

## BG650 Long Travel Stage



The BG650 is a long travel stage used for inspecting or processing larger parts such as flat panels and circuit boards. Many options are available, including lead screw or ball screw drives, stepper motors, servo motors, or “smart” motors with integral controllers (shown above), connector bulkheads, and side seals. Even though the BG650 is an economical stage, performance has not been compromised. A stiff stage body machined from 7075 aluminum ensures angular errors (pitch, yaw, roll) and straightness errors (straightness and flatness of travel) are kept to a minimum. Large, precision linear rail guides with recirculating, caged ball bearings provide smooth, quiet travel, long life and high load capacity. Because many

of our stages are integrated into metrology instruments or process tools, we pay a lot of attention to the quality of all external surface finishes.



Split Gantry using BG650 Stages

Specifications		
Travel	650mm	
Linear Guides	15mm Recirculating Ball Bearing	
Motor Options	IMS MDrive or Standard Stepper or Servo	
Motor Mount	NEMA23	
Drive Type	5mm Ball Screw	0.200” Lead Screw
Linear Accuracy w/ linear compensation <sup>1,2</sup>	±15µm	±15µm
Bidirectional Repeatability <sup>3</sup>	±1.0µm	±4.0µm
Maximum Velocity	200mm/sec	100mm/sec
Pitch	±20 arc-sec	
Yaw	±20 arc-sec	
Straightness of Travel	±5.0µm / Travel	
Flatness of Travel	±5.0µm / Travel	
Load Capacity	50Kg	
Travel Limits	Optical, 5-24VDC	

<sup>1</sup>Higher accuracies available on request <sup>2</sup>Measured 50mm above surface <sup>3</sup>With 2500 line encoder

