

2 Multi Degrees of Freedom

27-38

2.1



Free XD series

Multi Degrees of Freedom, Long Travel Range, Parallel Kinematic

27

2.1.1

Z Tx Ty

Free3D.ZTxTy

29

2.1.2

X Y Z · Tx Ty Rz

Free6D.3-2.150, Free6D.3-2.070

30

2.2



Carrier series

Carrier.L7550.XY, Carrier.L1010.XY

33

2.3



Piezo Motor Controller

MC-Newton.S

37

“Carrier Series”

Microscopy Imaging and Positioning



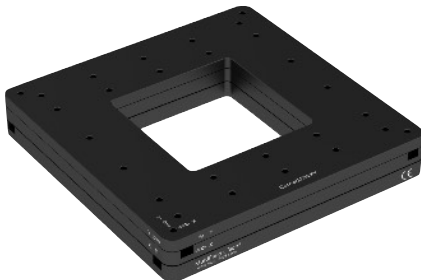
➔ Carrier.L7550.XY

Piezo Motor Positioning Stage, Optical Sensor Feedback

Travel Range: 75 × 50 mm

Minimum Incremental Motion: 10 nm

Max. Payload: 2 kg



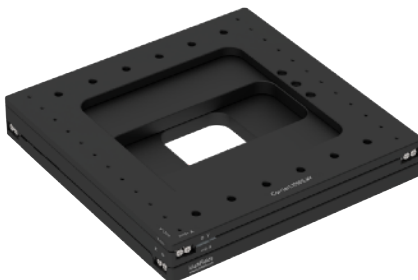
➔ Carrier.L1010.XY

Piezo Motor Positioning Stage, Optical Sensor Feedback

Travel Range: 100 × 100 mm

Minimum Incremental Motion: 10 nm

Max. Payload: 4 kg



➔ Carrier.L1010s.XY

Piezo Motor Positioning Stage, Optical Sensor Feedback

Travel Range: 100 × 100 mm

Minimum Incremental Motion: 10 nm

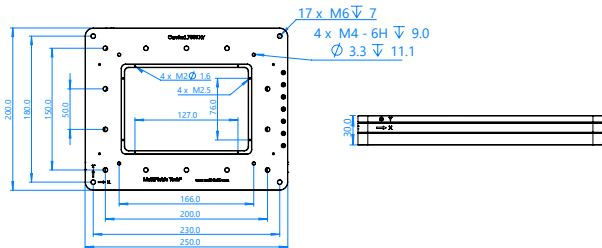
Max. Payload: 4 kg

Planar Linear Motion — Carrier.L7550.XY

High Resolution Piezo Motor Driving, Close-loop Control, for Microcopy

- ➔ Feature
- Nanometer Resolution
 - Self-lock
 - Clear Aperture
 - Compatible with microscopy
 - XY Planar Structure
 - Optical Sensor Inside
 - Stackable with Piezo Scanner

➔ Photo & Drawing



➔ Specification

Carrier.L7550.XY

1	Optional	.NM, Non-magnetic; .HV, High Vacuum Version; .UHV, Ultra High Vacuum Version;
2	Motion Direction	X, Y
3	Size	250 × 200 × 30 mm
4	Mounting Space	325 × 250 mm
5	Aperture	85 × 65 mm
6	Material	Aluminum, Stainless Steel
7	Cable & Connector	Standard/HV, shield cable and D-Sub15 plug; UHV, Kapton, PEEK D-Sub15
8	Work Temperature	10 ~ 40 °C
9	Mass	2.5 kg
10	Travel Range	75 × 50 mm
11	Max. Velocity	~ 15 mm/s*(Reduce to 10% in Vacuum)
12	Minimum Incremental Motion (Close-loop)	10 nm
13	Driving Frequency	Max. 20 kHz
14	Max. Payload (horizontal mounting)	2 kg
15	Pitch/Yaw	0.3 mrad
16	Sensor Type	Optical Sensor
17	Sensor Resolution	2 nm (Default)
18	Controller	MC-Newton.S series

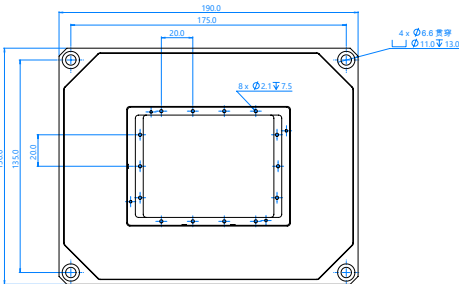
* For detail drawing and 3D model please contact us.

XY Piezo Scanner — Carrier.SL200.XY/XYZ.C

Large Clear Aperture, XY Motion, Low Profile

- ➔ Feature
- Piezo Stack Driving
 - Flexure Guiding
 - CAP Sensor, Close-loop Control
- Nanometer Resolution
 - For High Resolution Microscopy
- Combination with Long Travel Range Piezo Motor Stage

➔ Photo & Drawing



➔ Specification

Carrier.SL200.XY.C

Carrier.SL200.XYZ.C

1	Optional	.NM, Non-magnetic; .HV, High Vacuum Version; .UHV, Ultra High Vacuum Version;	
2	Motion Direction	XY	XYZ
3	Footprint × Height	182 × 150 × 19.5 mm	190 × 150 × 19.5 mm
4	Material	Aluminum, Stainless Steel	
5	Travel Range	200 × 200 μm	200 × 200 × 200 μm
6	Aperture	77 × 65 mm	77 × 65 mm
7	Resolution	2 nm	
8	Repeatability	10 nm	
9	Linearity	0.03%	
10	Max. Payload	500 g	
11	Sensor Type	Capacitive	
12	Driving Voltage	Max. 150 V	
13	Working Temperature	15 ~ 40 °C	
14	Combination	Compatible with Carrier.L7550.XY	
15	Controller	MC-Archimedes.N	

* For detail drawing and 3D model please contact us.