

Pan/Tilt Gimbal

Gimbal Module for Two Rotational Motion Axes

The CI Systems Pan/Tilt Gimbal module is ideal for mounting and manipulating an optical device.

The Pan/Tilt Gimbal offers high accuracy, high load capacity, and high torque capacity. No need for a controller. The Gimbal seamlessly integrates into test systems, directly to a computer.

Its structure is designed for high rigidity and thermal stability, accurate orthogonal rotation, smooth motion and high stability.



12" Gimbal with Joystick

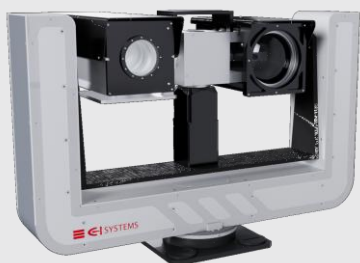
» Possible Applications

The Pan/Tilt Gimbal family of products is ideal for:

- Positioning and manipulating Electro Optical devices such as imagers, payloads and lasers within a test system
- Pan-Tilt positioning of optical components such as folding mirrors.
- Distortion Mapping of optical systems
- Industrial Inspections
- Scientific Research

» Features

- High resolution, repeatability and accuracy
- Built-in controller. Integrated directly to a computer
- Smooth and quiet motion
- Real-time close-loop encoder control.
- No homing required on power on (on High Accuracy Option)
- Standard size ranges for UUT size 12" up to 37"
- Speed up to 20 seg-sec Speed (optional)
- Load Capacity up to 150kg (optional)
- Customized interface plate (optional)
- Joystick driven Gimbal operation, with 6 predefined positions (optional)



32" Pan-Tilt Gimbal,
with a Multi Sensor Camera



22" Pan-Tilt Gimbal,
with a folding mirror



Single Yoke Gimbal with a Steering Mirror,
in front of a EO Tester

Pan/Tilt Gimbal

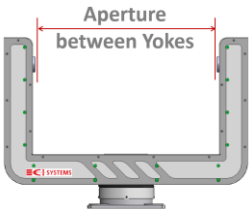
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» Specifications

Standard Gimbal:	Standard Accuracy	High Accuracy
Size (Maximum Aperture between Yokes)	12" , 15" , 19" , 22" , 24" , 32" , 37" (see note 1)	
Accuracy: at $\pm 10^\circ$ / at Full Range	50 / 64 arcsec	6 / 30 arc-sec
Resolution	32 arcsec (close loop) 1 arcsec (open loop, motor resolution)	1 arc-sec
Unidirectional Repeatability (at $\pm 10^\circ$)	32 arc-sec	4 arc-sec
Maximum Speed	8 deg-sec (see note 2 for optional high speed)	
Travel Range, Azimuth & Elevation	$\pm 140^\circ$ & $\pm 140^\circ$	
Load Capacity	50 kg (see note 3 for optional high load capacity)	
Maximum Output Torque	12 Nm	
Optical Limit Switches	Yes	
Origin Optical home switch	Yes	
Optical index on the encoder	Yes	
Encoder type	Optical on axis	
Interface: Power	220 / 110 V	
Interface: Communication	USB A for RS-232	

» Options

- (1) Standard Sizes (Maximum Aperture between Yokes) from 12" to 37" (see image, right)
- (2) Optional high speed up to 20 deg-sec is available upon request
- (3) Optional load capacity up to 150 kg is available upon request
- (4) Additional optional Gimbals are available upon request (see below)
- (5) Joystick driven Gimbal operation is available upon request



Custom Gimbals (Optional) :



Distribution in the UK & Ireland



Characterisation,
Measurement &
Analysis

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