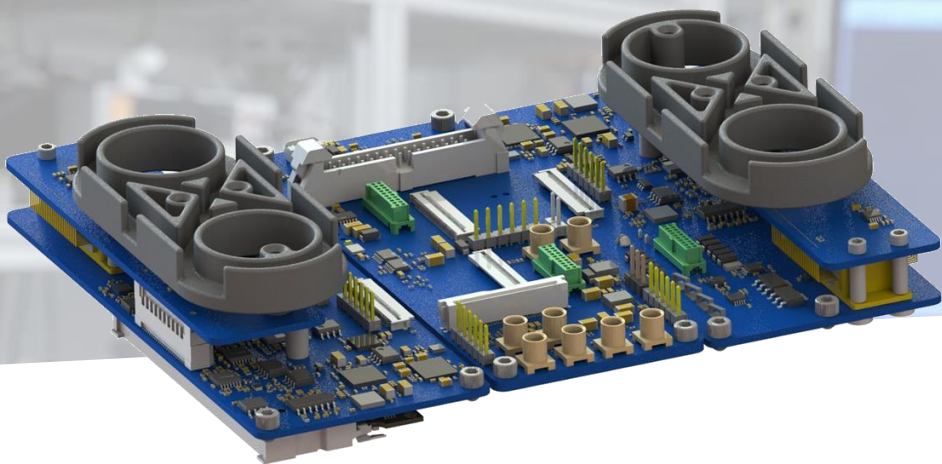


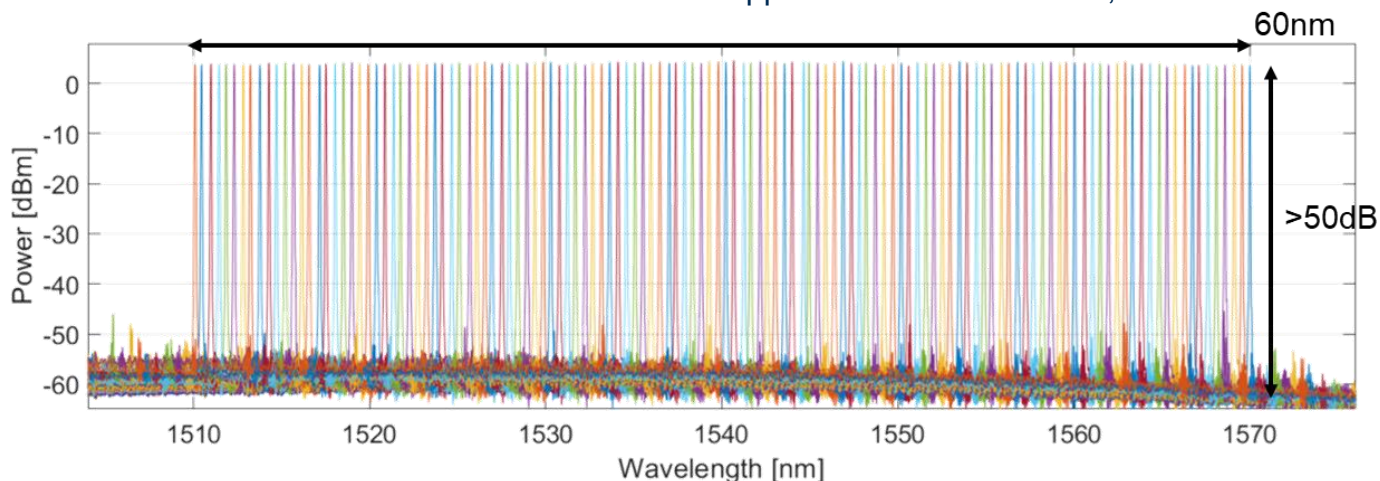
RAY-H1

High Power Widely Tunable Narrow Linewidth Laser for FMCW

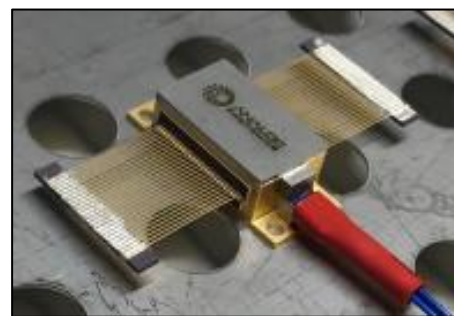


Applications & Benefits

- Wide 60 nm Tuning Range
- Linear Frequency Chirp of 1.5 GHz
- Narrow Linewidth
- High-Power Booster SOA
- Suitable for FMCW
- Applications include LiDAR, FSOC & Telecom



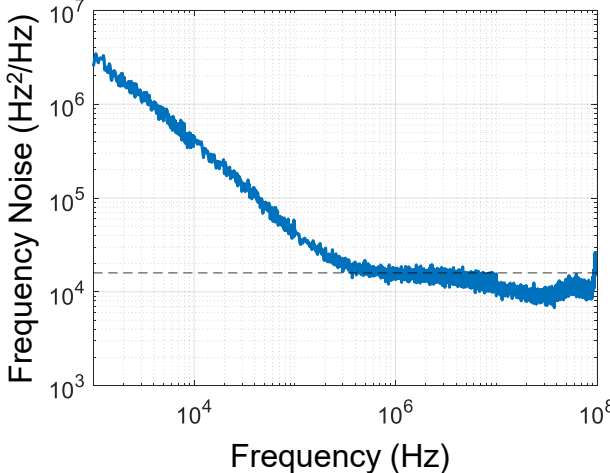
Feature	Module	Goldbox Only
Wavelength	C + L-Band (2-Channel)	
Optical Output Power	> 25 dBm	
Tuning Speed	< 300 μ s random access	
SMSR	> 40 dB	
Linewidth	< 40 kHz	
Chirp Excursion	≤ 1.5 GHz (adjustable)	
RIN	-160 dB/Hz (preliminary)	
PER	>20 dB (preliminary)	
Electrical Power	19 W	5 W
Form Factor	$15 \times 12 \times 4$ cm ³	$1.5 \times 3.5 \times 0.7$ cm ³
Mass	290 g	32g



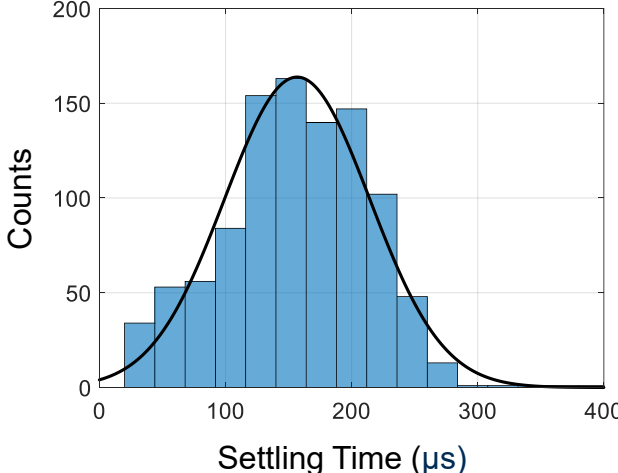
Internal Butterfly Package



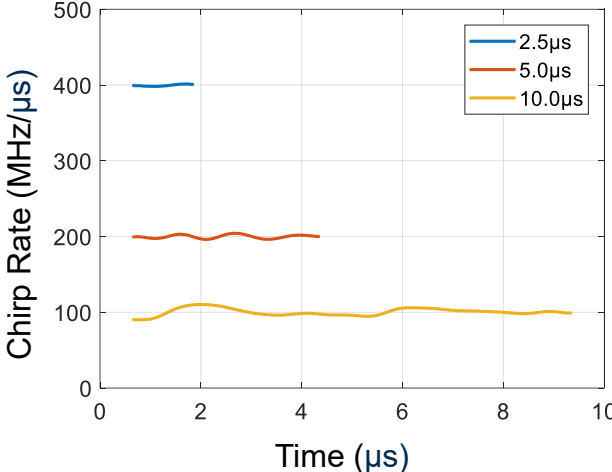
Linewidth



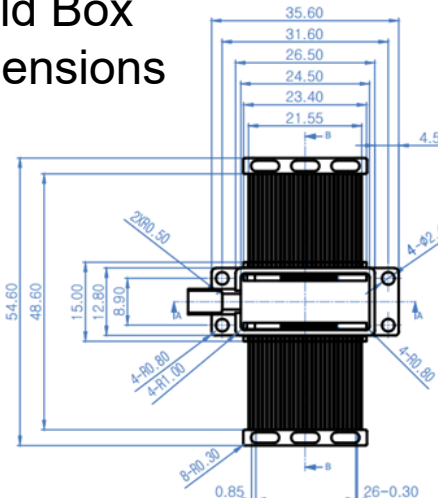
Settling Time



Chirp Rate



Gold Box Dimensions



Compact Design

The module is only 720 cm³ and < 290 g due to SiPh and CMOS integration.



Wide Tuning

The RAY-H1 module operates over a 60 nm tuning range.



Scalable

Silicon Photonics
is made in 300
mm processes;
integrated III/V.



Narrow Linewidth

The unit has a sub-40 kHz linewidth.



Availability

Q4 2025.



Linear Chirp

The module produces a linear chirp over 1.5 GHz excursion.



High Power

Booster SOA creates over 300 mW output power.

ANALOG
PHOTONICS