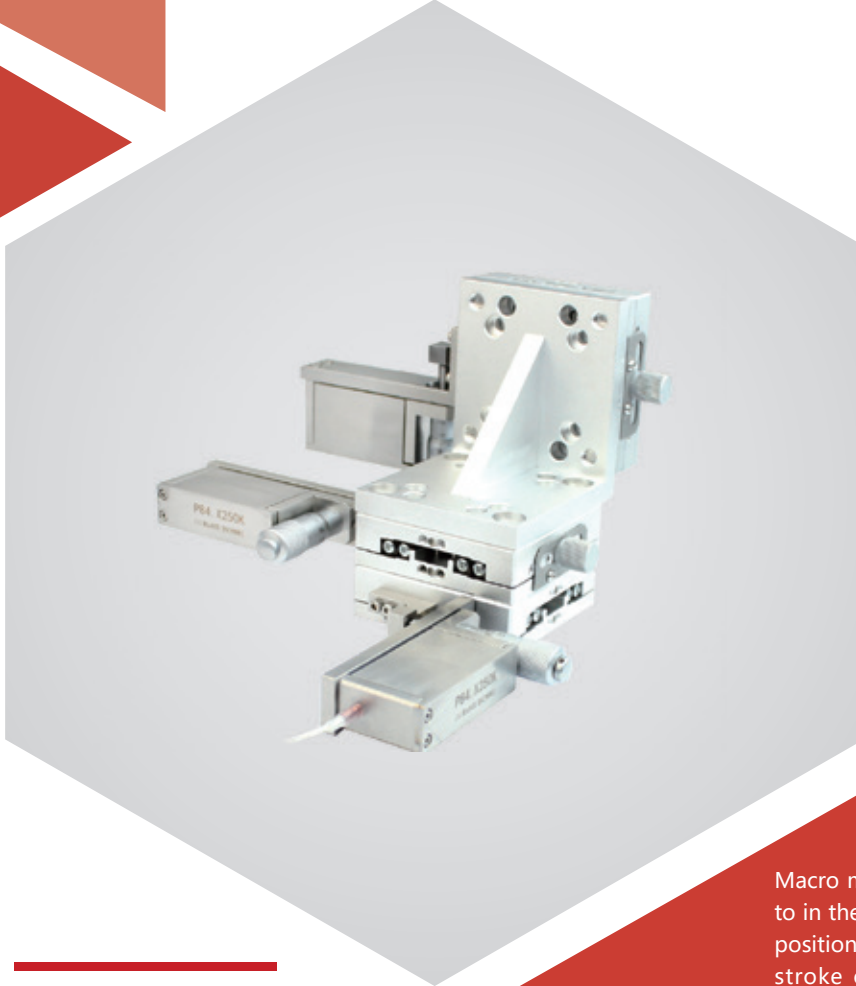


XYZ axis | XYZ65P84S/K250

Piezoelectric macro – micro composite platform



Characteristics >>

- X Y Z motion
- Manual displacement to 13mm/axis, resolution to 10μm
- Piezo displacement to 250μm/axis, resolution to 2nm
- Optional feedback sensor
- Custom longer coarse/fine travel is available

Applications >>

- Optical alignment
- Cell manipulation
- Precision positioning
- Micromachining

Introduction

Macro micro composite piezoelectric platform is to point to in the micrometer integration on the basis of the piezo positioning platform, hand the micrometer can be 13mm stroke of macro regulation, piezoelectric movement platform can be 250 microns stroke of nanoscale micro adjustment, and micrometer adjustment accuracy on the platform of piezoelectric motor adjustment range, so as to ensure the precision of adjustment and convenient.



CoreMorrow Ltd.

Tel: +86-0451-86268790

Fax: +86-0451-86267847

Email: info@coremorrow.com

Web: www.coremorrow.com

Headquarters: Building I2, No.191 Xuefu Road, Nangang District, Harbin

Shanghai Office: Building 2, No.608 Shengxia Road, Pudong District, Shanghai

Technical Data >>

| Type | S- Closed loop K- Open loop | XYZ65P84S250 | XYZ65P84K250 | Units |
|--------------------------------------|--------------------------------|-------------------|--------------|----------|
| Active axes | | X, Y, Z | X, Y, Z | |
| Travel range(coarse+fine) | | 13+250/axis | 13+250/axis | mm+μm |
| Material | | Steel,Al | Steel,Al | |
| Manual Adjustment - Micrometer | | | | |
| Travel range | | 13/axis | 13/axis | mm |
| Resolution | | 10 | 10 | μm |
| Driving mode | | Screw thread pair | | |
| Sensitivity | | <2 | <2 | μm |
| Least count | | 10 | 10 | μm/div |
| Screw pitch | | 0.5 | 0.5 | mm/rev. |
| Piezo Adjustment - Piezo | | | | |
| Travel range | 0~120V | 200/axis | 200/axis | μm±20% |
| | 0~150V | 250/axis | 250/axis | |
| Sensor | | SGS | - | |
| Min step (resolution) | | 7 | 2 | nm, typ. |
| Closed-loop linearity | | 0.1 | - | %F.S. |
| Repeatability | | 0.05 | - | %F.S. |
| Push force capacity | | 8 | 8 | N |
| Stiffness | | 0.03 | 0.03 | N/μm±20% |
| Load (Z axis) | | 0.3 | 0.3 | kg |
| Mass | | 1850 | 1850 | g±5% |
| Electrical capacitance | | 7.2/axis | 7.2/axis | μF±20% |
| Operating temperature ^[1] | | -20~80 | -20~80 | °C |
| Cable ^[2] | | 1.5 | 1.5 | m±10mm |
| Connector ^[2] | | LEMO | LEMO | |



Note: Max driving voltage could be -20V~150V, recommended voltage 0~120V for long-term and high-reliable operation to extend lifetime. Technical data is measured by CoreMorrow E00/E01 series piezo controller.

[1] Custom ultralow temperature and ultrahigh vacuum versions are available.

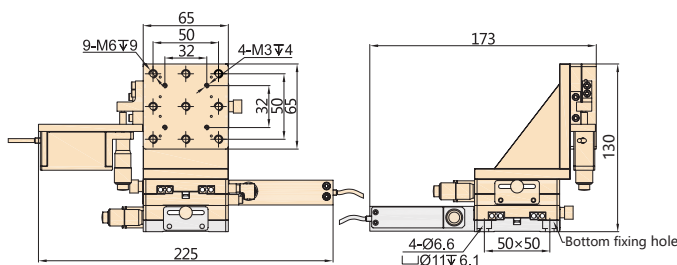
[2] Custom cable length and connector is available.

Note: The parameters mentioned above are related to the test environment and test equipment.

Composition >>

| Piezo stage | Micrometer |
|--|---|
| 250μm Travel | 13mm Travel |
|  |  |

Drawing >>



Recommended Controllers >>



E01.D3
 LCD, membrane button, up to 625mA
 RS-232/RS-422/USB interface
 Software secondary development



E70
 Small size, ave current 70mA/channel
 RS-232/RS-422/USB interface
 Software secondary development



CoreMorrow Ltd.

Tel: +86-0451-86268790

Fax: +86-0451-86267847

Email: info@coremorrow.com

Web: www.coremorrow.com

Headquarters: Building I2, No.191 Xuefu Road, Nangang District, Harbin

Shanghai Office: Building 2, No.608 Shengxia Road, Pudong District, Shanghai