



## SPECIFICATIONS COMPARISON FOR THE PHANTOM® PREMIUM MODELS 1.0, 1.5, AND 3.0

	Premium 1.0		Premium 1.0 High Force		Premium 1.5	Premium 1.5 High Force		Premium 3.0
Workspace	5 x 7 x 10 inches				7.5 x 10.5 x 15 inches		16 x 23 x 33 inches	
	13 x 18 x 25 cm				19.5 x 27 x 37.5 cm		41 x 59 x 84 cm	
Range of motion	Hand movement pivoting at wrist				Lower arm movement pivoting at elbow		Full arm movement pivoting at shoulder	
Nominal position resolution	860 dpi	3784 dpi			860 dpi	3784 dpi	> 1000 dpi	
	0.03 mm	.007 mm			0.03 mm	.007 mm	0.02 mm	
Backdrive friction	0.15 oz.	.75 oz.			0.15 oz.	.75 oz.	0.75 oz.	
	0.04 N	.2 N			0.04 N	.2 N	0.2 N	
Maximum exertable force	1.9 lbf.	8.4 lbf.			1.9 lbf.	8.4 lbf.	4.9 lbf.	
	8.5 N	37.5 N			8.5 N	37.5 N	22 N	
Continuous exertable force (24 hrs)	0.3 lbf.	1.9 lbf.			0.3 lbf.	1.9 lbf.	0.7 lbf.	
	1.4 N	8.3 N			1.4 N	8.3 N	3 N	
Stiffness	20 lbs./in.				20 lbs./in.		5.7 lbs./in.	
	3.5 N/mm				3.5 N/mm		1 N/mm	
Inertia (apparent mass at tip). Without Encoder Gimbal	< 0.17 lbm.	< .06 lbm.			< 0.17 lbm.	< .06 lbm.	< 0.35 lbm.	
	< 75 g	< 25 g			< 75 g	< 25 g	< 150 g	
Footprint	10 x 13 inches				10 x 13 inches		8 x 8 inches	
	25 x 33 cm				25 x 33 cm		20 x 20 cm	
Force feedback	x, y, z				x, y, z		x, y, z	
Position sensing	x, y, z (6DOF optional)				x, y, z (6DOF optional)		x, y, z (6DOF optional)	
Interface	Via Parallel Port				Via Parallel Port		PCI interface card	
Supported platforms	Intel-based PCs				Intel-based PCs		Intel-based PCs	