



IS dB Gain Raman Amplifier, 1535 nm to 1609 nm

OVERVIEW

Optilab Raman Amplifier Rackmount Units are designed for distributed Raman amplification in both the C-Band and L-Band. The RA-CL3-15-R unit provides over 15 dB On/Off gain flattened amplification from 1535nm to 1609nm, thus can support up to 200 DWDM channels. Each of the four pump channels is configured with two high power pump laser diodes and one polarization beam combiner (PBC). The unit includes micro-controller based laser current control circuitry for enhanced stability and reliability. RA-CL3-15-R is an ideal amplifier for high channel count DWDM 40G/100G transmission and fiber sensor systems. It is equipped with LCD touch screen and LabVIEW (TM) remote user interface for easy operation. Contact Optilab for more information.

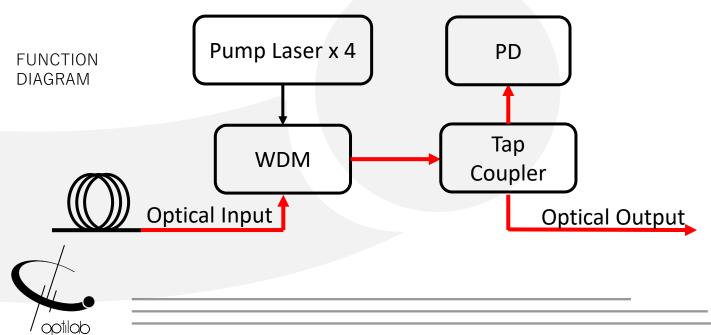
FEATURES

USE IN

- 1535 nm 1609 nm
 Over 15 dB On/Off Gain
- Gain flatness of $< \pm 1.5$ dB

- Excellent Stability
- Up to 200 DWDM Channels
- Touch Screen LCD & USB Interface
- Long Haul / Ultra-Long Haul Systems
 - Long Repeaterless Links
 - Low Latency Links

- Multi-Channel DWDM Networks
- 40 / 100 Gbps Transmission





SPECIFICATIONS

GENERAL

Pump Wavelength	1440, 1455, 1470, 1490 nm
Operating Wavelength	1535 nm to 1609 nm
Input Signal Level	-40 to -10 dBm
Pump Power	Up to 1.5 W
Averaged Gain @ -15 dBm Input	> 15 dB
Gain Flatness	< ±1.5 dB
Signal Insertion Loss	< 1 dB
Output Stability	< ± 0.1 dB for 24 hours
Degree of Polarization	< 5% for each channel

Operating Temperature	-5°C to + 55°C
Storage Temperature	-40 °C to 80 °C
Operating Humidity	0% to 90% Relative Humidity
Power Supply	110 – 240 VAC
Remote Port	USB 2.0
Dimensions	3U: 450 mm x 615 mm x 150 mm
Optical Input Fiber	SMF-28 with 3 mm Jacket (no connector)
Output Fiber Connector	FC/APC





Touch Screen Interface: easy adjustment of pump current settings

RA-CL3-15-R	MODULE 1 SETTINGS
MODULEMODULEPUMP1PUMP2PUMP3PUMP4PUMP5PUMP6SETPUMP7PUMP8NEXT	PUMP1 CURRENT:0000mAON/OFFSHIFTPUMP2 CURRENT:0000mAINCPUMP1 LIMIT:1600mAINCPUMP2 LIMIT:1600mASAVEOUTPUT POWER1:LOWdBmSAVEOUTPUT POWER1:LOWdBmESC

LabVIEW Remote Control Interface

💠 🥘 🚺 15pt	Application Font 🔹 🖫 🕶	-0 . •	≝ ▼ (\$ \$▼				•	jHII
🎇 Optila	ab r	RA-C	L3-15-R Ren	not	e Software l	Prog		sion: 2
Com Number	CHANNEL 1		CHANNEL 2	0	CHANNEL 3	۲	CHANNEL 4	
Kij comi ♥ Output Power dBm	Pump1 Current	mA	Pump1 Current	mA	Pump1 Current	mA	Pump1 Current	m
	Pump2 Current	mA	Pump2 Current	mA	Pump2 Current	mA	Pump2 Current	m
	Pump1 Limit	mA	Pump1 Limit	mA	Pump1 Limit	mA	Pump1 Limit	m
	Pump2 Limit	mA	Pump2 Limit	mA	Pump2 Limit	mA	Pump2 Limit	m
	Output Power1	dBm	Output Power1	dBm	Output Power1	dBm	Output Power1	dB
	Output Power2	dBm	Output Power2	dBm	Output Power2	dBm	Output Power2	dB
	Current1 () 100 [Set	Current1 () 100	Set	Current1 () 100	Set	Current1 / 100	Set
Stop	Current2 / 100	Set	Current2 / 100	Set	Current2 / 100	Set	Current2 / 100	Set

Typical Application Diagram

