

# Parallelism Sensor



Precision measurement is not just about removing variability,  
it is also opening up new possibilities.

Now under development!

# Development Background

Is there an easy method to measure the parallelism of opposing surfaces? We have developed this system in response to such customer requests.

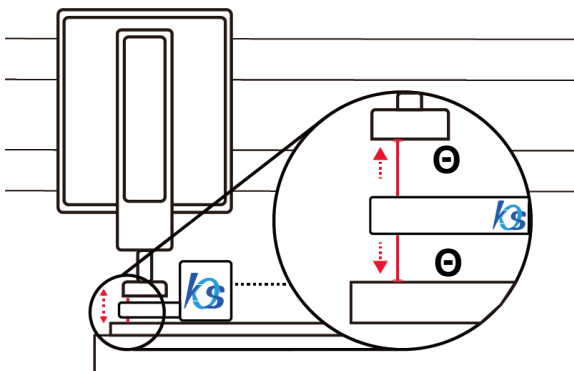
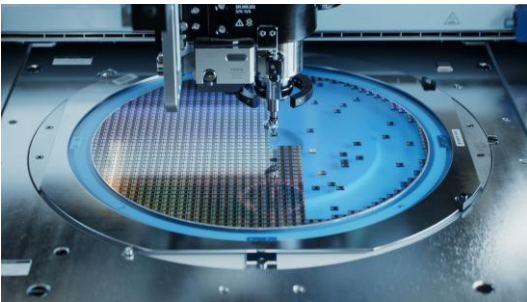
Slim Tip Design That Fits Directly Into the Gap You Want to Measure. Our ultra-thin probe slides effortlessly into narrow spaces. Parallelism measurements that previously relied on pressure-sensitive paper and could not be managed numerically can now be quantified accurately and reliably by anyone. This product eliminates the complexity and time-consuming nature of conventional measurement work.

## Features

- Easily measure the parallelism of opposing surfaces
- No PC required, stand-alone operation is possible through VGA monitor connection
- 18 mm slim sensor design for measurement in narrow gaps.

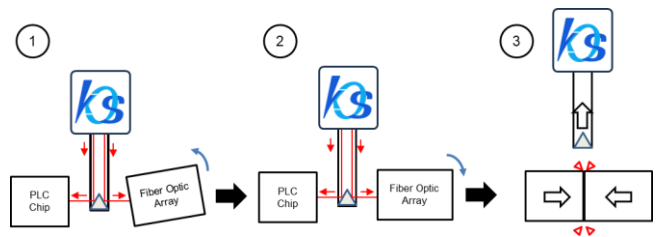
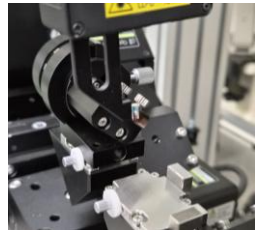
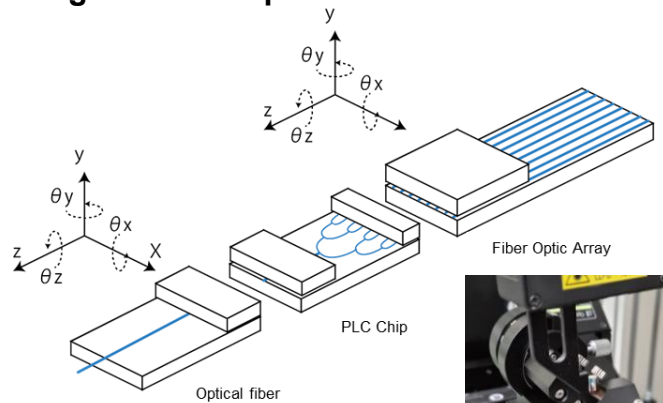
## Application sample

### Confirmation of parallelism between die collet and reference plane



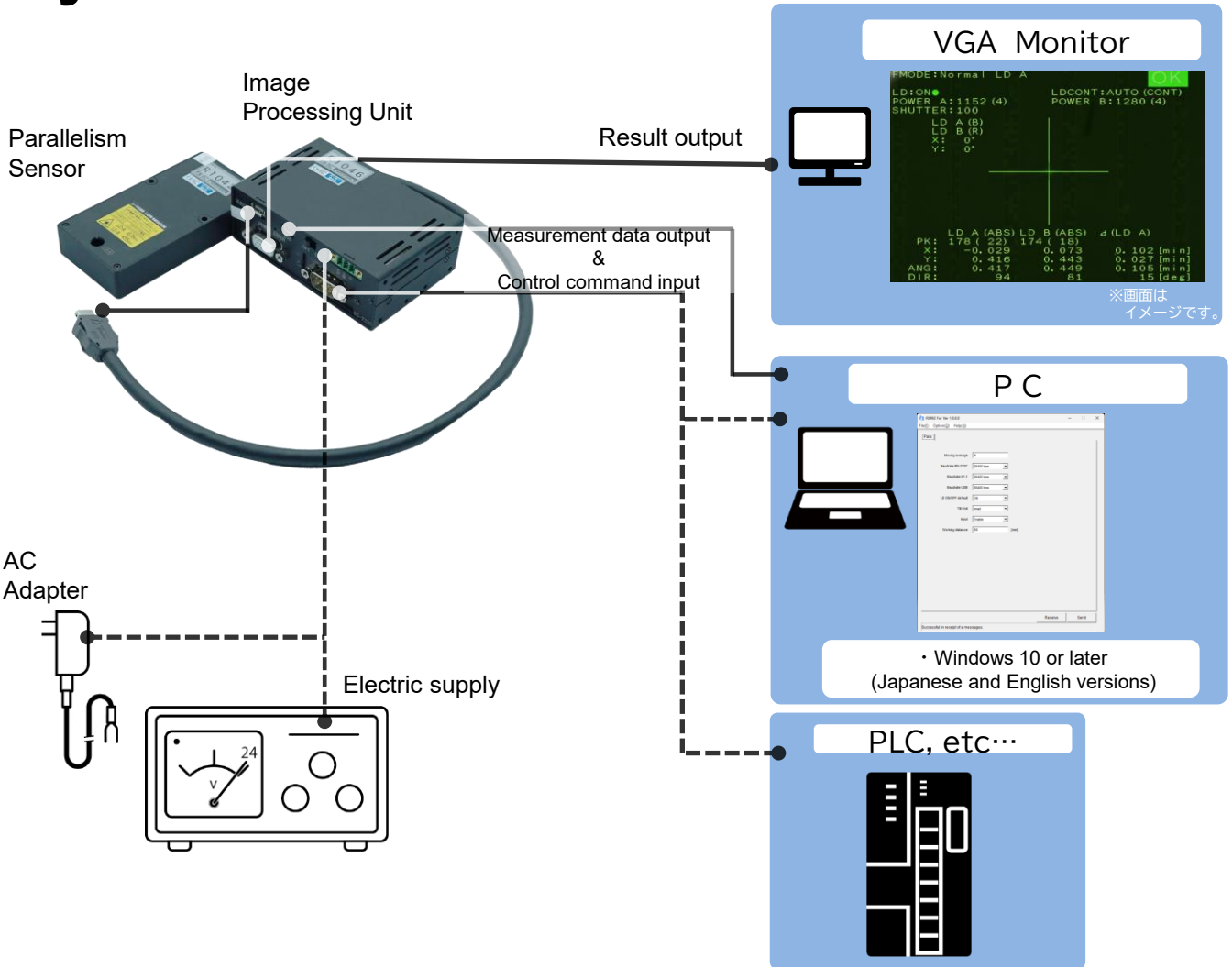
The parallelism sensor enables non-contact verification of the parallelism of opposing surfaces and allows numerical management of the parallelism of the top and bottom surfaces.

### Optical fiber array and PLC chip parallel alignment for optical communication modules



To ensure reliable adhesion and assembly of optical communication devices, the parallelism of opposing surfaces is measured and adjusted. Numerical angle measurement enables the reduction of takt time.

# System

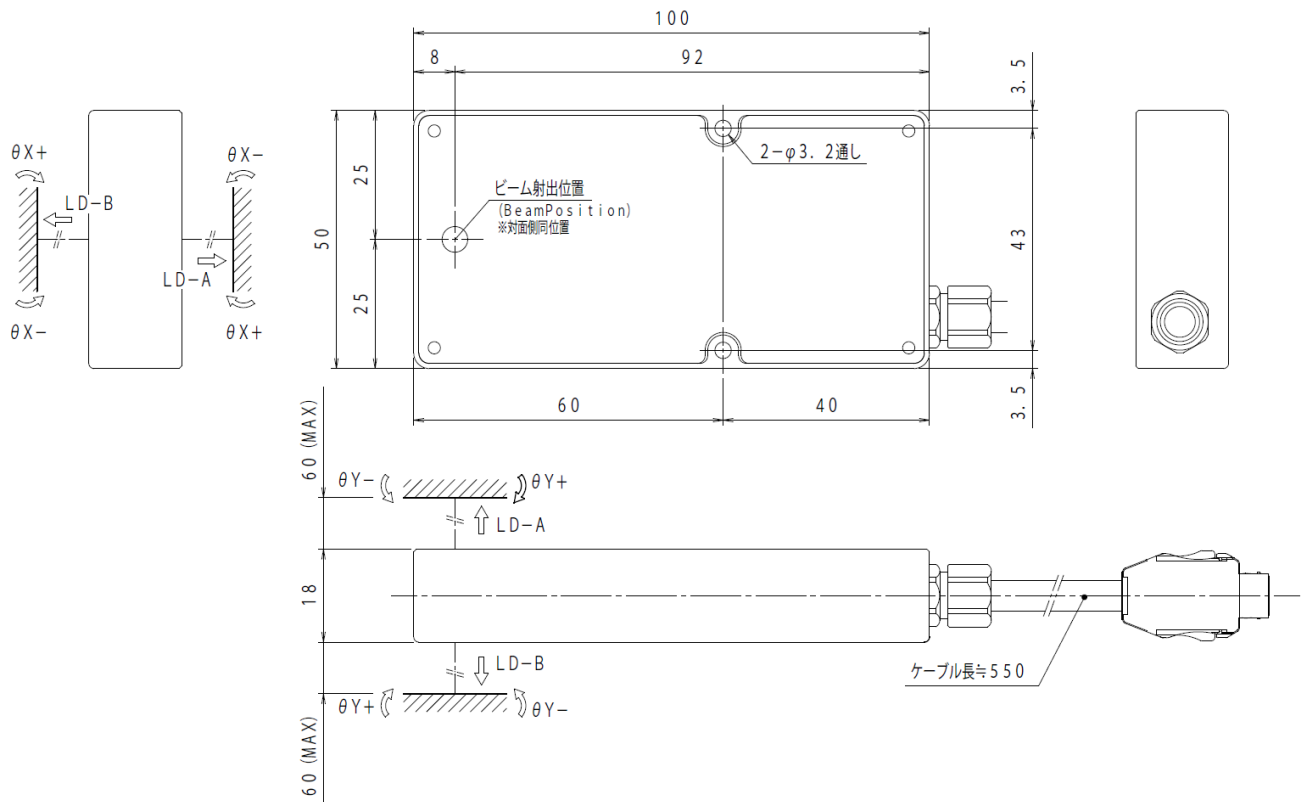


# Specification

Specifications are subject to change as this is a concept model.

Item	Parallelim Sensor
Measurement Sample	Optical Plane
Measurement Type / Measurement Method	Parallelim ( $\theta X, \theta Y, \Delta$ ) / Autocollimator
Measurement Area / Working Distance	$\pm 120\text{mm}$ ( $\pm 0.5\text{deg}$ ) $\pm 200\text{mm}$ ( $\pm 0.3\text{deg}$ )
Data Output	30times/sec

# Drawing



**Specifications are subject to change as this is a concept model.**

	<b>Katsura Opto Systems Co.,Ltd.</b>	
HQ	202, Crown Building 1-7-11, Kami-Asao, Asao-ku, Kawasaki-shi, Kanagawa 215-0021 JAPAN TEL: +81-44-969-5231 FAX: +81-44-969-5230	
China	KATSURA OPTO TECHNOLOGY (Shanghai) 1411, Yecheng Road, Jiading Industrial District, Shanghai 201-821 CHINA TEL: +86-21-69529975 FAX: +86-21-69529976	