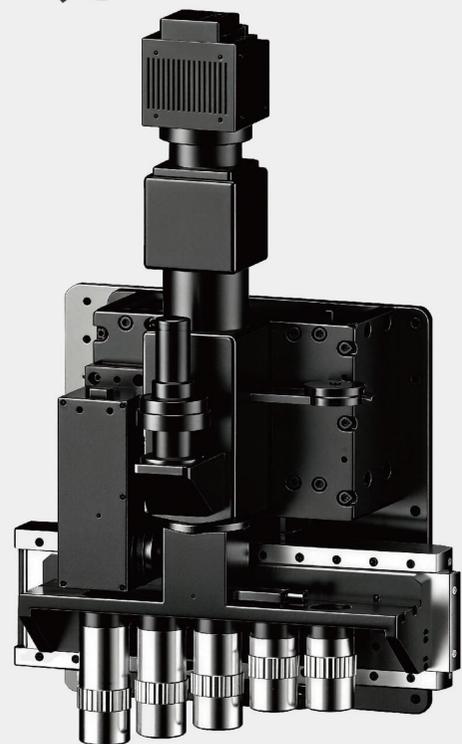


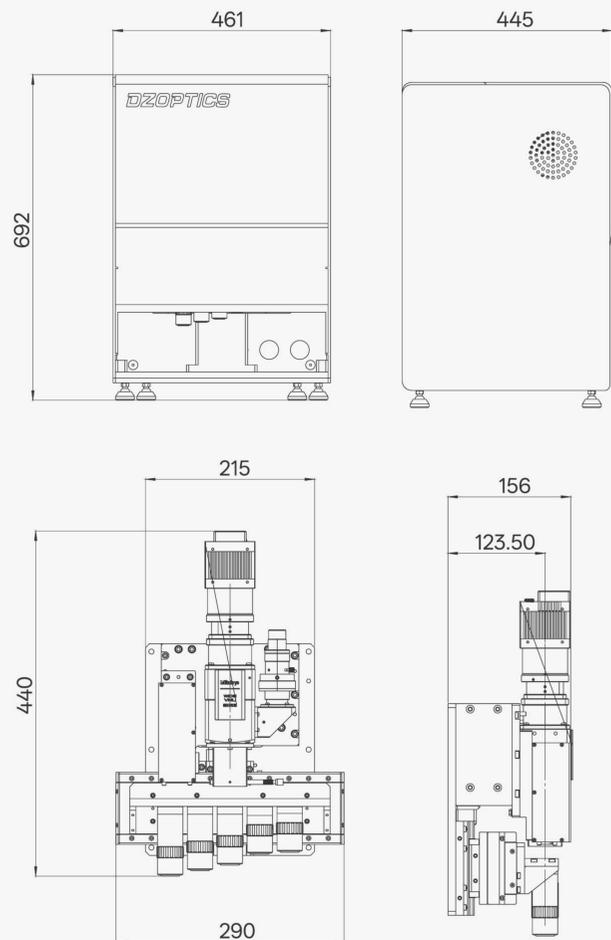
# 高倍显微物镜 自动对焦系统



High-Magnification Microscope  
Objective Autofocus System

## 规格图

Dimension Drawing



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## 规格

SPECIFICATION

项目 ITEM	搭配Plan APO无限远显微物镜 PAIRED WITH PLAN APO INFINITY MICROSCOPE OBJECTIVES				
放大倍率 MAGNIFICATION	5x	10x	20x	50x	100x
景深 DEPTH OF FIELD	14μm	3.5μm	1.6μm	0.9μm	0.6μm
激光对焦范围 LASER FOCUSING RANGE	12mm	4mm	1.5mm	0.5mm	0.15mm
激光对焦频率 LASER FOCUSING FREQUENCY	5KHz max				
对焦精度 FOCUSING ACCURACY	0.25倍物镜景深 0.25x objective lens depth of field				
对焦方式 FOCUSING METHOD	同轴激光追焦 Coaxial laser tracking				
激光性能 LASER PERFORMANCE	670nm线激光 670nm line laser				
波束形状 BEAM SHAPE	45°倾斜线激光 45° tilt line laser				
激光自动聚焦循环时间 LASER AUTOFOCUS CYCLE TIME	<0.1s				
物镜切换时间 OBJECTIVE LENS SWITCHING TIME	<0.5s				
物镜切换精度 OBJECTIVE LENS SWITCHING ACCURACY	0.5um				
尺寸 SIZE	285mm*525mm*210mm				
工作温度 OPERATING TEMPERATURE	5~50°C				
重量 WEIGHT	13kg				
靶面尺寸 TARGET SIZE	靶面支持φ30mm Target surface supports φ30mm				

## 特点优势

Features And Advantages

### 采用同轴线激光实时追焦技术，以670nm波长、45°倾斜线激光实现高精度测距

Employs coaxial laser real-time tracking focusing technology, using a 670nm wavelength, 45° tilted line laser to achieve high-precision ranging.

### 可扩展多物镜转盘与DI模块，适应OLED、MICROLED、晶圆等不同检测场景

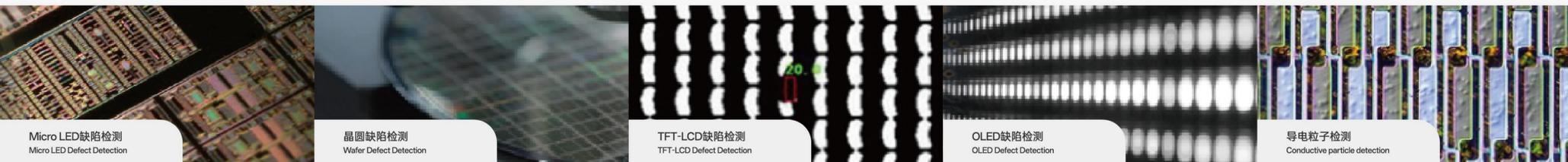
Expandable with multi-objective turrets and DI modules, adaptable to different inspection scenarios such as OLED, MICROLED, and wafers.

### 支持5X至100X物镜切换，对焦精度小于0.25倍物镜景深

Supports 5X to 100X objective lens switching, with a focusing accuracy of less than 0.25x objective lens depth of field.

## 应用场景

Application



### 外形紧凑，兼顾高性能与集成灵活性，可按客户需求进行定制

Compact design, balancing high performance and integration flexibility, customizable to customer needs.

### 自动对焦循环时间小于0.1秒

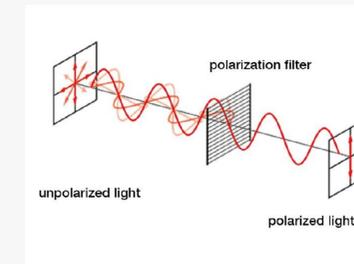
Autofocus cycle time is less than 0.1 seconds.

## DIC微分干涉模块

DIC Differential Interferometer Module

### 原理

DIC微分干涉显微镜，以平面偏振光为光源，光线经棱镜折射后分成两束，在不同时间经过样品的相邻部位，然后再经过另一棱镜将这两束光汇合，从而使样品中厚度上的微小区别转化成明暗区别。形成强立体感的三维浮雕影像。可用于观察样品中微粒、孔洞裂缝和凹凸不平的轮廓细节，或需要提供明显的三维浮雕感的金属或薄膜样品。



### Configuration

The DIC (Differential Interference Microscopy) uses plane-polarized light as its light source. The light is refracted by a prism and split into two beams, passing through adjacent areas of the sample at different times. These two beams are then combined by another prism, transforming minute differences in thickness within the sample into differences in brightness and darkness, creating a strong three-dimensional relief image.

It is commonly used to observe the details of particles, pores, cracks, and uneven contours in samples, or for metal or thin film samples where a clear three-dimensional relief is required.

### 配置：

在高倍自动对焦显微镜的筒镜中加上专用的起偏器，DIC棱镜，检偏器等部件，即可实现DIC成像观察。

### CONFIGURATION

BY ADDING A DEDICATED POLARIZER, DIC PRISM, ANALYZER, AND OTHER COMPONENTS TO THE TUBE OF A HIGH-MAGNIFICATION AUTOFOCUS MICROSCOPE, DIC IMAGING OBSERVATION CAN BE ACHIEVED.

### 应用示意图

Application Diagram

#### (1) 金属薄膜

Metallic thin films



明场照明 Bright field lighting

DIC

#### (2) 晶圆表面缺陷

Wafer surface defects



明场照明 Bright field lighting

DIC