Microscope Autofocus Module GY5000

Features

- True Autofocus: Focus measurement via microscope objectives.
- μs-Level Detection Speed: Enables real-time autofocus.
- Active Autofocus: Unaffected by sample characteristics.
- 830nm Focusing Laser: Maintains original microscope functions.
- Compatible with Various Microscopes and Lenses.
- Outputs Focus Signals: Near, far, and in-focus.
- Infrared Laser Assistance.
- Dichroic Adjustment.
- Easy Installation: No modifications needed.
- Stores Multiple Objective Parameters.

Application

- Microscopes
- Machine Vision
- Laser Engraving & Marking
- Industrial Inspection
- Semiconductor Testing

Description

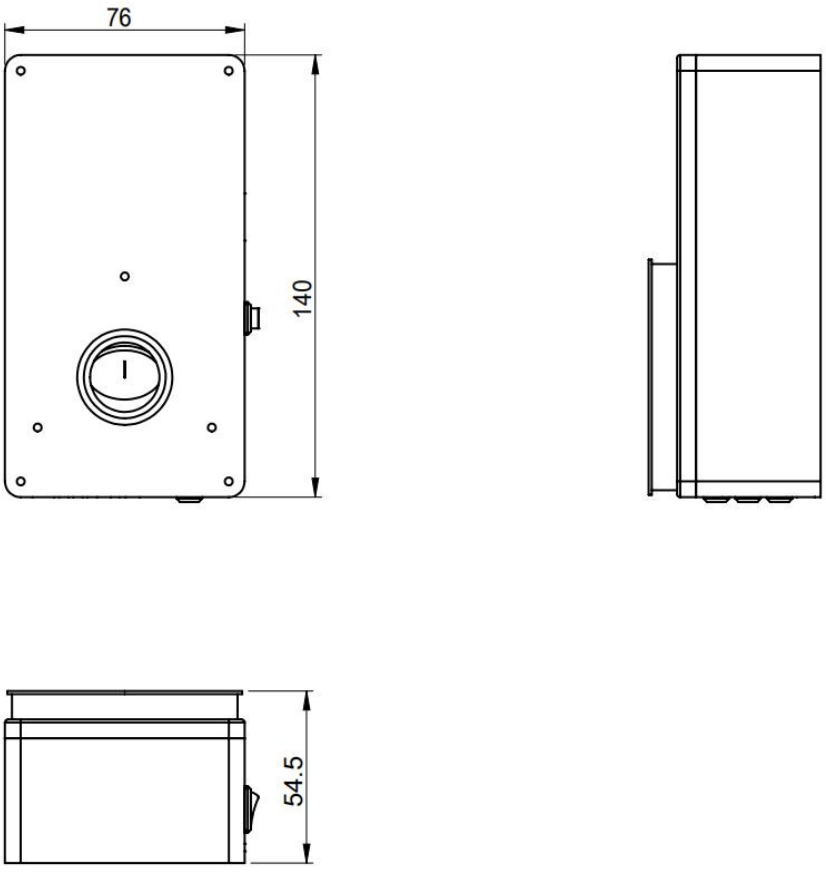
The GY5000, developed and manufactured by Optosky, is a revolutionary laser autofocus system for biological and industrial imaging. Integrating optical components with an intelligent microprocessor, it offers real-time autofocus for optical system calibration. The GY5000 monitors sample positioning at μs-level speed, providing defocus signals (near or far) if the sample deviates from the microscope objective's focal point. It then adjusts the stage or objective to reposition the sample accurately, ensuring clear imaging. Due to its rapid monitoring speed, the GY5000 maintains precise focus distance between the imaging focal point and selected reference boundary.

The GY5000 easily adapts to any optical system, including upright and inverted microscopes. It enhances existing microscope systems with powerful autofocus capabilities and installs in the space between the objective and tube lens. It also supports multiple objective parameters for single and multi-objective applications.The GY5000 supports autofocus for various interfaces, including slides, glass bottom dishes, and flow chambers.

1. Parameter

Specifications	GY5000
Laser wavelength	830nm
Laser output power	10mW
Dichroic 50% cutoff	630nm
Dichroic aperture	25.4mm
Response rate	10 μs
Applicable microscope type	Upright, inverted, OEM
Autofocus interface type	Glass slide/glass bottom dish/flow chamber/well plate/wafer/other reflective materials
Power supply	24V DC
Dimensions	140L×76W×54.5H (mm)
Weight	TBD

2. Dimensions Diagram



3. Installation Location