



STANDARD FEATURES

- Position Accuracy: ± 1 Arc Sec
- Position Repeatability: ± 1 Arc Sec
- Rate Accuracy: 0.0001%
- Direct-drive, DC brushless servo system
- High-precision, pre-loaded ball bearings
- Precision-ground anodized aluminum tabletop
- Fail-safe brakes
- Electronics console for AERO 4000 Controller and Servo Amplifiers

AERO 4000 CONTROLLER FEATURES

- .NET interface over Ethernet
- Front panel display of status and data
- Local and remote operation
- Trapezoidal velocity profiles with programmable velocity and acceleration
- Sinusoidal motion profiles with variable amplitude and frequency
- Profile Modes for simulating complex motion

DESCRIPTION

The 2003HP Series Three-Axis Precision Positioning and Rate Table Systems provide precise angular position, rate and acceleration motion stimuli generally used for the development, production and/or qualification testing of precision inertial packages such as Inertial Measurement Units (IMU), Inertial Navigation Systems (INS), and Attitude Heading Reference Systems (AHRS) or seeker/tracker/stabilization devices for applications in the Aviation, Aerospace, Defense, Space, and Marine industries.

These tables are servo controlled and feature direct-drive DC brushless motors, precision optical encoders and a microprocessor based controller that provides accurate and reliable motion control. The table can be operated from the Aero 4000 Controller, front panel keypad or keyboard for local control or through a computer interface for remote control. This test table system is designed for ease of operation, yet allows for the performance of complex motion profiles.

The 2003HP Series Table Systems may be configured for limited rotation or with slip rings for unlimited axis rotation based on specific customer requirements. For limited rotation applications, these tables have wire wrap allowance that provides a cost effective alternative to slip rings. Wire wrap test tables are designed for high reliability, minimal electrical noise, and low maintenance.

EASE OF INTEGRATION

- LabVIEW™ Virtual Instrument (.vi) driver included
- GPIB and 100base-T Ethernet interfaces standard
- Available control languages: ATL (Aerosmith Table Language) and MPACS (Legacy Carco and Contraves Controllers)

OPTIONS

- High-quality, low-noise slip rings for continuous rotation applications available in various package sizes
- Integral LN₂ cooled thermal chamber with testing range of -65 to +105 deg C (+125°C optional)
- Custom tabletop diameters
- Increased maximum rates for any axis
- High Frequency RF Rotary Joint
- Fiber Optic Rotary Joint
- High Speed Reflective Memory interface
- *For special requirements, please contact Ideal Aerosmith regarding system customization*

For much more detailed information, contact Ideal to request a 2003HP Series Specification Document or AERO 4000 Controller Data Sheet

Rev C