest GUI software.
2. Install target specific configuration file.
3. Setup target or integrate target to platform.
4. Ensure CaMEO system auto connects to GUI.
5. Configure shot file save location.
6. View live feed.
7. Initiate save shot prior to 'beam on' command.
8. Process data more in depth after the test.



SemQuest.com

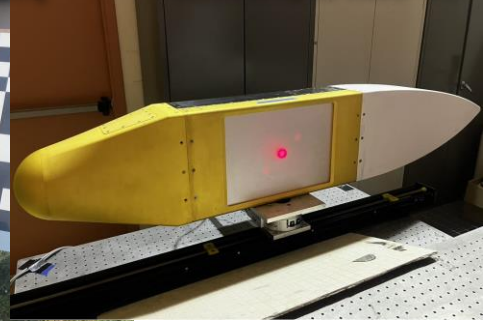
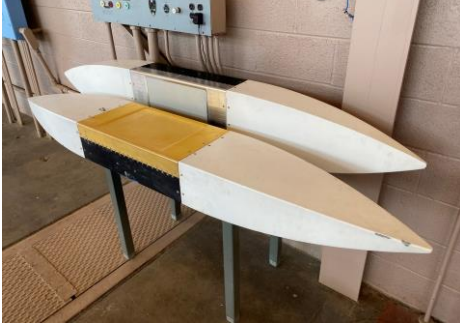
©2024 SemQuest Inc.

This document does not contain "Technical Data" as defined under the International Traffic in Arms Regulations (ITAR) (22 C.F.R. 120-130) or "Technology" within the definition of the Export Administration Regulations (EAR) (15 C.F.R. Parts 740-774) amended under the authority of the International Emergency Economic Powers Act. EAR99 Applicable.

CaMEO Pods After Flight Test

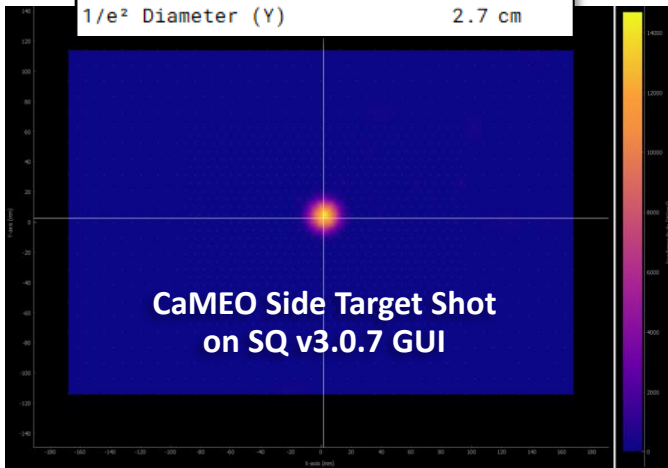
CaMEO Side Target During Outdoor Testing

CaMEO Setup for Indoor Test



The SemQuest GUI software provides a near real time Quicklook display which can be used to provide laser diagnostics and assess laser lethality.

Power	47.1 kW
Peak Irradiance	14617.7 W/cm <sup>2</sup>
1/e <sup>2</sup> Diameter (X)	2.8 cm
1/e <sup>2</sup> Diameter (Y)	2.7 cm



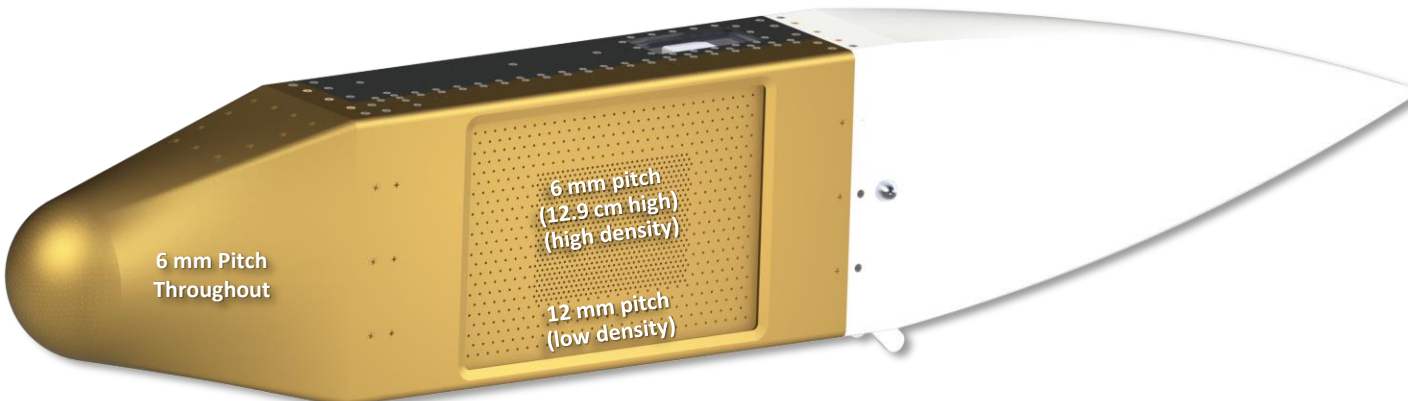
### Specifications (CaMEO SWAP)

System Name (sensor pitch)	CaMEO Side (6 & 12 mm)	CaMEO Nose (6 mm)
Target Dimensions L x W x H	14.7' x NA' x 10.6'	3.5' x 6.7' x 6.7'
CaMEO Dimensions L x W x H	66.1" x 6.7' x 11.6'	-
System Weight (full pod - aluminum)	20.6 kg (45.6 lbs)	-
<b>Power Consumption</b>		
Ethernet Data Setup	15 Watts	-
Radio Data Setup	39 Watts	-

### Specifications (CaMEO Sensor Info)

System Name (sensor pitch)	CaMEO Side (6 & 12 mm)	CaMEO Nose (6 mm)
Number of Sensors	1,260	750
Peak Irradiance Record (kW/cm <sup>2</sup> )	21.2	2.0
Peak Beam Fluence Record (kJ/cm <sup>2</sup> )	212.49	30.5

## CaMEO Pod System Engagement Area Types and Sensor Pitch Configurations



Nose 6 mm Pitch -750 Sensors

Side 6 & 12 mm Pitch 1,260 Sensors

**Acknowledgement:** This material is based upon work supported by the U.S. Army Program Executive Office, Simulation, Training and Instrumentation (PEO STRI), Test Resource Management Center (TRMC) Test and Evaluation/Science & Technology (T&E/S&T) Program. These projects are funded by the T&E/S&T Program through the U.S. Army Program Executive Office for Simulation, Training and Instrumentation (PEO STRI) Instrumentation Management Office (IMO).

**Disclaimer:** Any opinions, findings and conclusions or recommendations expressed in this material are those of the author(s) and do not necessarily reflect the views of the Test Resource Management Center (TRMC) Test and Evaluation/Science & Technology (T&E/S&T) Program and/or the Program Executive Office for Simulation, Training & Instrumentation (PEO STRI).