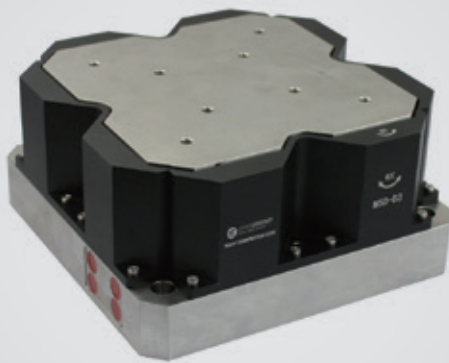


θ_x/θ_z axes | S50.UR1S/K

Piezo Tilt/Rotation Stage



Introduction

S50.UR1S/K a 2-dimensional piezo tilt/rotation stage, which could be equipped with closed-loop sensor, with deflection angle of 1.3mrad/axis, and load capacity of up to 20kg.

Characteristics >>

- θ_x deflection, θ_z rotation
- Optional closed-loop sensor
- Load up to 20kg
- Resolution up to 0.03 μ rad

Applications >>

- Optical beam scanning
- Light path adjustment
- Graphical stability
- Interference/metering
- Large loading tilt motion
- Space perturbation simulation system
- Calibration of acceleration sensor
- Calibration of angular velocity sensor



Harbin Core Tomorrow Science & Technology Co., Ltd.

Tel: +86-451-86268790

Email: info@coremorrow.com

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

Fax: +86-451-86267847

Web: www.coremorrow.com

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

Technical Data >>

Type	S-Closed loop K-Open loop	S50.UR1S	S50.UR1K	Units
Active axes		θ_x, θ_z	θ_x, θ_z	
Driving channels		3	3	
Tilt angle(0~120V)		1/axis	1/axis	mrad $\pm 10\%$
Tilt angle(0~150V)		1.3/axis	1.3/axis	mrad $\pm 10\%$
Integrated sensor		SGS	-	
Resolution		0.03	0.03	μrad
Linearity		0.2	-	%F.S.
Closed loop repeatability		0.07	-	%F.S.
Unloaded resonant frequency(θ_x/θ_z)		604/726	604/726	Hz $\pm 20\%$
Unloaded step time		50	20	ms $\pm 20\%$
Resonant frequency@20kg load, θ_x/θ_z		68/155	68/155	Hz $\pm 20\%$
Load capacity		20	20	kg
Operating temperature ^[1]		-20~80	-20~80	$^{\circ}\text{C}$
El. capacitance(θ_x/θ_z)		36/44.3	36/44.3	$\mu\text{F}\pm 20\%$
Material		Al, steel	Al, steel	
Mass		9.5	9.5	kg $\pm 5\%$
Cable length ^[2]		1.5	1.5	m $\pm 10\text{mm}$
Sensor/voltage connector ^[2]		-	-	

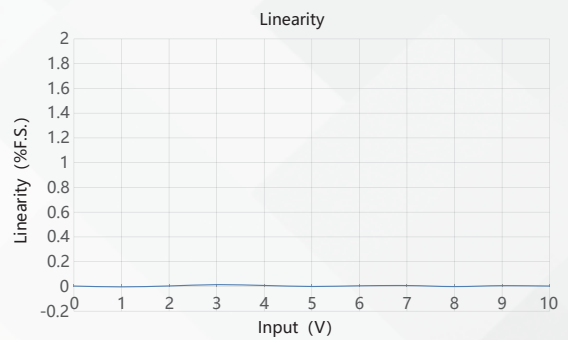
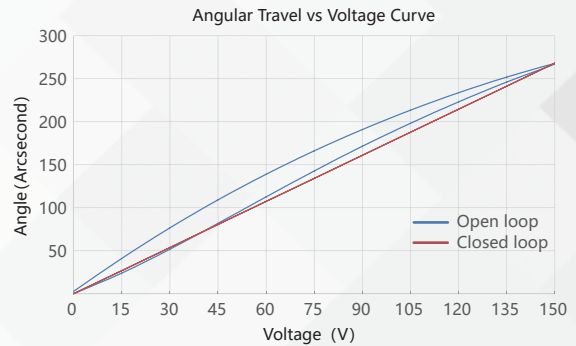
Note: Technical data are measured by CoreMorrow E00/E01 series piezo controller. Max driving voltage could be -20V~150V, 0~120V is recommended for long-term and high-reliable operation. Unless otherwise specified, the above parameters are measured at room temperature about 25 $^{\circ}\text{C}$.

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

[2] Custom cable length and connector is available.

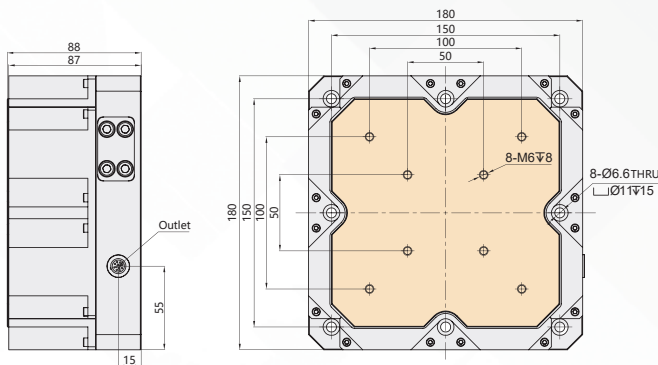
Note: The parallelism of the moving platform is about 20 μm , and the roughness is about 1.6 to 3.2. Please contact the sales engineer for confirmation before purchase.

Curves >>



Disclaimer: The data here are typical, only for reference. Some variations will occur for different batch.

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



Harbin Core Tomorrow Science & Technology Co., Ltd.

Tel: +86-451-86268790 Email: info@coremorrow.com
 Fax: +86-451-86267847 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