

2-Axis Rate Table Series FOGRT2247



2-Axis Rate Table Series AC2247-TC is precise test equipment which can provide stimuli in the form of the orthogonal axes angular rates , acceleration and positions to achieve the testing and evaluation about gyro, inertial measurement unit and accelerometers. It also can be achieved the motion simulate, servo, simulation, vibration, and other dynamic angular movement in two spatial rotational directions.

Control system:high-performance control unit, high-precision angular measuring system, PWM digital servo amplifier,Direct drive servo motor and so on.

Components:support,drive motor, power amplifier, angle measuring device,AD/DA card (those are adopted high-performance products).

Structure: vertical, horizontal

Features

Precise absolute positioning,

High rate accuracy with no drift,

Excellent rate stability in both axes thanks to AC direct drives in both axes

Temperature chamber, either with liquid nitrogen (LN2) or carbon dioxide (CO2) open-loop cooling

Sliprings for data transmission from / to device under test

Host computer interface through IEEE-488, Ethernet, or real-time; graphical user interface (GUI) for system customization and command

Applications

Aircraft and space applications

IMU System Testing

Fiber optic gyro testing

Quartz accelerometer Testing

FOGRT2247 Series 2-Axis Turntable Performance

Type	FOGRT2247-A	FOGRT2247-B	FOGRT2247-C	FOGRT2247-D
Function	2-axis rate and position	2-axis rate and position	2-axis rate and position	2-axis rate and position

Max load weight	30kg	35kg	40kg	50kg
Max load size	Φ 310×410mm ²	Φ 350×460mm ²	Φ 460×510mm ²	Φ 580×550mm ²
Mounting surface accuracy	~±2''	~±2''	~±2''	~±2''
Locating surface accuracy	~±2''	~±2''	~±2''	~±2''
2-axis position accuracy	~±1''	~±1''	~±1''	~±1''
2-axis position resolution	~0.36''	~0.36''	~0.36''	~0.36''
Rate range (inside, outside)	0.001~2100°/s, 600°/s	0.001~1600°/s, 500°/s	0.001~1300°/s, 500°/s	0.001~1100°/s, 400°/s
2-axis accuracy and stability	1×10 ⁻³ ~1×10 ⁻⁶	1×10 ⁻³ ~1×10 ⁻⁶	1×10 ⁻³ ~1×10 ⁻⁶	1×10 ⁻³ ~1×10 ⁻⁶
2-axis rate resolution	~0.0001°/s	~0.0001°/s	~0.0001°/s	~0.0001°/s
2-axis angular acceleration (inside,outside)	~1000°/s, 500°/s	~800°/s, 600°/s	~600°/s, 300°/s	~500°/s, 200°/s
Slip ring	customized	customized	customized	customized
Turntable weight	300kg	400kg	550kg	700kg
Dimension,(mm ³)	1410×960×1500	1480×960×1500	1560×1100×1550	1750×1100×1700

FOGRT2248 Series 2-Axis Turntable

Type	FOGRT2248-A	FOGRT2248-B	FOGRT2248-C	FOGRT2248-D
Function	2-axis position,rate and simulation	2-axis position,rate and simulation	2-axis position,rate and simulation	2-axis position,rate and simulation
Max load weight	32kg	36kg	41kg	52kg
Max load size	Φ 350×400 mm ²	Φ 450×500 mm ²	Φ 550×600 mm ²	Φ 600×550 mm ²
Platform fatness	~0.01mm	~0.01mm	~0.02mm	~0.02mm
Platform tun-out	~ 0.01mm	~0.01mm	~0.02mm	~0.02mm
2-axis position accuracy	~±1''	~±1''	~±1''	~±1''
2-axis position resolution	~0.36''	~0.36''	~0.36''	~0.36''
Rate range (inside, outside)	0.001~3000°/s, 1200°/s	0.001~3000°/s, 1200°/s	0.001~3000°/s, 1200°/s	0.001~3000°/s, 1200°/s
2-axis accuracy and stability	1×10 ⁻³ ~1×10 ⁻⁶	1×10 ⁻³ ~1×10 ⁻⁶	1×10 ⁻³ ~1×10 ⁻⁶	1×10 ⁻³ ~1×10 ⁻⁶
2-axis rate resolution	~0.0001°/s	~0.0001°/s	~0.0001°/s	~0.0001°/s
2-axis angular acceleration (inside, outside)	~6000°/s, 2000°/s	~4000°/s, 2000°/s	~2000°/s, 1500°/s	~1500°/s, 1000°/s
System bandwidth (-3dB, inside,outside)	~100HZ,~50HZ	~80HZ,~40HZ	~60HZ,~30HZ	~40HZ,~20HZ
Slip ring	customized	customized	customized	customized
Turntable weight	1300kg	1300kg	1300kg	1300kg
Dimension ,mm ³	1290×795×1050	1290×795×1050	1290×795×1050	1290×795×1050

CAD Drawings

