

# SPARROWHAWK

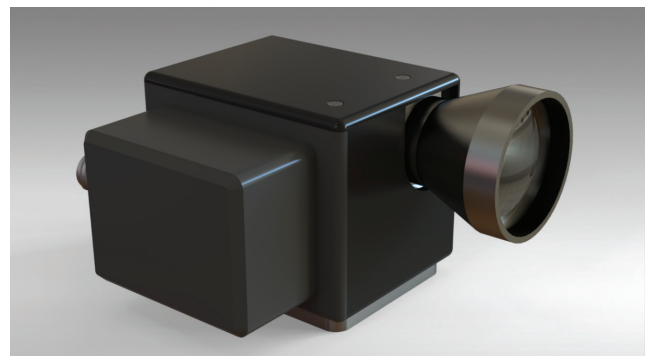
## MINI-DEFENSE LASER TRANSMITTER



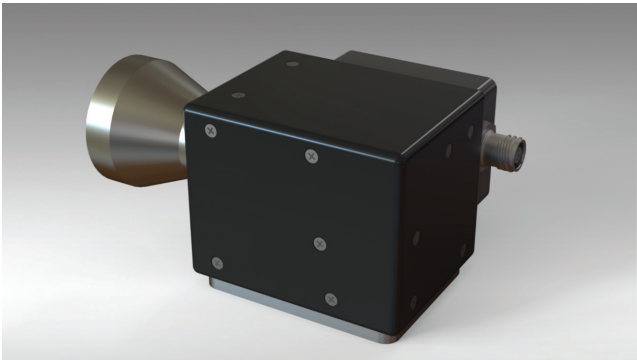
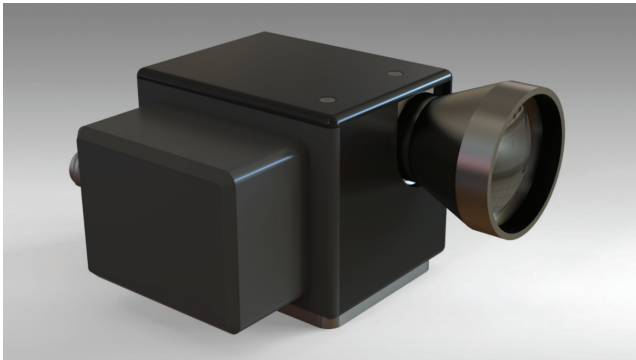
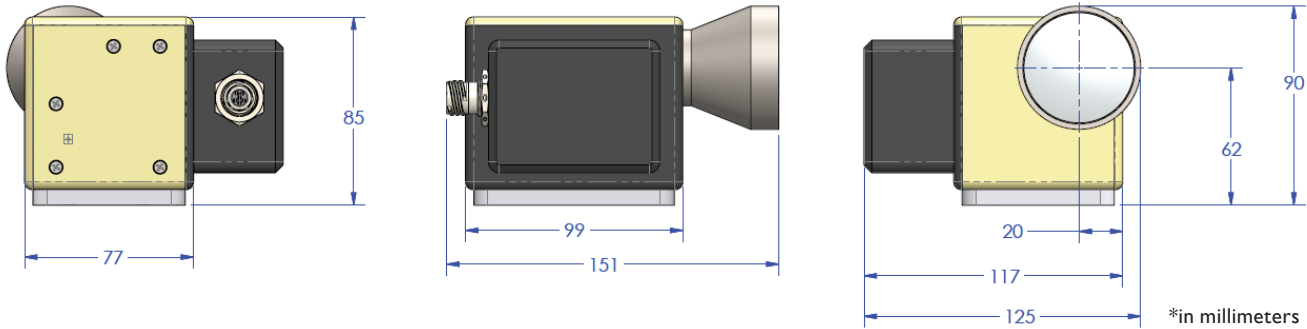
The SparrowHawk 70 mJ mini laser designator is an evolution of the compact, ruggedized, and reliable laser design that has been the Lumibird way since its inception. The SparrowHawk is designed with a focus on manufacturability to enable low SWaP-C. Using key technologies learned through continuous design improvements in support of Air, Sea, and Ground based Defense laser systems, we have integrated critical sub-assemblies and modules from both our commercial and defense products to establish a new paradigm in laser designation systems.

Integrated and miniaturized temperature control reduces turn on time and stabilizes performance over the entire operational temperature range. Industry standard connectors and communications protocols,

combined with the integrated laser diode driver and controllers allows for simplified integration into gimbals and other targeting systems with low available volume. Proven optomechanical design techniques applied to the highly integrated resonator architecture ensure stable operation and shock survivability.



# SPARROWHAWK



## System Overview

PRF	8-20 Hz
Energy	> 70 mJ @1064 nm
Pulse Width	10-20 nsec
Coaxial Wavelengths	532/1540/1570nm option
Full Angle Divergence	< 250 $\mu$ rad
Operational Temperature	-40 to 70°C
Storage Temperature	-54 to +71°C
Shock and Vibe	per MIL-STD-810
Cooling Type	Conductively Cooled
System Weight	1,300g
Dimensions	151 x 120 x 86mm

## Interface

- Input Voltage: +28 VDC (MIL-STD-704F Compliant)
- Power Draw: 70W Typical
- Communications: RS-422 Full Duplex
- External Trigger
- Discrete Laser Enable
- Discrete Reset

## Controller

- BIT and Data Logging
- TEC Diode Temperature Control and Feedback
- Hardware and Firmware Remote Interlock
- Fixed Timing from External Trigger to Light Out

STANAG 3733 Compliant

This product is listed under category XII(b) of the United States Munitions List. International Traffic In Arms Regulations (ITAR) requires a valid export license prior to technical or hardware shipments or transmissions of information.



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