

## **Product Description:**

Carmanhaas has high end 2D laser scanning galvanometer, 3D laser scanning galvanometer, high power laser welding galvanometer, beauty galvanometer and laser cleaning solution.

Carmanhaas 2-axis Galvanometer Scanner Head including High Speed (A Series) and Standard Series, are designed for a board range of application including laser precision marking, laser cutting, laser welding, rapid prototyping, 3D printing, drilling location, laser cleaning, medical beauty and so on.

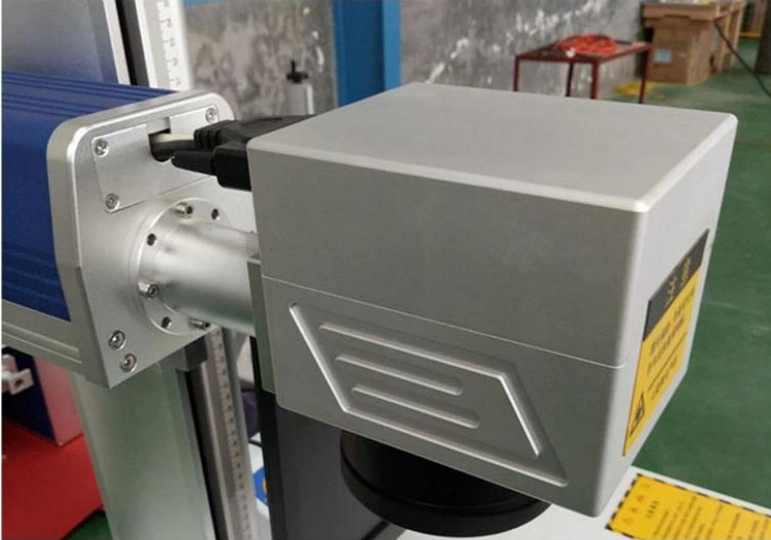
## **Features:**

1. Aperture: 7mm, 10mm, 12mm, 14mm, 16mm, 20mm, 30mm□
2. Good degree of Linearity, high resolution small drift, precise repetitive positioning□
3. Highest processing speeds in the industry to maximize production throughput□
4. High-accuracy & high-stability models available for precise scanning applications□
5. Wide range of cost-efficient, high-performance options for specific applications.

# PRODUCT DETAILS

HIGH SPEED  
GALVO LENS

SMALL SIZE, FRIENDLY INTERFACE  
IN ORDER TO IMPROVE THE QUALITY OF EXPORT,  
USE NEW TECHNOLOGY, NEW CRAFT, IN THE GALVO  
LENS SCANNING SYSTEM, GRAPHIC IS GOOD, NO DISTORION ETC...



## 1064nm Galvo Scanner Head with Power Supply & DB25 cable



## Optional Aperture:



12mm Aperture



14mm Aperture



16mm Aperture





■ DB25 Interface



Switch Power Supply

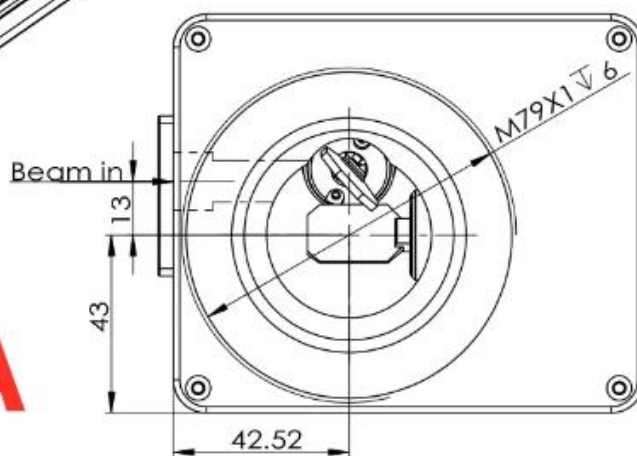
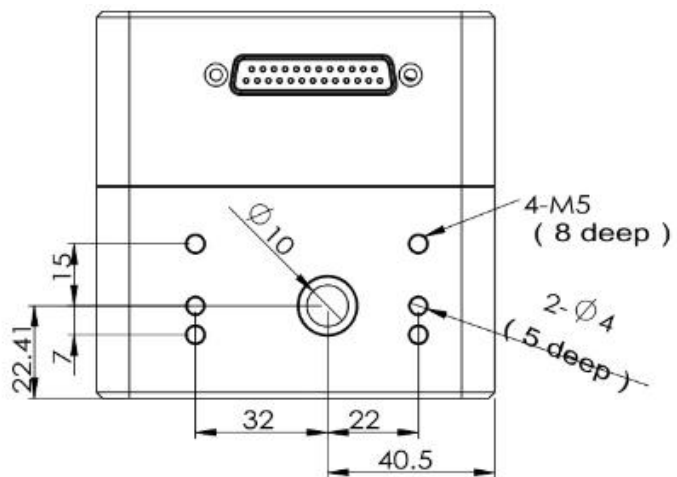
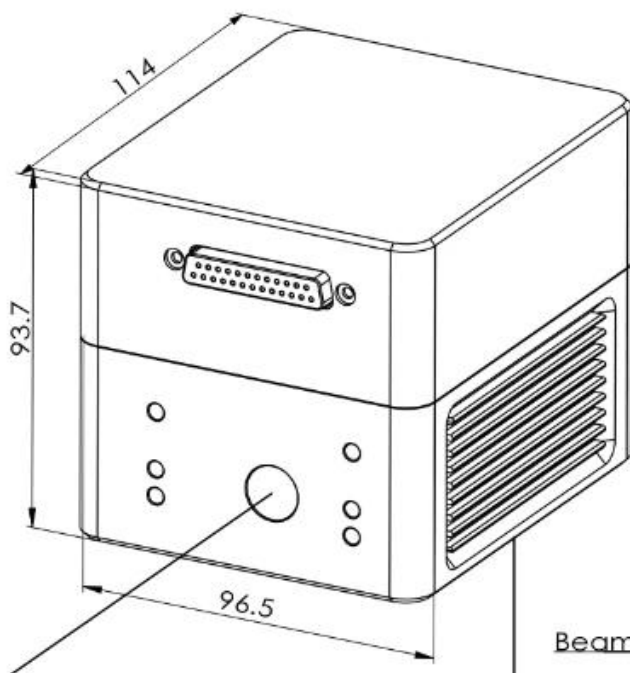
DB25 Cable



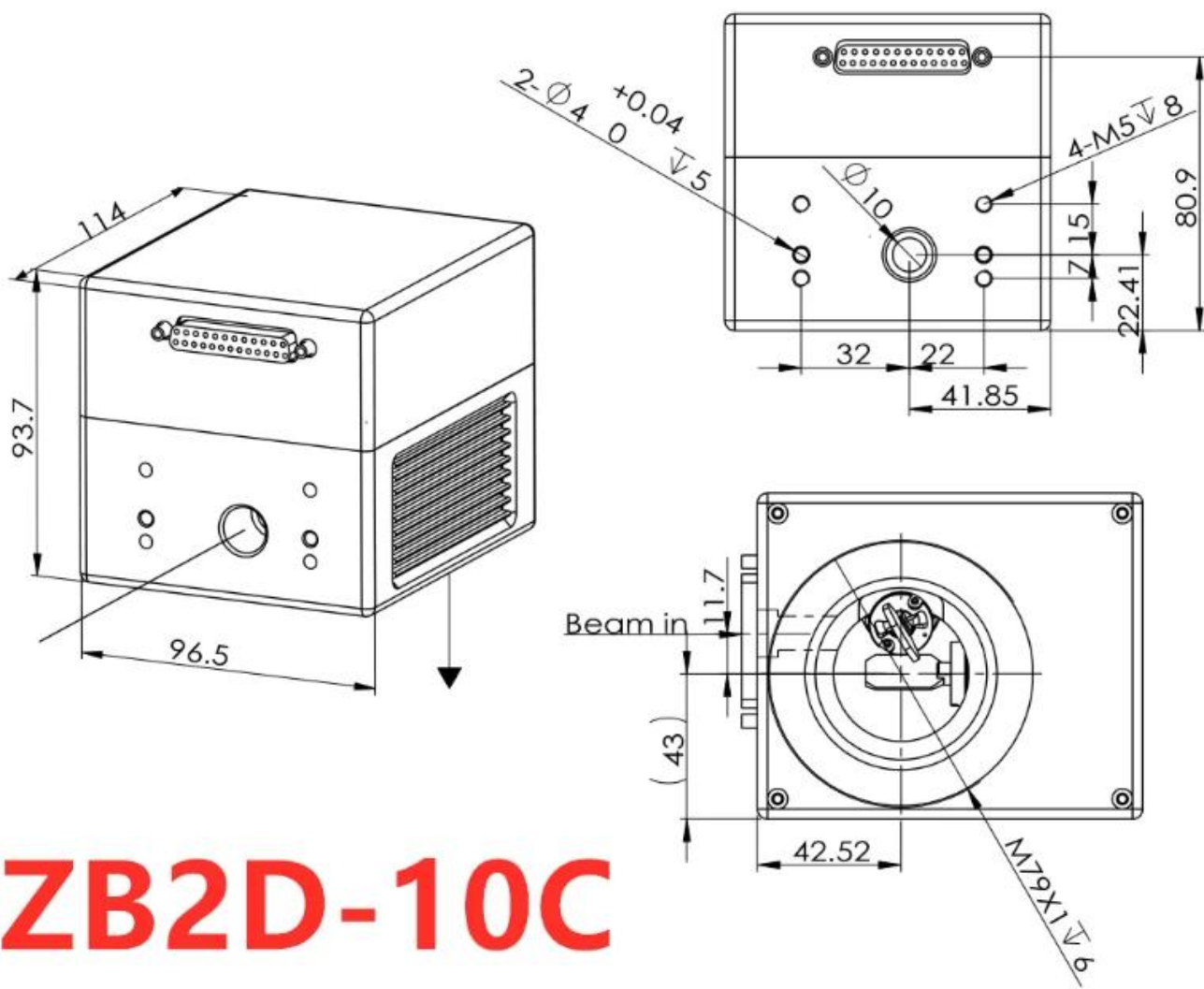
## Technical Parameters:

Model	ZB2D-10A	ZB2D-10C	ZB2D-12A
Aperture (mm)	10	10	12
Typical scan angle	$\pm 0.35$ rad	$\pm 0.35$ rad	$\pm 0.35$ rad
Nonlinearity	$< 0.5$ mrad	$< 2$ mrad	$< 0.5$ mrad
Tracking error	0.15ms	$< 0.2$ ms	0.2ms
Step Response Time	$< 0.3$ ms	$< 0.4$ ms	$< 0.4$ ms
Repeatability	$< 15$ urad	$< 20$ urad	$< 15$ urad
Gain drift	$< 50$ ppm/K	$< 50$ ppm/K	$< 50$ ppm/K
Zero drift	$< 30$ urad/K	$< 30$ urad/K	$< 30$ urad/K
Long-term drift over 8hours□After 30 min warn-up□	$< 0.1$ mrad	$< 0.1$ mrad	$< 0.1$ mrad
Marking speed	2.5m/s	2.0m/s	2.0m/s
Positioning speed	15m/s	10m/s	10m/s
Power requirements	$\pm 15$ VDC Max.5A	$\pm 15$ VDC Max.3A	$\pm 15$ VDC Max.5A
Digital Signal	XY2-100	XY2-100 or SPI	XY2-100 or SPI
Analog Signal	$\pm 5$ V	$\pm 5$ V or $\pm 10$ V	$\pm 5$ V
Reflection wavelength	1064nm 532nm 355nm	1064nm 532nm 355nm	1064nm
Operating temperature	25°C $\pm$ 10°C	25°C $\pm$ 10°C	25°C $\pm$ 10°C

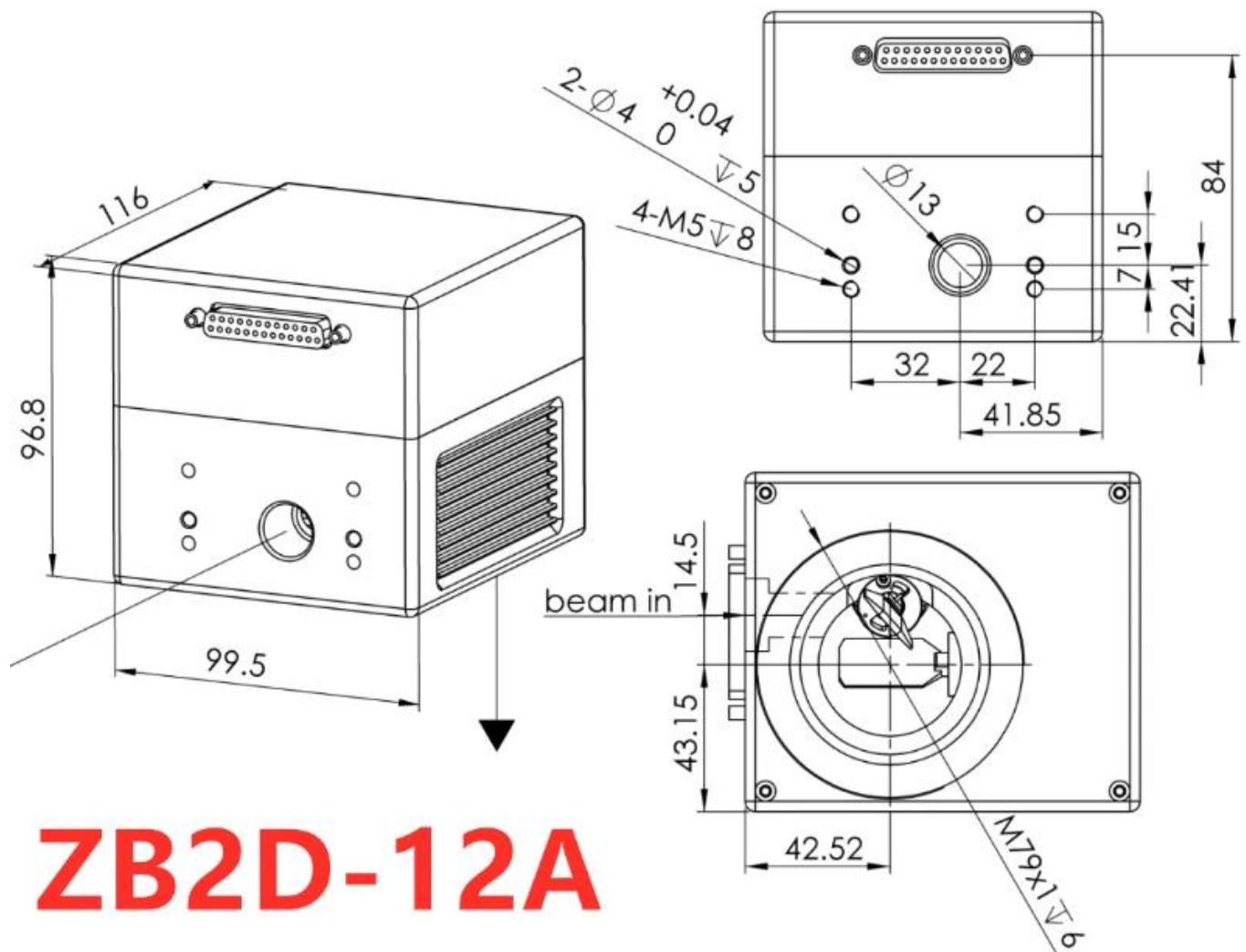
## Mechanical Dimensions(mm)□



**ZB2D-10A**



**ZB2D-10C**

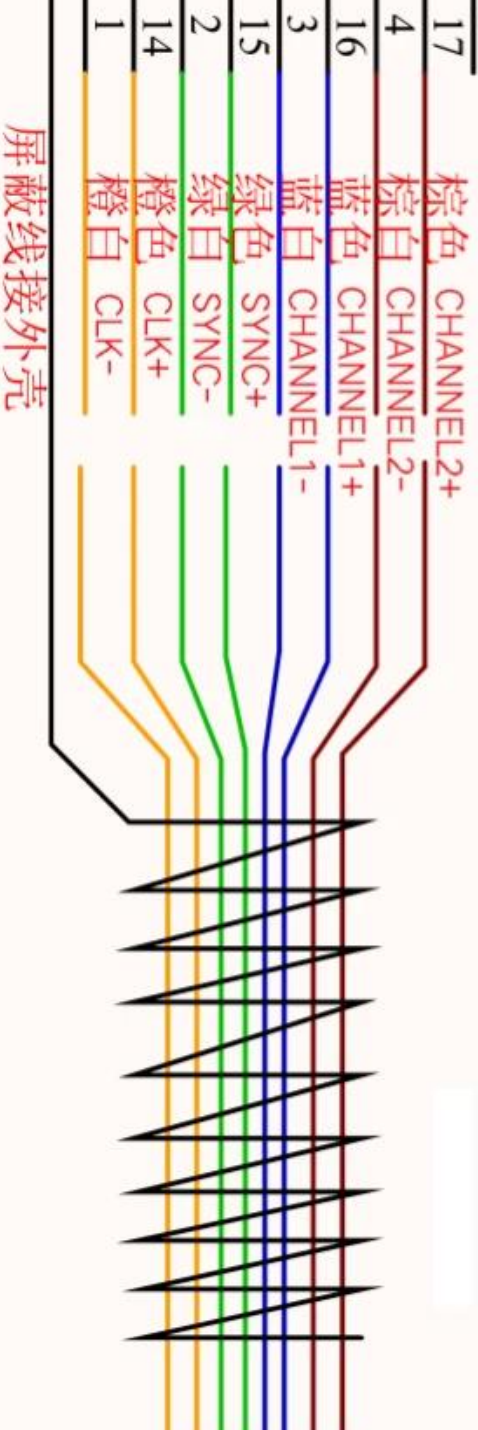
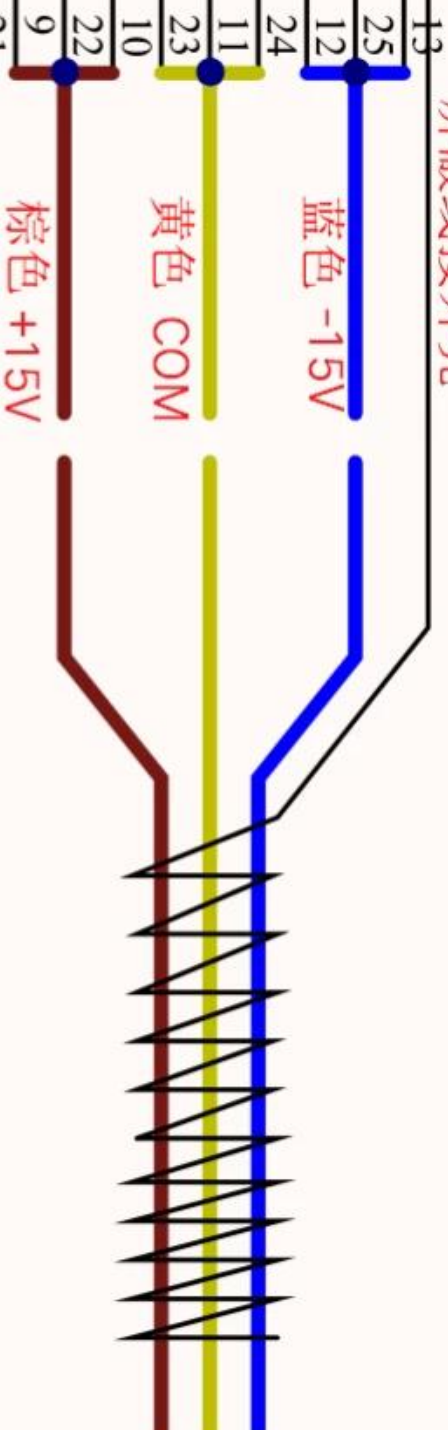


# ZB2D-12A

Electrical interface definition:



屏蔽线接外壳



屏蔽线接外壳

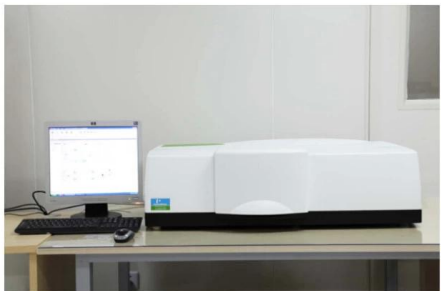


# Product Packaging





**TRIOPTICS OptiSpheric 2000 AF**  
 ---Testing EFL、R、Centering Error、Wedge Angle、BFL、MTF



**PerkinElmer Lambda 950**---Testing Transmission and Reflectivity



**Carmanhaas Coating Machine**



