

RSL1000X High-Speed Long Travel Stage



The RSL1000X high-speed long travel stage was developed for a new customer to replace a linear stage in an application that was not meeting their desired performance criteria. At 1299mm in total length and 185mm in width, the RSL1000X has 1000mm of travel and utilizes a direct drive with linear motors and ultra-precision linear guide rails. It is well suited for applications requiring accelerations up to 2.6g and/or velocity up to 3.3m/s. There is also easy integration with an optional Z axis (pictured above).

Specifications	
Travel	1000mm
Drive Type	Linear Motors
Peak Force	420N
Continuous Force	240N
Encoder Resolution	1.0µm
Linear Accuracy	±10.0µm
Bi-Directional Repeatability	±5.0µm
Flatness of Travel	$\pm 10.0 \mu m/500 mm$
Straightness of Travel	±20.0µm/500mm
Orthogonality	10 arcsec
Max Velocity	3.3m/s
Max Acceleration	26m/s^2