



Key Features

- Narrow linewidth
- Low phase noise
- Ultra low RIN
- High output power, up to 2W
- Linear polarized output
- RS232 remote control (Option)
- Wavelength tunability (Optional)

AULLD Series Module Casing





Description

Amonics' high power narrow linewidth laser (AULLD series) integrates high power fiber amplifier with narrow linewidth laser. It features narrow linewidth, low phase noise, ultra low RIN, high output power with exceptionally reliable performance.

The turnkey microprocessor controlled benchtop AULLD provides alarms and status indicators. An integrated RS232 or Ethernet computer interface provides easy control, diagnostic functions and data acquisition.

It is particularly suitable for commercial fiber optic sensing applications, such as interferometric and Brillouin DTSS sensing systems for oil & gas, security, metrology and smart infrastructure.

Application



Laboratory



Test & Measurement



Brillouin distributed sensing

Interferometric fiber optics sensing

LIDAR



ISO 9001: 2015 Certificate No.: CC 5346 Our product is manufactured under a HKQAA ISO 9001 certified quality management system. The ISO 9001:2015 certification applies to the Hong Kong production site only.

High Power Narrow Linewidth Laser



Specifications

Model	AULLD Series	AULLD High Power Series	Remarks	
Laser Wavelength	ITU DWDM or custom, ±0.04 nm	ITU DWDM or custom, ±0.04 nm	CW @ rated power	
Optical Output Power	13 dBm, 23 dBm, 27 dBm, 30 dBm, 33 dBm	37 dBm, 40 dBm, 43 dBm, 44 dBm	Other power level on request	
Maximum Linewidth FWHM, Lorentzian	2 kHz, 5 kHz, 10 kHz, 15 kHz, up to 200 kHz	2 kHz, 5 kHz, 10 kHz, 15 kHz, up to 200 kHz	CW @ rated power	
Polarization	Linear or random	Linear or random		
Optical Isolation	Min. 30 dB	Min. 20 dB	Under operation temp.	
Side-mode Suppression Ratio	Min. 35 dB, Typ. 45 dB	Min. 35 dB, Typ. 45 dB	CW @ rated power	
Relative Intensity Noise	Shot noise limited @ frequency Min. 100 kHz	Shot noise limited @ frequency Min. 100 kHz		
Output Power Stability	Max. ±0.2 dB (within 8 hrs), Max. ±0.03 dB (within 10 mins)	Max. ±0.2 dB (within 8 hrs), Max. ±0.03 dB (within 10 mins)	CW @ rated power and	
Wavelength Stability	Max. ±0.005 nm (within 8 hrs), Max. ±0.001 nm (within 10 mins)	Max. ±0.005 nm (within 8 hrs), Max. ±0.001 nm (within 10 mins)	constant environment temperature	

General Parameters

	Value
Operation Temperature	0 to 40 °C
Storage Temperature	-10 to 70 °C
Power Supply	+12 ± 0.25 VDC
Module Dimensions	200(W) x 140(D) x 50(H) mm [AULLD Series] or 350(W) x 350(D) x 35(H) mm [AULLD High Power Series]
Optical Power Monitoring	Seed power, Output power
Remote Control Port	DB-9 female (RS232)
Protection	Loss of seed power, Pump laser (TEC) overheat
Optical Connector	FC/APC, FC/UPC, SC/APC, SC/UPC, bare fiber
Optical Fiber	PM fiber, SMF-28 (optional)

Ordering Information

Product Code	AULLD-aa-bbbb-cc-dd-M-ee	aa : Default (or unspecified) for single mode, PM for polarization maintaining bbbb : Wavelength in nm cc : Laser linewidth in kHz dd : Output power in dBm ee : FA for FC/APC, FC for FC/UPC, SA for SC/APC, SC for SC/UPC, NC for bare fiber
--------------	--------------------------	--

Amonics undertakes continuous and intensive product development to ensure its product performance at the highest technical standards. As a result, the specifications in this document are subject to change without notice.

Amonics Limited (Hong Kong)

14/F, Lee King Industrial Building, 12 Ng Fong Street, San Po Kong, Kowloon, Hong Kong

Tel :+852 2428 9723 Fax :+852 2428 9704

Beijing Amonics Co. Ltd. (Beijing)

 ${\tt Room\,902,\,Unit\,1\,Joy\,Mansion,\,NO.99\,Chaoyang\,North\,Road,\,Beijing\,China\,100123}$

Tel :+86 10 8478 3386 Fax :+86 10 8478 3396
Email: contact@amonics.com Website: www.amonics.com



