



三维旋转电输运系统

- 3维球-旋转系统（闭环控制）；
- 16路电输运测量线路；
- 独立控温模块-温度计&加热器；

多场低温科技（北京）有限公司

www.multi-field.com

北京市海淀区中关村东路 恒兴大厦24G

三维旋转系统, 技术参数

覆盖完整3D球的旋转系统，默认搭配电输运测试系统和温度控制系统

工作环境	交换气制冷系统，He等
旋转传感器	电阻传感器，theta & phi 两轴旋转
旋转行程	完整3D，theta & Phi 均支持旋转360度
材料	纯钛，铍铜 压电陶瓷 纯铜双绞线
单步分辨率	1m° - theta & phi
传感器分辨率	10 m° - theta & phi
重复性	~50 m° - theta & phi
线性度	~1%
样品托	LCC 20, LCC 28, PCB；最多16路测量线缆，8对双绞线；
工作温度范围	1.5 K~350 K
磁场范围	Max. 18T (Tested)
可搭配低温平台种类	所有拥有49mm（或以上）直径样品腔的低温平台
压电旋转台控制器	MFP6 controller
温度计	Cernox 1050 (Calibrated)
加热器	50 omga, 100 W (max. Power)
温度控制器	多场科技自有温控仪，Kelvion；可选其他品牌温控仪
电学接头	Mini-DSub 09~温度控制 Mini-DSub 15~压电旋转台控制 Mini-DSub 21~电学测量部分
尺寸示意图	
可选附件	



3D ROTATOR SYSTEM

- 3D Sphere Rotation (Closed loop);
- 16pin ETO¹ Measurement;
- Independent Temperature Control;

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3D-Rotator System, Specification

Full 3D Sphere rotation system, with electric transport measurement and temperature controller modular.

Work Environments	designed for He exchange gas systems to keep sample cool
Sensor Specification	2 rotation axis (theta & phi) with resistance encoder
Travel Range	Full 3D sphere, with 360° for both theta & phi axis
Materials	Pure Ti & BeCu PZT Ceramic Twisted Copper Wires (20cm)
Step Size	1m° - theta & phi
Sensor Resolution	10 m° - theta & phi
Repeatability	~50 m° - theta & phi
Linearity	~1%
Sample Holder	LCC 20, LCC 28, PCB; 16 twisted wires max.
Temperature Range	1.5 K~350 K
Magnetic Field Range	Max. 18T (Tested)
Compatible Cryostats	All cryostats with 49mm (or above) bore size
Rotator Controller & Software	MFP6 controller
Temperature Sensor	Cernox 1050 (Calibrated)
Heater	50 omga, 100 W (max. Power)
Temperature Controller	MultiFields Technologies product, Kelvinin; or any other commercial controller.
Electric Connectors	Mini-DSub 09~Temperature Control; Mini-DSub 15~Rotator Control & Sensors; Mini-DSub 21~Electric Transport Measurement;
Schematic	
options	