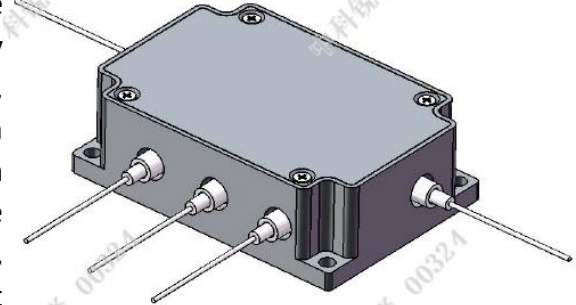


## Miniaturized 1\*N Adjustable Fiber Optic Splitting Module

### ◆ Product introduction

Miniaturized 1\*N adjustable fiber optic splitting module is the core module in optical experiments, especially in quantum optical experiments. The polarization extinction of the traditional beam splitter with fused taper is relatively low, and the splitting ratio cannot be adjusted online, which cannot meet the needs of precision measurement experiments. The optical fiber beam splitting module introduced by CSRayzer has the characteristics of arbitrarily adjustable splitting ratio, high extinction ratio, small volume, compact structure, vibration resistance, high and low temperature, and the wavelength range covers 400-2,000 nm at most.



### ◆ Parameter index

Parameter	unit	Value
Central Wavelength	nm	420/461/509/780/852/ Customization
Beam Splitting Configuration		1*3/1*4/1*8 or customized
Beam Splitting Ratio Adjustment Range	%	0-100%
Beam Splitting Ratio Stability	%	≤0.5
Insertion Loss	dB	≤1.5
Polarization Extinction Ratio	dB	≥28
Return Loss	dB	≥45
Peak Power	W	5
Fiber type		Single mode polarization maintaining
Connector		FC/APC or FC/PC
Working Temperature	°C	0 to 50
Storage Temperature	°C	-40 to 85
Dimension	mm	65*45*20(1*4)

◆ Polarization characteristic test

The inside of the module is coupled into the single-mode polarization-maintaining fiber through the wave plate group and the spatial beam splitting/combining device, and each optical component is fixed in the whole optical path by a highly stable and fixed dispensing method. The module maintains excellent polarization retention ability in the complex environment of high and low temperature and vibration, and the polarization extinction ratio of each module is measured under the conditions of high and low temperature and vibration before leaving the factory. The following figure is a typical 1\*4 polarization characteristic test result:

