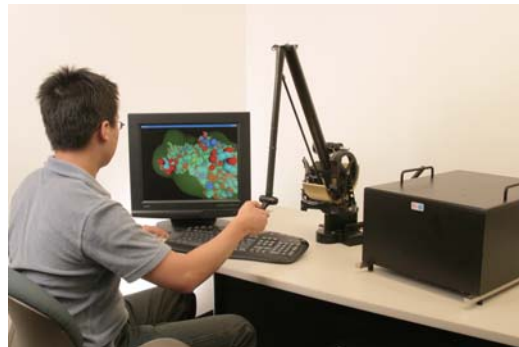




SPECIFICATIONS FOR THE PHANTOM® PREMIUM 3.0/6DOF HAPTIC DEVICE



Workspace	Translational	33 W x 23 H x 16 D inches 838 W x 584 H x 406 D mm
	Rotational Yaw Pitch Roll	297 degrees / 5.18 radians 260 degrees / 4.54 radians 335 degrees / 5.85 radians
Footprint	Detachable portion	8 W x 8 D inches / 203 W x 203 D mm
	Electronics console (AMP box)	15 W x 20 D inches / 381 W x 508 D mm
Range of motion	Full arm movement pivoting at shoulder	
Nominal position resolution	Translational	> 1000 dpi / ~ 0.02 mm
	Rotational Yaw & Pitch Roll	0.0023 degrees / 0.00004 radians 0.0080 degrees / 0.00014 radians
Backdrive friction (x, y, z)	0.75 oz 0.2 N	
Maximum exertable force and torque at nominal position (orthogonal arms)	Translational	4.9 lbf / 22N
	Rotational Yaw & Pitch Roll	73 oz-in / 515 mNm 24 oz-in / 170 mNm
	Continuous exertable force and torque at nominal position (orthogonal arms)	0.7 lbf / 3 N
Continuous exertable force and torque at nominal position (orthogonal arms)	Translational	0.7 lbf / 3 N
	Rotational Yaw & Pitch Roll	27 oz-in / 188 mNm 7 oz-in / 48 mNm
	Stiffness	5.7 lbf in ⁻¹ / 1 N mm ⁻¹
Inertia (apparent mass at tip)	< 0.48 lbm / < 220 g	
Weight (device only)	Detachable portion	16 lb / 7.3 Kg
	Electronics console (AMP box)	53 lb / 24 Kg
Force feedback	x, y, z, Tx, Ty, Tz	
Position sensing	x, y, z, roll, pitch, yaw	
Interface	Parallel port	
Supported Platforms	Intel-based PCs	
GHOST® SDK Compatibility	Upon special request	
OpenHaptics™ Toolkit Compatibility	Yes	

'SenSitus' molecular docking software package shown above courtesy of Stefan Birmanns, Ph.D. of the Laboratory for Structural Bioinformatics, University of Texas Health Science Center at Houston.

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