

# 1542C-12-TL SERIES TWO AXIS POSITIONING AND RATE TABLE SYSTEM



## STANDARD FEATURES

- Position Accuracy:  $\pm 15$  arc sec
- Rate Accuracy:  $\pm 0.005\%$   $\pm$  Resolution
- Max Rate (varies depending on axis configuration):
  - Inner Axis: 1080 deg/sec
  - Outer Axis: 360 deg/sec
- Direct-drive, brushless servo system
- Precision-ground anodized aluminum tabletop
- 12-inch diameter tabletop
- Fail-safe brakes (both axes)
- Integral Thermal Chamber
- Rotational freedom options of  $\pm 720^\circ$
- AERO 3500 Commander Digital Controller mounted in a short cabinet
- RS-232, IEEE-488 and Ethernet interface
- 2 kHz servo update rate
- Front panel display of status and data
- Local and remote operation
- User-friendly Ideal Aerosmith Table Language (ATL)
- Trapezoidal velocity profiles with programmable velocity and acceleration
- Sinusoidal motion profiles with variable amplitude and frequency
- Position Profile, Velocity Profile, and Flight Profile Modes for simulating complex motion profiles
- Analog position and velocity input
- Analog position, velocity, acceleration and position error output
- Absolute Optical Encoders
- Capable of querying the current position, velocity, and acceleration
- CE Mark

## DESCRIPTION

The 1542C-12-TL Series Automatic Positioning and Rate Table System is designed to provide precise position, rate and acceleration motion for the development and/or production testing of inertial packages and their components.

The 1542C-12-TL Series test table is a servo-controlled systems featuring direct-drive brushless torque motors, precision absolute optical encoders and a microprocessor based controller that provides accurate and reliable motion control. The table can be operated from the AERO 3500 COMMANDER front panel for local control or remotely through a host PC via the Ideal Aerosmith Table Language (ATL) over an RS-232, IEEE-488 or Ethernet communication interface.

## OPTIONS

- Custom tabletop
- $\pm 8$  arc second position accuracy
- Unlimited rotation for inner or both axes
- Custom user line or slip ring packages
- Rotary Joints for RF or Fiber Optic signals
- High-speed inner axis
- *For special requirements, please contact Ideal Aerosmith regarding system customization.*

*For much more detailed information, contact Ideal to request a Specification document.*

Rev A