PLC Quick Alignment System

Model: KS502-AM

Low cost version

Alignment of Wave-guide and Fiber array

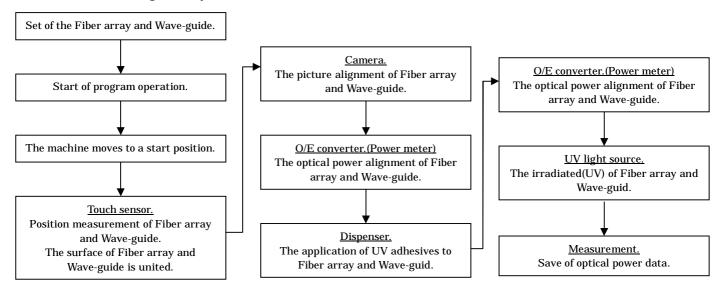


High precision alignment by original high rigidity SUS stage.

High speed alignment by original power meter.

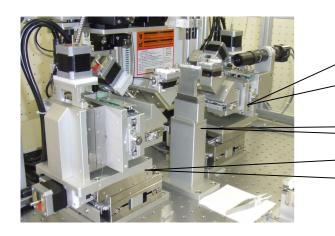
High speed alignment by original multithread software.

The main flows of the alignment system.



The program can be changed freely.





Output: Automatic Fiber array stage unit

 $Automatic\ stage = X,Y,Z,\theta x,\theta y\ ,\theta z$

The contact sensor is attached

(It is automatic and the surface of Fiber array and Wave-guide is united.) Picture automatic alignment camera

 $\pmb{Center}: Wave-guide\ unit$

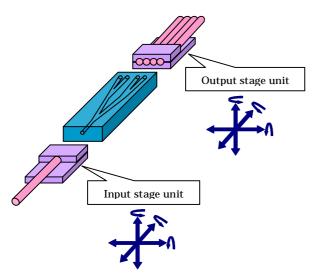
Input: Automatic Fiber array stage unit

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The contact sensor is attached

(It is automatic and the surface of Fiber array and Wave-guide is united.)

Auto Motion Axes (12axes)



The move part of each unit.

	Axis	Working Range	Resolution
	LX	± 25mm	0.025 µ m
Input	LY	± 15mm	0.025 µ m
Automatic	LZ	± 25mm	0.025 µ m
Fiber array	L x	±8°	0.000015°
stage unit	L y	±8°	0.000012°
	L z	±8°	0.000012°
	RX	± 25mm	0.025 µ m
Output	RY	± 15mm	0.025 µ m
Automatic	RZ	± 25mm	0.025 µ m
Fiber array	R x	±8°	0.000015°
stage unit	R y	±8°	0.000012°
	R z	±8°	0.000012°

The main equipment of KS502-AM

The main mechanism portions	The main control unit	
Input: Automatic Fiber array stage unit	LD light source (Option)ASE light source	
Automatic stage = $X,Y,Z,\theta x,\theta y,\theta z$	Selection of wavelength can be performed.	
The contact sensor is attached	O/E converter (2ch)	
Fiber array holder	Stepper motor driver (12 axis)	
Center : Wave-guide unit	Contact sensor driver (2ch)	
Wave-guide holder	UV light source and UV light guide	
Output : Automatic Fiber array stage unit	Dispensor,	
Automatic stage = $X,Y,Z,\theta x,\theta y,\theta z$	Computer	
The contact sensor is attached	Kuge proprietary Cockpit software	
Picture automatic alignment camera	Stepping motor controller board	
Fiber array holder	Picture board	
Stage unit of UV hardening and an observation camera.	A/D board	
The UV light source and fiber for UV hardening.	LCD monitor	
The observation camera and a monitor. ($\times 2$)	Computer rack	
Anti-vibration table and Measurement shelf		



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