

# POLYGON SCAN HEAD

## 棱镜面扫描头



### 产品简介

#### PRODUCT INTRODUCTION

大族思特棱镜面扫描头采用一维棱镜加一维振镜设计方案，无需外加运动轴即可实现二维面扫描。自主设计的高精度棱镜和高速直流无刷电机，匹配高性能数字驱动板，实现超高速度的同时保证高速度稳定性。扫描起始点检测模块可检测棱镜面的起始点，配合大族思特GMC控制卡和专用打标软件，简化客户系统集成的难度。

大族思特棱镜面扫描头适用于各种高重频的皮秒、飞秒激光器以及高功率连续激光器等应用场景，可达到260米/秒的扫描速度，实现振镜无法比拟的加工效率。

Han's Scanner Polygon scanning head adopts a one-dimensional polygon mirror and one-dimensional galvanometer design scheme, which can realize two-dimensional surface scanning without an additional axis of movement. Self-designed high-precision polygon and high-speed DC brushless motor, matched with a high-performance digital driver, Achieves high speed while ensuring high-speed stability. The scanning starting point detection module can detect the starting point of the polygon surface, and work with Han's Scanner GMC control card and special marking software to simplify the difficulty of customer system integration.

Han's Scanner Polygon scan head is suitable for various high repetition frequency picosecond, femtosecond lasers and high-power continuous lasers and other application scenarios. It can reach the scanning speed of 260 m/s and realize the processing efficiency that the galvanometer can not match.

### 产品特点

#### FEATURES



高速、高速度稳定性。  
High speed, stability of high speed.



高激光功率。  
High laser power.



低漂移、高精度。  
Low drift and high precision.



模块化设计，易于集成。  
Modular design, easy to integrate.

# Kokyo

株式会社光響

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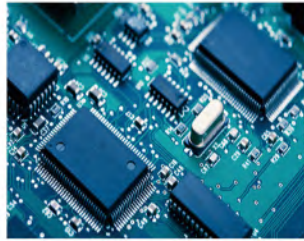
Web : <https://www.symphotony.com/>

## 应用场

INDUSTRY APPLICATION



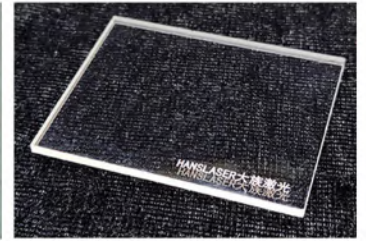
高速划线、飞行打标  
High-speed marking  
On-the-fly marking



PCB高速表面处理  
PCB high-speed surface treatment



高功率激光清洗  
High power laser cleaning



玻璃、塑料钻微孔  
Glass and plastic micro-drilling

※以上图片来源于网络  
The above pictures are from the Internet

## 技术参数

TECHNICAL PARAMETERS

### 棱镜面扫描头 Polygon Scan Head

入口光斑	Input Beam Aperture (mm)	≤15
波 长	Standard Wavelength (mm)	355/532/1064
扫描速度(线/秒) <sup>①</sup>	Scan Speed (lines per second)	150-1600
扫描线速度 <sup>①</sup>	Moving Spot Speed (m/s)	50-260
线重复定位-Y轴	LINE Placement Repeatability-Y axis (urad)	±50
打标重复定位-X轴	Optimal Laser Pixel Placement Repeatability-X axis (urad)	±50
电源要求	Power Requirements	±15VDC@7Amax
扫描角度 <sup>②</sup>	Scan Angle (°)	±16 (X轴axis) , ±12.5 (Y轴axis)
工作温度	Operation Temperature (°C)	25±10

注: ① 使用焦距F=255mm的场镜测试 Test with F=255mm F-theta lens

② 以上角度均为光学角度 All angles are in optical degrees

## 外形尺寸图

TECHNICAL DRAWING

