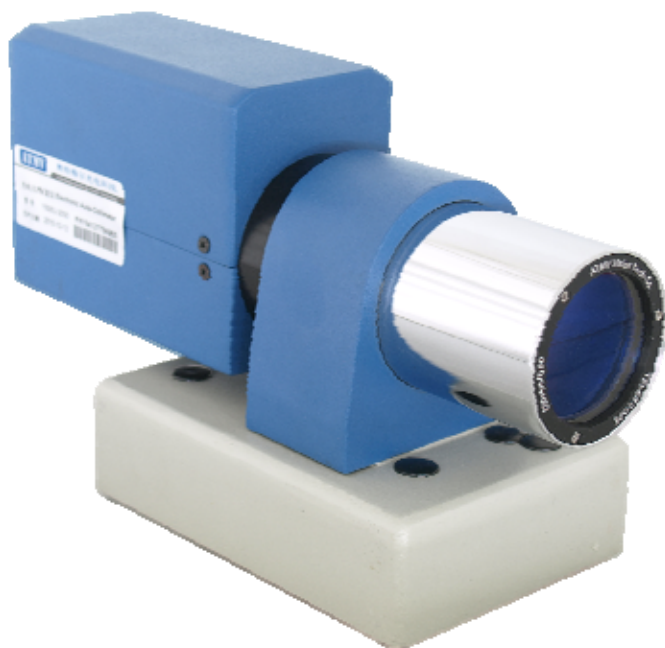




## 大视场光电自准直仪 RANGE EXTENDED ELECTRONIC AUTO-COLLIMATOR



### 产品特性 (Features)

- 0.5角秒测量精度 (Up to 0.5 arc sec accuracy);
- XY双轴同时测量 (Dual-axis measurements);
- 大视野电子目镜 (Expanded large-field electronic viewfinder);
- 科学级高分辨率CCD传感器 (High resolution CCD Sensors);
- 长寿命LED光源 (LED Light Sources);
- 小型化设计 (Compact Design);
- 全数字信号处理 (Digital image processing technology);
- 即插即用USB接口 (USB 2.0 high speed interface);
- 丰富的测量配附件 (Rich accessories);

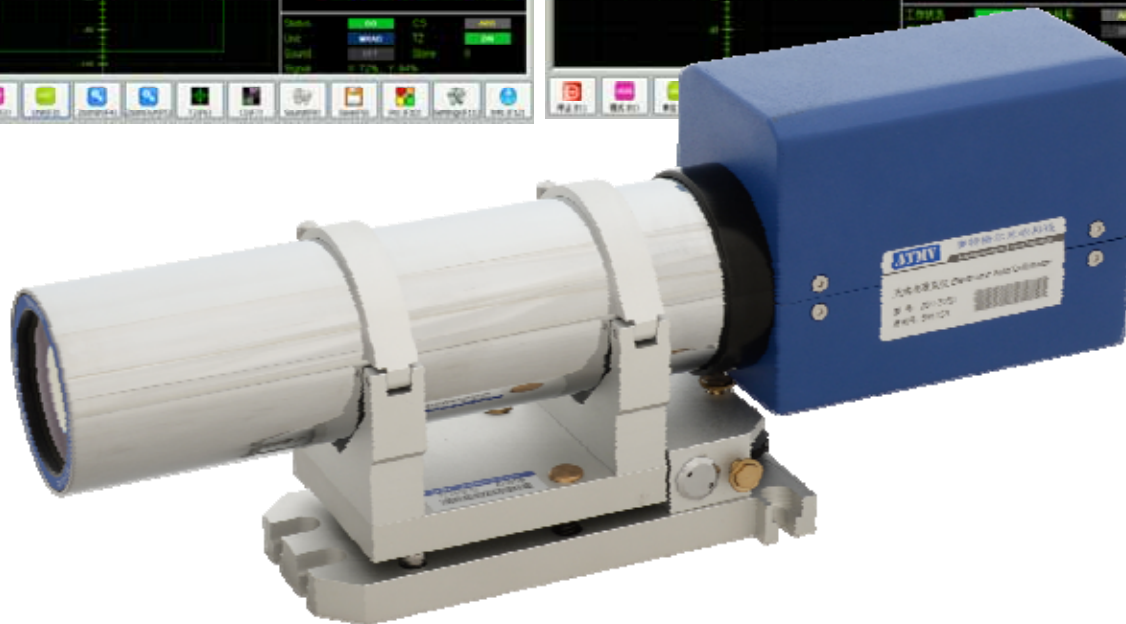
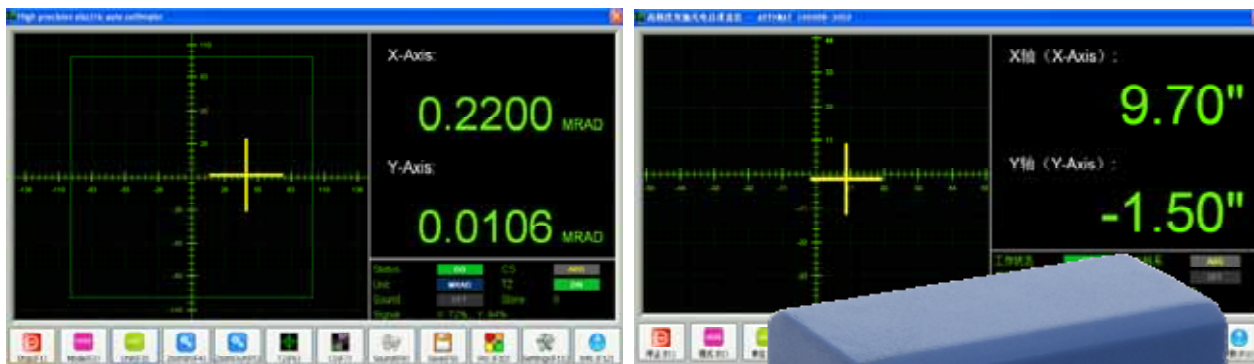
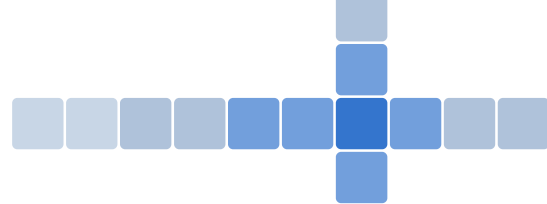
### 典型应用 (Applications)

- 精密机械安装定位 (Alignment of machinery);
- 机械产品直线度、平面度、垂直度、平行度等精度保障 (Proof for straightness, flatness, parallelism of rails, tables and linear stage etc.);
- 精密旋转台检测 (Rotary table measurement);
- 航空航天 (Alignment of astronomical system);
- 光学产品装配及调整 (Assembly and adjustment of optical components like mirrors, prisms, windows, wedges etc.);
- 物理及光学实验室 (Alignment of components for the beam control in high energy physics);

### 规格 (Specifications)

型号 Order Number	20U-2050	20U-3050A
物镜焦距 (Focal Length)	200mm	300mm
物镜口径 (Lens Diameter)	50mm (NA. = 90%)	50mm (NA. = 90%)
光源类型 (Light Source)	大功率半导体光源 LED Light Source (中心波长 $\lambda=630\text{nm}$ )	
探测器 (Sensors)	两个科学级高分辨率探测器 (High Resolution Linear Sensors)	
目镜 (Viewfinder)	软件显示的大视野电子目镜 (Electronic Viewfinder with Software Crosshair)	
测量频响 (Measuring Frequency)	25Hz TYP.	
接口 (Interface)	USB 2.0 High Speed Interface	
测量距离 (Measuring Distance)	25米 (25 meter MAX.)	
测量范围 (Measuring Range)	5000" (arc sec. 角秒)	4000" (arc sec. 角秒)
分辨率 (Resolution)	0.05" (arc sec. 角秒)	0.01" (arc sec. 角秒)
测量精度 (Accuracy) <sup>[1]</sup>	1.0" (arc sec. 角秒)	0.5" (arc sec. 角秒)
重复性 (Repeatability)	0.2" (arc sec. 角秒)	0.1" (arc sec. 角秒)
外形尺寸 (Dimensions)	280mm(L)×130mm(W)×170mm(H)	380mm(L)×100mm(W)×150mm(H)
重量 (Weight)	5.2KG	4.3KG

[1] 测量精度指标按照 $\pm 1000''$ (角秒)且测量距离<1米范围界定 (Accuracy specification is in  $\pm 1000''$  (arcsec.) range and <1 meter working distance.)



**AutoMAT 20**系列是集合了中等的测量精度、高性价比和丰富多样的配附件系列化产品，稳定性和易用性达到完美结合，是精密机械制造和精密光学装配环节的理想角度测量仪器。系列产品采用自主设计的大口径成像物镜、稳定可靠的光机部件和全数字电路应用技术相融合，提供了较大的读数视场范围和均匀的全视场测量精度保障，是长距离测量应用的理想产品。

除标准配件外，该系列可选择多种多样的测量附件完成各类测量应用，如选择LF65找像器可为长距离现场找像提高数倍的效率，而选用MP40直角转像镜则可以拓展进行平行度和垂直度的测量。

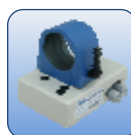
The **AutoMAT 20** series autocollimators are combination of precision, stability and ease of use also with cost efficiency which can responds optimally to different customer requirements and can cover a large range of applications in mechanical and optical field.

As the integration of a dedicate designed high-resolution and low-distortion lens, internal optical parts and fully digital design technology, results high accuracy for angle measurement. The precise and highly reliable measurement system excels in ease of use. The new ergonomically adapted measurement software ensures a maximum usability with complete functionality.

**标准附件 (Standard Accessories)**



MA60<sup>[1][2]</sup>  
标准反光镜  
Standard Mirror



DZ65<sup>[1]</sup>  
二维可调底座  
Adjustable Holder



AH65S<sup>[2]</sup>  
二维可调底座  
Adjustable Holder

[1] 20U-2050标准配置配件 (Standard Configuration included for 20U-2050);  
[2] 20U-3050A标准配置配件 (Standard Configuration included for 20U-3050A);