

θ**x**, θ**y** axes | S38.T1S/K Piezo Tip/Tilt Platform



Introduction

S38.T1 piezo tip/tilt platform have a very small shape and structure, with an outer diameter of only 20mm, θ X and θ Y two-dimensional deflection strokes can reach ±0.75mrad/axis. Small lenses can be loaded for fast twodimensional optical path deflection adjustment.

Characteristics >>

- θx, θy tilt
- Tilt angle: ±0.75mrad/axis
- Small size, outer diameter is only 20mm
- Optional closed-loop sensor

Applications >>

- Laser scanningBeam deflection
- Image processing and stabilization
- Error correction for polygonal mirrors
- Beam stabilization
- Light filter
- Optical switch
- Active and adaptive optics



Harbin Core Tomorrow Science & Technology Co., Ltd.

Tel: +86-451-86268790 Email: in Fax: +86-451-86267847 Web: w

790 Email: info@coremorrow.com847 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



Make Your Motion and Control More Accurate!

Technical Data >>

Туре	S - closed loop K - open loop	S38.T1S	S38.T1K	Units
Active axes		Өх, Өу	Өх, Өу	
Driving channels		3	3	
Tilt angle		±0.5/axis (0~100V)	±0.6/axis (0~120V)	mrad±20%
Tilt angle		±0.6/axis (0~120V)	±0.75/axis (0~150V)	mrad±20%
Integrated sensor		SGS	-	
Resolution		0.03 (< 0.01")	0.01 (< 0.01")	µrad
Closed-loop linearity		0.3	-	%F.S.
Closed-loop repeatability		0.1	-	%F.S.
Unloaded resonant frequency		7000	7000	Hz±20%
Closed-loop operating frequency (-3dB)		400(@26.7g load)		Hz±20%
El. capacitance		1.6/axis	1.6/axis	μF±20%
Closed-loop operating frequency (-3dB)		400(@26.7g load)		Hz±20%
Operating temperature ^[1]		-20~80	-20~80	°C
Material		Steel, cuprum	Steel, cuprum	
Platform length L		20	20	mm±0.1
Mass(with no cable)		50	50	g±5%
Cable length ^[2]		1.5	1.5	m±10mm
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° 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 20μ m, and the roughness is about 1.6 to 3.2. Please contact the sales engineer for confirmation before purchase.



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

Drawing >>



Note: Only mouting at the base, clamping is not accepted.

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 Fax: +86-451-86267847

Fmail: info@coremorrow.comWeb: www.coremorrow.com

Headquarters: Building I2, No.191 Xuefu Road, Nangang District, Harbin Shanghai Office: Building 2, No.608 Shengxia Road, Pudong District, Shanghai