

SLIM 8 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.

- SLIM 8 systems have been engaged thousands of times at different laser weapon power and peak irradiance levels.
- The SLIM 8 system is packable and transportable in a small Pelican case.
- Basic SLIM 8 system and software training is simple and can take just a couple hours.

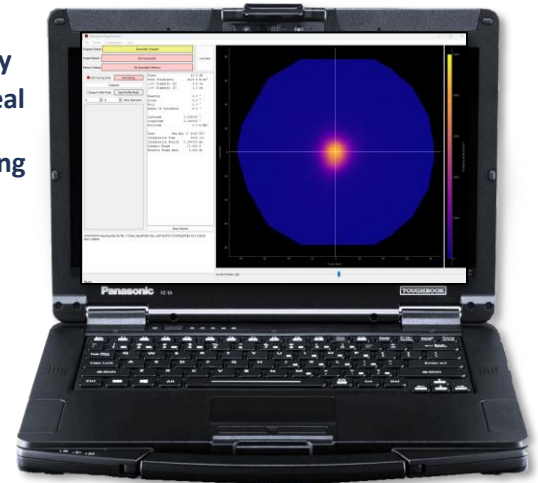
Easy to use HEL diagnostics

Proven in both static and dynamic uses

Our Small Laser Irradiance Measurement 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 SLIM 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 SLIM 8 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.

SLIM 8 Target on a Class III Drone Concept



SLIM 8 in flight on an Alta X

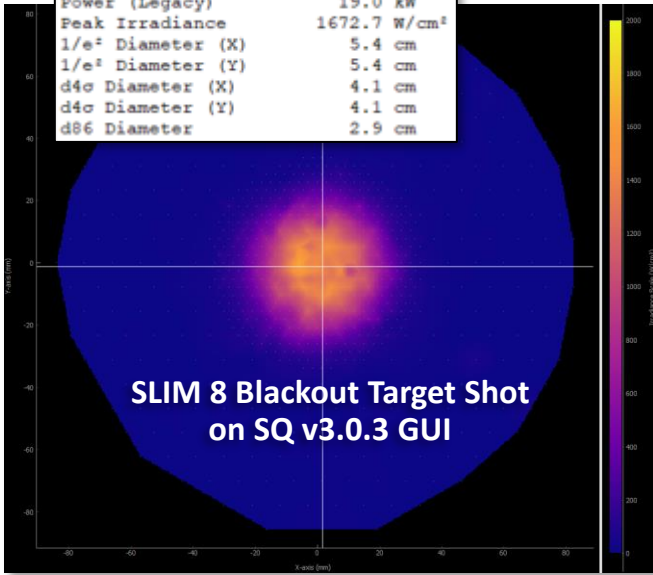


SLIM 8 target in flight on an E1250



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

| | |
|-------------------------------|--------------------------|
| Power | 19.2 kW |
| Power (Legacy) | 19.0 kW |
| Peak Irradiance | 1672.7 W/cm ² |
| 1/e ² Diameter (X) | 5.4 cm |
| 1/e ² Diameter (Y) | 5.4 cm |
| d4σ Diameter (X) | 4.1 cm |
| d4σ Diameter (Y) | 4.1 cm |
| d86 Diameter | 2.9 cm |



SLIM 8 Blackout Target Shot on SQ v3.0.3 GUI

Specifications (SLIM 8 SWAP)

| System Name (sensor pitch) | SLIM 8 (6mm) | SLIM 8 (3 & 9 mm) | SLIM 8 1.5K (4.3 mm) |
|----------------------------------|---------------------|---------------------|----------------------|
| SLIM 8 Dimensions L x W x H | 10.2" x 8.5" x 8.5" | 10.2" x 8.5" x 8.5" | 10.2" x 8.5" x 8.5" |
| System Weight (ASA housing) | 2.17 kg (4.8 lbs) | 2.17 kg (4.8 lbs) | 2.17 kg (4.8 lbs) |
| System Weight (aluminum housing) | 2.81 kg (6.2 lbs) | 2.81 kg (6.2 lbs) | 2.81 kg (6.2 lbs) |
| Power Consumption | 9 Watts | 9 Watts | 9 Watts |

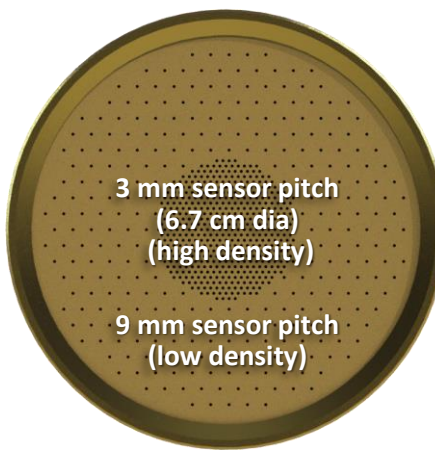
Specifications (SLIM 8 Sensor Info)

| System Name (sensor pitch) | SLIM 8 (6mm) | SLIM 8 (3 & 9 mm) | SLIM 8 1.5K (4.3 mm) |
|--|--------------|-------------------|----------------------|
| Sensor Array Size | 8" circle | 8" circle | 8" circle |
| Number of Sensors | 750 | 750 | 1,500 |
| Peak Irradiance Record (kW/cm ²) | 27.9 | 27.9 | Pending |
| Peak Beam Fluence Record (kJ/cm ²) | 679.4 | 679.4 | Pending |

SLIM 8 System Engagement Area Types and Sensor Pitch Configurations



6 mm Pitch Throughout



3 mm sensor pitch (6.7 cm dia) (high density)

9 mm sensor pitch (low density)



4.3 mm Pitch Throughout

SLIM 8 6 mm Pitch ~750 Sensors

SLIM 8 3 & 9 mm Pitch ~750 Sensors

SLIM 8 1.5K ~1,500 Sensors

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