▶ 非球面保偏光纤准直器

Aspheric Lenses Collimators with PM Fiber

采用紧凑精巧的结构设计,其中特定倾角的角尾纤和非球面透镜经过精密调节,从而保证出射 光呈现出高质量的高斯光束形态,同时具备出众的准直特性。不仅如此,在内部光机精密结构上进 行了深度优化,极大程度上降低了后端光纤活动时对出射光斑产生的不良影响,为精密测量或控制 过程中信号的稳定传输提供了坚实可靠的保障。此外,凭借远讯精湛的精密光学调试技术以及完备 的测试手段,能够将出射光光斑的中心偏移量以及出光偏角精准地控制在极小的范围之内,尽显产 品在光学性能上的高精度与高可靠性。

It boasts a compact and ingeniously designed structure. The angled pigtail fiber with a inclination angle and the aspherical lens undergo meticulous and precise adjustments. This meticulous calibration ensures that the emitted light manifests as a high-quality Gaussian beam , and simultaneously endowing the collimator with exceptional collimation characteristics.

Furthermore, the internal precision opto-mechanical structure has undergone a thorough and in-depth optimization process. This optimization effectively minimizes the detrimental impact of the movement of the rear-end fiber on the emitted light spot, thereby providing a robust and dependable safeguard for the stable transmission of signals during intricate precision measurement or control operations.

Additionally, leveraging Ysenser's sophisticated precision optical debugging techniques and comprehensive testing methodologies, both the deviation of the center of the emitted beam and the light deflection angle can be accurately and precisely regulated within an extremely narrow margin. This exemplifies the product's remarkable high precision and reliability in optical performance, setting it apart in the field.



特征 Features:

• 出光偏角、出光中心偏移量极小 The deflection angle of the emitted light and the deviation of the emitted light center are both minuscule.

• 多种光纤类型可选Fiber Type Options: PM460/PM630/PM780/PM980/PM1310/PM1550

• 多种连接器类型可选 Connector Options: FC/PC、FC/APC、LC、SC、SMA905

•多种护套类型可选 The Type of Cable Options: PVC0.9mm/2.0mm/3mm, 3mm armored cable, 3mm Stainless steel, 0.9mmTeflon

• 封装材料304不锈钢,结构紧凑可靠The packaging material is 304 stainless steel, and the structure is compact and reliable.

•可定制无磁、真空环境应用封装结构 It can be customized with a packaging structure for applications in a non-magnetic and vacuum environment.

18

| Wavelength | Bandwidth | Waist Beam Size | Divergence Angle | NA | EFL | Pakage Dia. | Fiber Type | Max. Power | Transmittance |
|------------|-----------|--------------------|------------------|------|---------|-------------|------------|---------------|---------------|
| 532nm | ±5nm | 0.86mm | 0.05°+0.01° | 0.24 | 4.59mm | Ф9.0mm | PM460 | 1W | >90% |
| 532nm | ±5nm | 2.06mm | 0.02° +0.01° | 0.24 | 10.96mm | Ф9.0mm | | | |
| 532nm | ±5nm | 3.3mm | 0.015° +0.01° | 0.15 | 18.14mm | Ф9.0mm | | | |
| 633nm | ±5nm | 0.86mm | 0.05°+0.01° | 0.24 | 4.59mm | Ф9.0mm | PM630 | | |
| 633nm | ±5nm | 2.06mm | 0.02° +0.01° | 0.24 | 10.96mm | Ф9.0mm | | | |
| 633nm | ±5nm | 3.3mm | 0.015° +0.01° | 0.15 | 18.14mm | Ф9.0mm | | | |
| 780nm | ±5nm | 1.0mm | 0.06°+0.01° | 0.24 | 4.63mm | Ф9.0mm | PM780 | | |
| 780nm | ±5nm | 2.4mm | 0.026° +0.01° | 0.24 | 11.06mm | Ф9.0mm | | | |
| 780nm | ±5nm | 4.0mm | 0.01° +0.01° | 0.15 | 18.33mm | Ф9.0mm | | | |
| 980nm | ±5nm | 1.0mm | 0.07°+0.01° | 0.24 | 4.66mm | Ф9.0mm | PM980 | | |
| 980nm | ±5nm | 2.4mm | 0.03° +0.01° | 0.24 | 11.16mm | Ф9.0mm | | | |
| 980nm | ±5nm | 4.0mm | 0.02° +0.01° | 0.15 | 18.52mm | Ф9.0mm | | | |
| 1310nm | ±5nm | 0.84mm | 0.11°+0.01° | 0.24 | 4.70mm | Ф9.0mm | PM1310 | | |
| 1310nm | ±5nm | 2.04mm | 0.047° +0.01° | 0.23 | 11.25mm | Ф9.0mm | | | |
| 1310nm | ±5nm | 3.35mm | 0.029° +0.01° | 0.15 | 18.67mm | Ф9.0mm | | | |
| 1550nm | ±5nm | 0.87mm | 0.11°+0.01° | 0.24 | 4.74mm | Ф9.0mm | PM1550 | | |
| 1550nm | ±5nm | 2.10mm | 0.053° +0.01° | 0.23 | 11.31mm | Ф9.0mm | | | |
| 1550nm | ±5nm | 3.4mm | 0.032° +0.01° | 0.15 | 18.75mm | Ф9.0mm | | | |

参数表 Parameter

* 束腰光斑直径: 取高斯光束1/e²处, 均用各波长单模光纤理论计算值。

Waist beam size: calculated using the theory of single-mode optical fiber for each wavelength, taken at the $1/e^2$ intensity point of the Gaussian beam.

*光束远场发散角:按高斯光束1/e²理论计算值。

Far-field divergence angle of the beam: calculated according to the Gaussian beam 1/e² theory.

* 其它光斑或封装尺寸接收定制

Customization is accepted for other light beam sizes or packaging dimensions.