

3-Axis Rate Table Series FOGRT3337



3-axis turntable is precise test equipment which can provide stimuli in the form of angular rates , acceleration and positions in three directions to achieve the testing and evaluation about gyro, inertial measurement unit and accelerometers. It also can be achieved the motion simulation, angular vibration,swaying and other dynamic angular movement in three 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: mechanical body is designed as U-O-O/U-U-T.

Product category: rate and position turntable, angular vibration table, swaying platform.

Features

Precise absolute positioning,

High rate accuracy with no drift,

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

FOGRT3337 Series 3-Axis Rate Table

Type	FOGRT3337-A	FOGRT3337-B	FOGRT3337-C
Function	3-axis rate and position	3-axis rate and position	3-axis rate and position

Max load weight	30kg	45kg	60kg
Max load size	350×350×400 mm ²	450×450×500 mm ²	550×550×600 mm ²
Mounting surface accuracy	~±2''	~±2''	~±2''
Locating surface accuracy	~±2''	~±2''	~±2''
3-axis position accuracy	~±1''	~±1''	~±1''
3-axis position resolution	~0.36''	~0.36''	~0.36''
Rate range (inside, medium, outside)	0.001~1500°/s, 1200°/s, 1000°/s	0.001~1200°/s, 1000°/s, 800°/s	0.001~1000°/s, 800°/s, 600°/s
3-axis accuracy and stability	1×10 ⁻³ ~1×10 ⁻⁵	1×10 ⁻³ ~1×10 ⁻⁵	1×10 ⁻³ ~1×10 ⁻⁵
3-axis rate resolution	~0.0001°/s	~0.0001°/s	~0.0001°/s
3-axis angular acceleration	~300°/s	~200°/s	~100°/s
Slip ring	customized	customized	customized
Turntable weight	1200kg	1600kg	2100kg
Dimension	1100×950×2050mm ³	1250×1050×2050mm ³	1400×1250×2300mm ³

FOGRT3338 Series 3-Axis Angular vibration Table

Type	FOGRT3338 -A	FOGRT3338 -B	FOGRT3338 -C
Function	3-axis position,rate and angular vibration	3-axis position,rate and angular vibration	3-axis position,rate and angular vibration
Max load weight	25kg	40kg	60kg
Max load size	Φ 350×400 mm ²	Φ 450×500 mm ²	Φ 550×600 mm ²
Platform flatness	~0.01mm	~0.015mm	~0.02mm
Platform run-out	~ 0.01mm	~0.015mm	~0.02mm
3-axis position accuracy	~±2''	~±2''	~±2''
3-axis position resolution	~0.36''	~0.36''	~0.36''
Rate range (inside, medium, outside)	0.001~2000°/s, 800°/s, 600°/s	0.001~2000°/s,600°/s, 400°/s	0.001~2000°/s, 400°/s, 300°/s
3-axis accuracy and stability	1×10 ⁻³ ~1×10 ⁻⁵	1×10 ⁻³ ~1×10 ⁻⁵	1×10 ⁻³ ~1×10 ⁻⁵
3-axis rate resolution	~0.0001°/s	~0.0001°/s	~0.0001°/s
3-axis angular acceleration (inside,medium,outside)	~4000°/s, 3000°/s, 2000°/s	~3000°/s, 2000°/s, 1500°/s	~2000°/s, 1500°/s, 1000°/s
System bandwidth (-3dB, inside,medium,outside)	~80HZ,~40HZ,~20HZ	~60HZ,~30HZ,~20HZ	~40HZ,~30HZ,~15HZ
Slip ring	customized	customized	customized
Turntable weight	1100kg	1800kg	2500kg
Dimension	1150×950×1500mm ³	1350×1150×1600mm ³	1650×1250×1900mm ³

FOGRT3339 Series 3-Axis Angular vibration Table

Type	FOGRT3339-A	FOGRT3339-B	FOGRT3339-C
Function	3-axis position,rate and angular vibration	3-axis position,rate and angular vibration	3-axis position,rate and angular vibration

Max load weight	35kg	45kg	60kg
Max load size	350×350×400 mm ²	450×450×500 mm ²	550×550×600 mm ²
Mounting surface accuracy	~±2''	~±2''	~±2''
Locating surface accuracy	~±2''	~±2''	~±2''
3-axis position accuracy	~±2''	~±2''	~±2''
3-axis position resolution	~0.36''	~0.36''	~0.36''
Rate range (inside, medium, outside)	0.001~900°/s, 650°/s, 400°/s	0.001~600°/s, 400°/s, 300°/s	0.001~500°/s, 300°/s, 200°/s
3-axis accuracy and stability	1×10 ⁻³ ~1×10 ⁻⁵	1×10 ⁻³ ~1×10 ⁻⁵	1×10 ⁻³ ~1×10 ⁻⁵
3-axis rate resolution	~0.0001°/s	~0.0001°/s	~0.0001°/s
3-axis angular acceleration (inside,medium,outside)	~8000°/s, 4000°/s, 2500°/s	~3000°/s, 2000°/s, 1500°/s	~2000°/s, 1500°/s, 1000°/s
System bandwidth (-3dB, inside,medium,outside)	~100HZ,~50HZ,~40HZ	~60HZ,~30HZ,~20HZ	~40HZ,~30HZ,~15HZ
Slip ring	customized	customized	customized
Turntable weight	3500kg	4100kg	4800kg
Dimension	1550×1550×2050mm ³	1700×1550×2200mm ³	1850×1550×2400mm ³

FOGRT3339 Series 3-Axis Swaying Platform

Type	FOGRT3339 -A	FOGRT3339 -B	FOGRT3339 -C
Function	3-axis position,rate and angular vibration	3-axis position,rate and angular vibration	3-axis position,rate and angular vibration
Max load weight	35kg	45kg	60kg
Max load size	350×350×400 mm ²	450×450×500 mm ²	550×550×600 mm ²
Mounting surface accuracy	~±2''	~±2''	~±2''
Locating surface accuracy	~±2''	~±2''	~±2''
3-axis position accuracy	~±2''	~±2''	~±2''
3-axis position resolution	~0.36''	~0.36''	~0.36''
Rate range (inside, medium, outside)	0.001~900°/s, 650°/s, 400°/s	0.001~600°/s, 400°/s, 300°/s	0.001~500°/s, 300°/s, 200°/s
3-axis accuracy and stability	1×10 ⁻³ ~1×10 ⁻⁵	1×10 ⁻³ ~1×10 ⁻⁵	1×10 ⁻³ ~1×10 ⁻⁵
3-axis rate resolution	~0.0001°/s	~0.0001°/s	~0.0001°/s
3-axis angular acceleration (inside,medium,outside)	~8000°/s, 4000°/s, 2500°/s	~3000°/s, 2000°/s, 1500°/s	~2000°/s, 1500°/s, 1000°/s
System bandwidth (-3dB, inside,medium,outside)	~100HZ,~50HZ,~40HZ	~60HZ,~30HZ,~20HZ	~40HZ,~30HZ,~15HZ
Slip ring	customized	customized	customized
Turntable weight	3500kg	4100kg	4800kg
Dimension	1550×1550×2050mm ³	1700×1550×2200mm ³	1850×1550×2400mm ³

Control Unit

