

# 2nd Order Distributed Fiber Raman Amplifier

## YB / RAMAN / THULIUM AMPLIFIERS



On the basis of the first-order fiber Raman amplifier, the second-order fiber Raman amplifier incorporates a pump laser in the 1340~1360nm wavelength band to provide Raman gain for the 14xx nm laser of the first-order Raman amplifier. This effectively reduces system noise and is suitable for amplifying optical signals in longer-distance unrepeated optical transmission systems. The second-order fiber Raman amplifier must be used in conjunction with the first-order fiber Raman amplifier.

- Wide operating wavelength
- High Gain
- Low noise figure
- Applications
- Long-distance fiber communication
- Fiber optic distributed sensing
- Fiber Laser

### Specifications

Parameter	Specification
Pump Wavelength (nm)	1340~1360
Signal Wavelength	1425~1465
Raman Gain (dB)	10/20
Gain Flatness (dB)	<2
Pump Power (mW)	300/500/1000/1400
Degree of polarization (DOP) of pump light	5% (Typical), 10%(Max)
Polarization dependent gain (dB)	<0.2
Polarization mode dispersion (ps)	<0.5
Input/Output Isolation (dB)	>35
Noise Figure (dB)	0
Optical Fiber	SMF-28
Fiber connectors	FC/APC
Control Mode	APPC (Automatic pump power control)

\* Signal Wavelength: Customizable

\* Pump Power: Customizable

Source: WaveQuanta product database. For ordering, customization (wavelength, power, package) and quotation, contact sales@wavequanta.com.