



### **Key Features**

- Low noise
- High Gain
- Wide wavelength range

## **Applications**

- Optical fiber distributed sensing
- Fiber Lasers
- Long-distance optical

# For more Info

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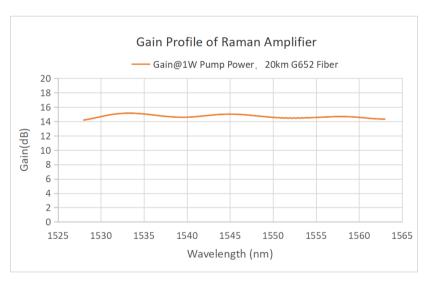
Shenzhen, China 518109

## **Distributed Fiber Raman Amplifier**

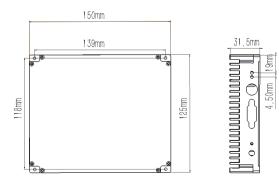
#### -1st Order Fiber Raman Amplifier

Fiber Raman amplifier uses the Raman effect in quartz fiber, using a pump laser with a wavelength of 14xxnm to provide Raman gain to optical signals, and achieves high gain and low noise amplification of optical signals in the C or L band, which can effectively compensate for the attenuation of optical signals in long-distance optical fiber transmission. It can be used in long-distance optical transmission systems, distributed optical fiber sensing, and intensive wavelength division multiplexing optical transmission systems





#### Module dimensions:



\*Note: When the module is installed, the cooling fins are facing upwards, and ensure that sufficient cooling air is blown along the cooling fins.

Web-site: https://www.dkphotonics.com/ Email: sales@dkphotonics.com DK-XS-DT-006-A/2





#### **Performance Specifications**

#### Distributed Fiber Raman Amplifier: -1st Order Fiber Raman Amplifier

Optical Parameter	Unit	Typical Values	Remark
Signal Wavelength	nm	1528~1565 1570~1650	customizable
Raman gain	dB	10/20	*Note 2
Gain Flatness	dB	<2	
Pump wavelength	nm	1425~1457 1470~1550	
Pump Power	mW	300/500/1000/1400	customizable
Pump light polarization DOP	-	5% (Type), 10%(Max)	
Polarization dependent gain PDG	dB	<0.2	
Polarization Mode Dispersion PMD	ps	<0.5	
Input/output Isolation	dB	>35	
Fiber Type	-	SMF-28	1.0m length
Optical Connector	-	FC/APC or Fiber collimator	FC/APC only for low
			power test
Control Mode	-	Automatic pump power control (APPC)	

<sup>\*</sup>Note 2 :This amplifier is only Raman amplifier pumping and needs to cooperate with the long-distance quartz fiber in the user's system to generate sufficient signal gain.

Electrical and environmental parameters	Desktop	Module	
Control Mode	Button	RS232	
Communication Interface	* Optional	DB 25 Female	
Power Supply	100~240V AC, <45W	5V DC, <30W	
Dimensions	260(W)×320(D)×120(H)mm	125(W)×150(D)×30(H)mm	
Operation Temperature Range	-5~+55°C		
Operation Humidity Range	0~70%		

#### Order information P/N: 10-2-3-4

When you inquire, please provide the correct P/N number according to our ordering information, and attach the appropriate description would be better.

1	2	3	4
FRA	Signal wavelength (nm)	Pump power (mW)	Package Type
	1550	300/500/1000/1400	M: Module

## **Ordering Information for Custom Parts**

If you need to customize other specifications, please provide detailed description for your requirement.