

CRYO STAGE 02 (CS02)



Features

- Orthogonal xyz motion
- Will fit a 50mm bore
- Robust package
- XY using CBS10 positioners, non magnetic
- Z using a CLA2601 positioner
- XYZ scan range 1.6 micron at 4K
- Load capacity 1kg
- Resistive Linear Sensor option "RLS"
- Gold coated OFHC reference frame is optional

Description / Applications

The CS021 offers orthogonal xyz positioning with high load capacity in a compact and robust package, fitting a 50mm bore. It combines 2 CBS10 positioners for xy motion with a CLA2601 positioner for vertical motion. The latter allows the CS021 to take loads up to 1kg. Sensors with absolute position output can be fitted on all axes when accurate positioning is required. The detachable reference frame offers a stable interface close to the sample table and is made of gold plated OFHC for highest thermal conductivity. It will allow users to attach parts at will, as needed in their experiment.

Specifications

specs	unit	CS021	CS021-RLS
SYSTEM SPECIFICATIONS			
Active axes	-	3	
Type of motion	-	x, y, z, orthogonal	
Coarse range *	mm ³	max 10 x 10 x 5	
Scan range @ ambient	µm ³	8 x 8 x 8	
Scan range @4K	µm ³	1.6 x 1.6 x 1.6	
X and Y positioner (including scanning) **	-	CBS10	
Z positioner ***	-	CLA2601	
Z scanning actuator	-	piezo ceramic	
Z-scanner sensitivity @ ambient	nm/V	66	
Z-scanner sensitivity @ 4 K	nm/V	13	
Endstops ****	-	xy +/-5mm and z +/- 3mm	
Main construction materials	-	Titanium, Aluminium, Stainless steel	
Load capacity	grams	1000	
Operating temperature	K	0.8-375	
Mass	grams	200	230
DRIVE ELECTRONICS			
Controller/driver	-	CAB-230(115), CADM2	
Sensor readout	-	RSM	
Scanner module for z-scanner	-	PSM, PSMIL	
* See CS021 interface drawing for details			
** See CBS product page for detailed information.			
*** See CLA product page for detailed information			
**** xy endstops can be touched without problems. Touching z endstops is ideally avoided and can be prevented by using the RLS position feedback option. Touching them will not cause damage but could require manual action to free it.			

Mechanical and electrical information

Download 3D-Step files, interface drawings and user manuals from:
www.jpe.nl/cryo-nano-positioning/

Contact

For quotations, orders, customization or specials, please contact us at:
www.jpe.nl/contact

Ordering Information

CS021

Cryo Stage 021

CS021-RLS

CS021 incl. Resistive Linear Sensor on all axes

I1-CS021

Gold plated, detachable OFHC Interface/Reference Frame for the CS021