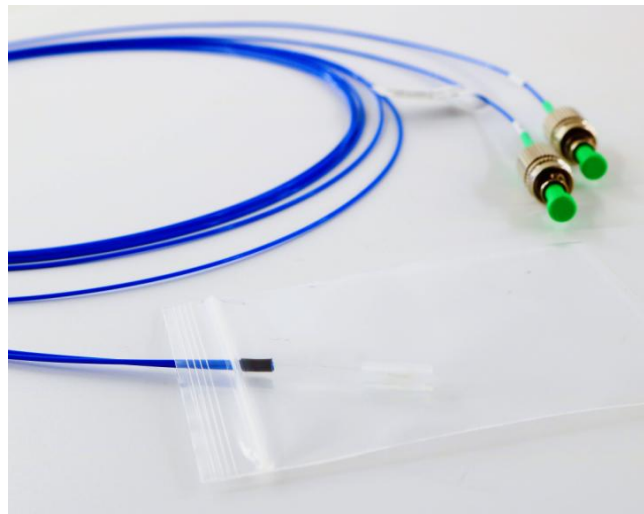# Dual Channel Fiber Optic Array

● Product Description

Idealphotonics provides custom fiber arrays with different fiber types. The fiber types we currently supply include single-mode, multi-mode, and polarization maintaining. At the same time, we can also customize fiber arrays with different fiber lengths. Thanks to many years of processing experience, we can currently provide high-precision fiber grinding and alignment, and we can also glue the fibers together for grinding and polishing. Our high-precision alignment equipment can achieve a

polarization-maintaining fiber alignment with an angle deviation better than 0.5deg, and our end-face observer can ensure that the end-face grinding quality meets special application areas, such as interferometers. In addition, our processing accuracy can reach a spacing as small as 5μm. At the same time, we also customize different connectors for different application requirements of customers. Welcome to contact us for processing and customized fiber arrays.

● Product features

Support fiber types SM, MM, PM Fibers、 Any fiber length and spacing、 High precision and high reliability、 Low PDL Low insertion loss、 Compact structure

● Part Number
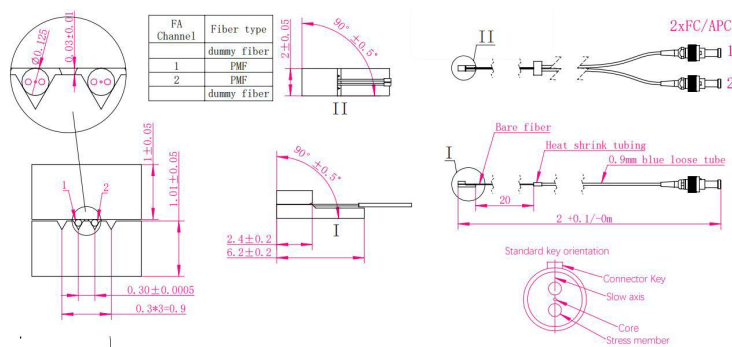
MP-FAR-1×2-300-PM460-PA

● Application area

Fiber Optic Sensors、 Optical Switch、 Interferometer、 Splitter / Combiner、 Integrated Devices 、 Waveguide Coupled Devices 、 Multiplexer / Demultiplexer

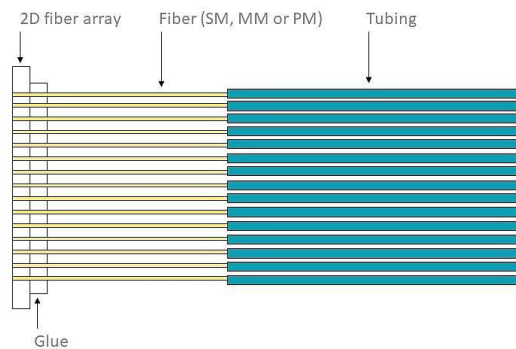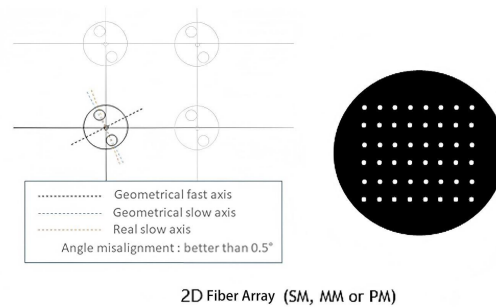## ● Core parameters

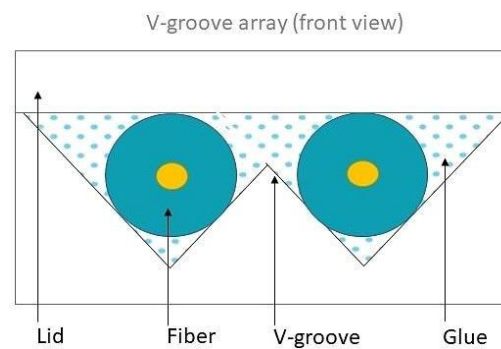| Fiber Spacing	Fiber Connector
300um	FC/APC

● Dimension Drawing

● General Parameters

Array size	Custom Made
Fiber length	From a few centimeters to hundreds of meters
Fiber Type	SMF, MMF, PMF or custom
Fiber spacing	Customized according to customer needs
Array position accuracy	+/- 1 um (X and Y axis)
Grinding Angle	0°+/-0.5°,8°+/-0.5°, custom
Fiber Optic Connector Type	FC, LC, SC, SMA, ST, MU, E2000, other

Fiber arrays are key components for connecting optical fibers to their waveguides for different applications. Idealphotonics provides unique assembly/cutting/polishing processes to obtain fiber core position accuracy with optimal polishing surface.

Geometrical fast axis
Geometrical slow axis
Real slow axis
Angle misalignment : better than 0.5°

2D Fiber Array (SM, MM or PM)

2D fiber array   Fiber (SM, MM or PM)   Tubing

Glue

2D Fiber V- Groove Array

V-groove array (front view)

Lid   Fiber   V-groove   Glue

Model and ordering

MP-FRA- A□-G□□□-S○-Material▽-☆-△- XX

A□：Polished Angle

0:0°

8:8°

G □□□: Optical fiber spacing

1:1mm 2:2mm

S○：Fiber Array Structure

12:1x2

22:2x2

65:6x5

56:5x6

Material▽：

Q: Quartz

S: SiO 2

R: Semicircular tube

F: Square tube

☆ : **Pigtail Length**

05:0.5m

1:1m

10:10m

△: **Loose Tube**

B: Bare Fiber

9:900um Loose Tube

20:2mm Loose Tube

30: 2mm Loose Tube

XX: Fiber and Connector Type SA=SMF-28E+ FC/APC

SP=SMF-28E+ FC/PC

PA=PM Fiber+ FC/APC

PP=PM Fiber+ FC/PC