

# CCS-I Series

Integrated Cool & Control Module



**ALPhA** **NOV**

Optics & Lasers Technology Center

# CCS-I Series

## Integrated Cool & Control Module

Laser diode source and control modules with integrated laser diode, user adjustable current / temperature control and pulsed or CW (Continuous Wave) modes of operation.



### Key applications

- Laser development
- Laser alignment
- Nondestructive control
- Telemetry
- Doppler measurements
- Metrology

### Key features

- ALPhANOV integrates laser diodes which are sourced from industry leading manufacturers and offer proven reliability and performance. Current/temperature control circuits and safety limits are pre-set and optimized to ensure the highest level of performance in pulsed or CW mode.
- Laser diodes with driving current up to 1.2 A in both CW or pulse regime and TEC current up to 3.8 V/1.5 A can be integrated.
- Min. pulse duration: ~ 1.5 ns, <1 ns Jitter, up to 4 MHz repetition rate.
- Compatible with ALPhANOV HPP technology (High Pulse Performance) with ultra low Jitter, 250 MHz maximum frequency, 3500 mA maximum current and low noise adjustable CW Offset current under pulse.
- All versions are delivered with adapted protected fiber with high grade optical connector.
- All version can be controlled either through USB link or through an analog signals or with a manual knob.
- Most versions show fast delivery for immediate customer use.

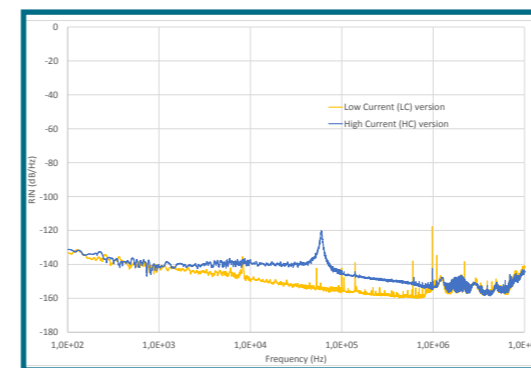
## Technical Specifications



### Specifications

	Pulse/CW	Wavelength [nm]	Bandwidth [nm]	Power - CW [mW]	Power - Pulsed [mW]	CCS-I Version
Example 1: <b>808 nm CW-PM-FBG</b>	CW only	808±5	0.2 (typical)	250	-	Low current (LC)
Example 2: <b>980 nm CW-PM-FBG</b>	CW only	976±1	1.0 (typical)	500 or 1000	-	LC (< 500 mW) HC (1000 mW)
Example 3: <b>1030 or 1064 nm PM-DFB</b>	Pulse & CW	1030±2 or 1064±2	< 0.2	200	800	Low current (LC)
Example 4: <b>1064 nm Bragg close to the chip</b>	Pulse & CW	1064±2	< 0.3	300	950	Low current (LC)
Example 5: <b>1060 nm seeder</b>	Pulse & CW	1060±10	< 2.0	420	800	Low current (LC)
Example 6: <b>1420 or 1450 or 1500 nm PM-FBG</b>	Pulse & CW	1450 or 1450 or 1480 or 1500 ±0.5	< 2.0	350	350	High current (LC)

Other wavelength available in Pulse & CW regime: 845, 1310, 1480, 1550, 1950 etc.

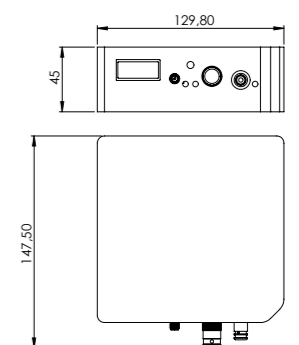


Noise curve for low current (LC) and high current (HC) version

### Electrical

Operating voltage	12-15 Vdc (OEM) 110/220V AC/DC converter included
Input impedance	50 Ω

### Mechanical



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