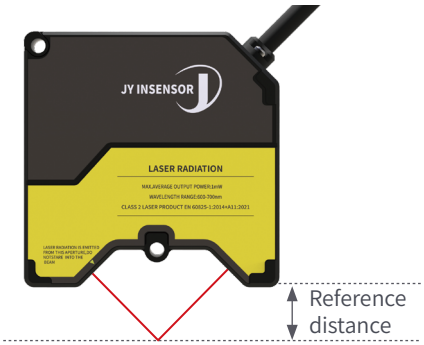
JY INSENSOR

Laser Displacement Sensor

INTRODUCTION TO INTELLIGENT SENSOR

Product Overview

The JPK Series is a non-contact, ultra-high-speed, ultra-high-precision laser displacement sensor. The flagship JPK002T offers a 15 mm reference distance and 10 nm repeatability, designed for high-demand inspections under stable conditions — providing core thickness and flatness measurement solutions for precision electronics, photovoltaics, and high-precision machining.



Technical Advantage

Ultra-High-Speed Scanning

Meets the demands of high-speed inline inspection

Ultra-High Precision

10 nm repeatability
Faithfully captures target detail

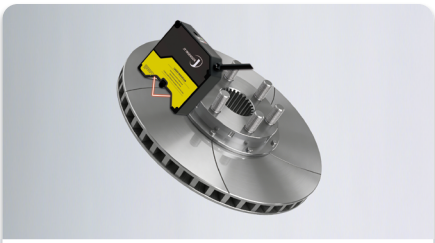
Non-Contact Measurement

Non-contact, no target damage
Ideal for precision inspection

Material Versatility

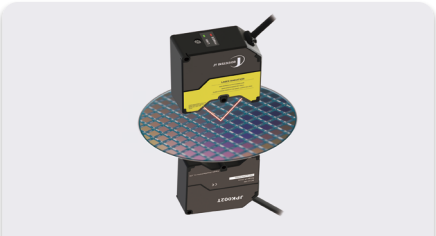
Unaffected by color or gloss
Stable measurement

Application Scenarios



Runout Measurement

Precision machining & disc runout measurement



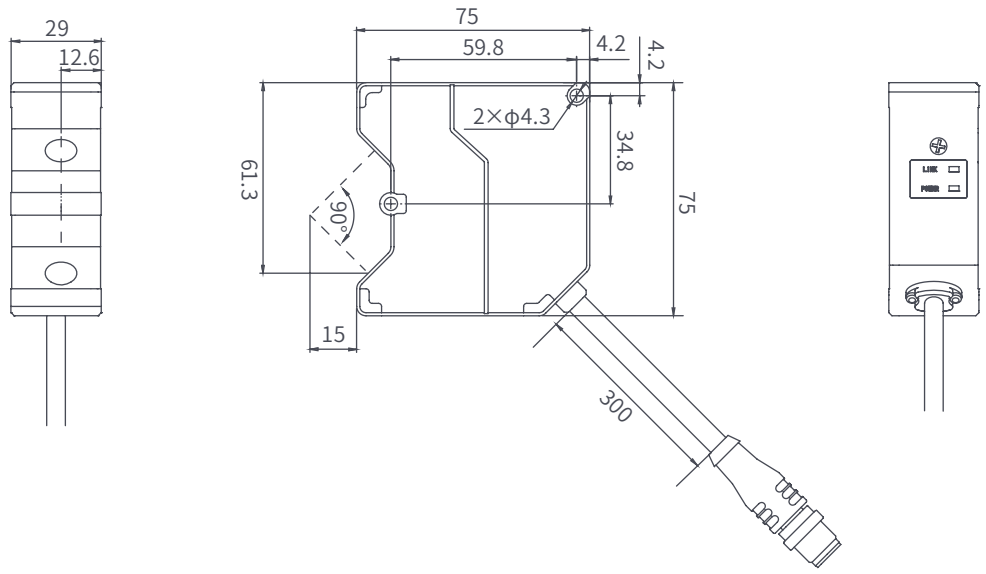
Thickness Measurement

Photovoltaic wafer measurement
Li-ion battery electrode measurement

Warpage & Flatness

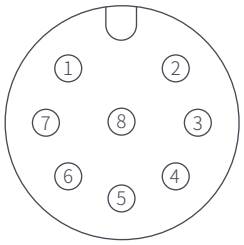
Glass panel warpage, flatness & thickness measurement

Dimensions Diagram



【Unit:mm】

Pin Arrangement

Aviation connector pin arrangement	Pin	Color	Function
 M12 Connector 8-pin, A-Code	1	Pink	Input (MF) / RS485+
	2	Black	0 V
	3	Red	+Ub
	4	White	TxD-
	5	Blue	RxD+
	6	Green	TxD+
	7	Yellow	Input (MF) / RS485-
	8	Brown	RxD-

Performance Specifications

Model		JPK002T
Reference Distance		15 mm
Measuring Range		14-16 mm
Repeatability		10 nm
Linearity		< ±0.05 % MR
Voltage Range		11-30 VDC
External Input		Data mode, laser mode, zero reset, etc.
Communication Interface		100BASE-TX
Measuring Rate		Up to 100 kHz (with ROI enabled)
Laser	Wavelength	Red laser (658 nm)
	Class	Class2 EN:60825-1:2014+A11:2021
Temperature Range	Storage	-20 ~ +70 ° C (No condensation)
	Work	0 ~ +50 ° C (No condensation)
Weight		Approx. 232 g
Display		LED indicator × 2
Protection Class		IP67