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Innovation to the Core



iFocus

Auto Focus Sensor IT-AF-TTL1



Auto Focus Function
Through The Lens(TTL) type



High-speed FPGA-based
Capable of focus detection to Z-axis control



Fast Sampling Rate
Up to 1.2kHz



Real Time Auto Focus
Applicable in line scan through high-speed tracking



Wide Capture Range
Up to $\pm 1,500\mu\text{m}$

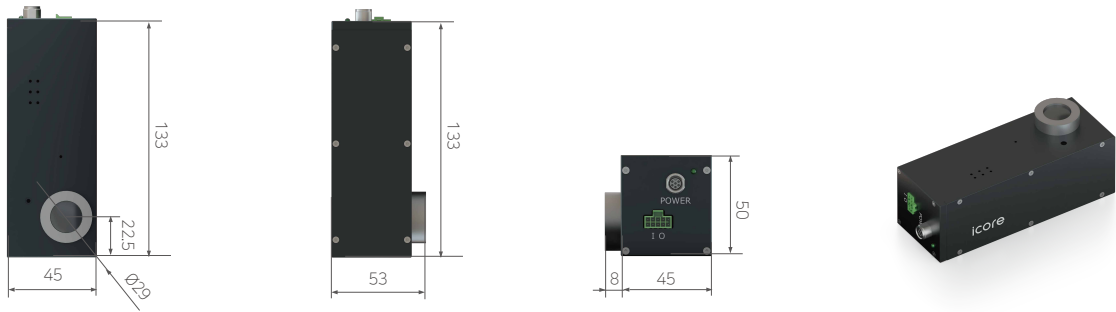


Flexible Customization
From Optical Lenses to AF Sensors and Z-axis Actuators

Specifications

Model		IT-AF-TTL1
Sensing Type		Through The Lens
Sampling Rate		Up to 1.2kHz
Capture Range	5× Objective Lens	±1,500μm
	10× Objective Lens	±500μm
	20× Objective Lens	±300μm
	50× Objective Lens	±100μm
Precision	Repeatability	1/3 Objective Depth of Field or better
	Static AF Accuracy	±1/4 Objective Depth of Field or better
	Tracking AF Accuracy	±1/2 Objective Depth of Field or better
Laser	Wavelength	655nm / 685nm / 780nm
	Laser Class	Class 1
	Light Pattern	Line Laser
Function	AF Sensor	Auto Exposure / Auto Laser Control Laser Brightness Control by PD Feedback Support Real-time Graph Display Motion Control
	Tracking Mode	OFF / Single / Continuous
	Motion Control	Support Jog /Absolute / Incremental Move Support HW Limit & SW Limit Auto Calibration
Interface		RS-485(Up to 921,600bps)

Dimensions (mm)



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iFocus Auto Focus Sensor

IT-AF-MBK1 & IT-AF-MBK2



Auto Focus Function
Optical Triangulation type



High-speed FPGA-based
Capable of focus detection to Z-axis control



Fast Sampling Rate
Up to 1.2kHz



Real Time Auto Focus
Applicable in line scan through high-speed tracking



Wide Capture Range
Up to $\pm 1,800\mu\text{m}$



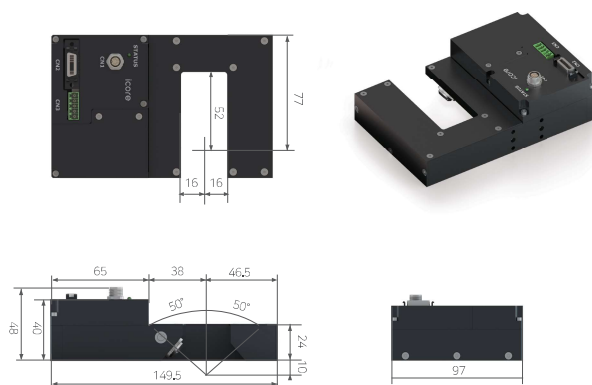
Flexible Customization
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Specifications

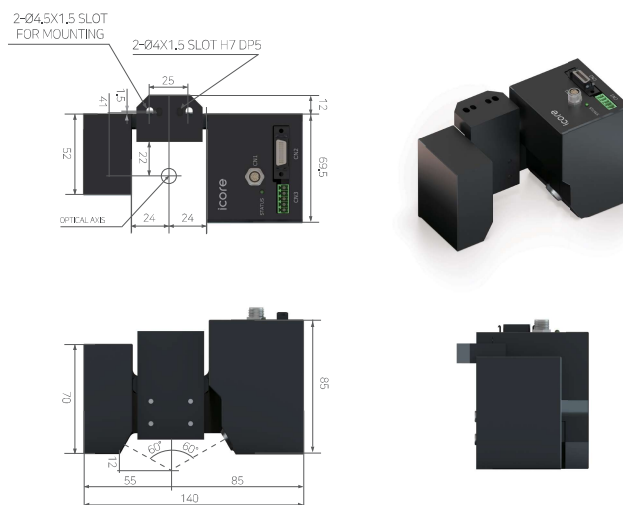
Model		IT-AF-MBK1	IT-AF-MBK2
Sensing Type		Optical Triangulation	
Sampling Rate		Up to 1.2kHz	
Capture Range		±1,100μm	±1,800μm
Precision	Repeatability	<0,2μm	
	Linearity Error	<0,5%	
Laser	Wavelength	655nm / 685nm / 780nm	
	Laser Class	Class 1	
	Light Pattern	Line Laser	
Function	AF Sensor	Auto Exposure / Auto Laser Control Laser Brightness Control by PD Feedback Motion Control / Support Real-time Graph Display Multiple Layer Detection (Max.5)	
	Tracking Mode	OFF / Single / Continuous	
	Motion Control	Support Jog /Absolute / Incremental Move Support HW Limit & SW Limit Auto Calibration	
Interface		RS-485(Up to 921,600bps)	

Dimensions (mm)

IT-AF-MBK1



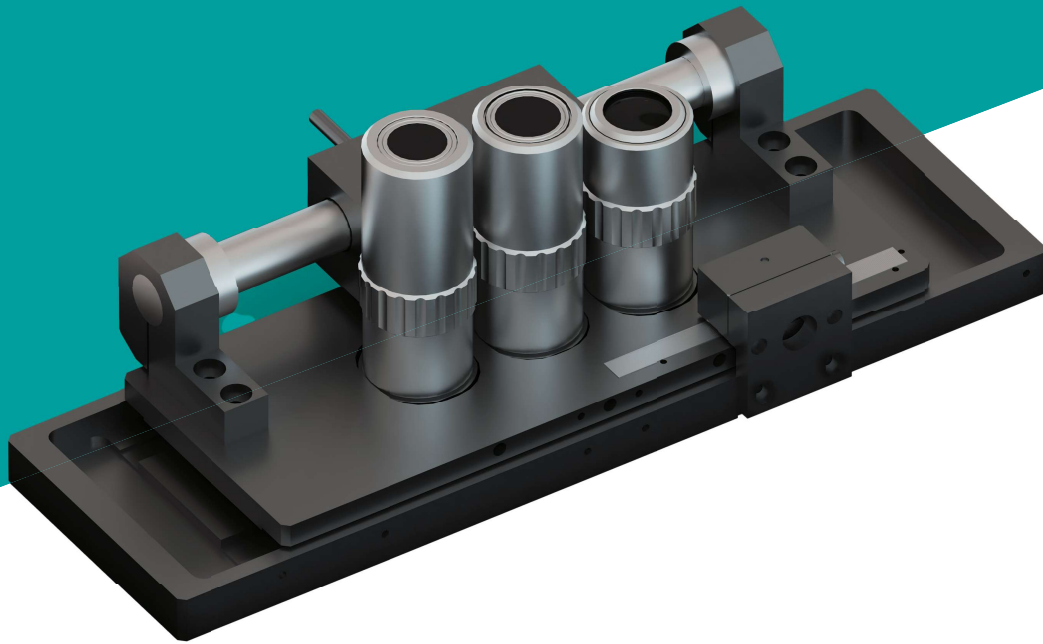
IT-AF-MBK2



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Linear Lens Changer



iFocus

Linear Lens Changer

Features

- High Speed Lens Change Time : Max. 0.2sec
- Linear Shaft Motor (Resolution : 0.05 μ m)
- High Precision Accuracy ($\pm 1\mu$ m)
- Perfect Match with iFocus Product

Application

- FPD Inspection
- Film Inspection
- Wafer Inspection
- PCB Inspection
- Glass inspection

iFOCUS Linear Lens Changer for Auto Focus Module

Specifications

Model	IAF-LLC03	IAF-LLC04	IAF-LLC05
Lens Slot	3-Slot Assy	4-Slot Assy	5-Slot Assy
Lens Spacing	38mm		
Thread Type	M26 x 36TPI		
Lens Changing Time	< 0,2s		
Motor type	Servo Motor (Linear Shaft Motor)		
Linear Scale Encoder Resolution	0.05μm		
Accuracy	± 1μm		
Stroke	80mm (@ 3Lenses)		
Mechanical Guide	Cross Roller Guide		

Dimensions (mm)

4-M4 C'B (Bottom Side)

