

Mobile Workstations Compared

@Xi PowerGo XT 2018
17.3-inch
4.0GHz Intel Core i7-8086K 6-core CPU, NVIDIA Quadro P4200, 32GB RAM, 500GB NVMe PCIe SSD

Lenovo ThinkPad P52s
15.6-inch
1.9GHz Intel Core i7-8650U quad-core CPU, NVIDIA Quadro P500, 16GB RAM, 1TB NVMe PCIe SSD

HP Zbook x2
14.0-inch detachable
1.9GHz Intel Core i7-8650U quad-core CPU, NVIDIA Quadro M620, 32GB RAM, 512GB NVMe PCIe SSD

Lenovo ThinkPad P71
17.3-inch
3.1GHz Intel Xeon E3-1535M v6 quad-core CPU, NVIDIA Quadro P5000, 64GB RAM, two 512GB NVMe PCIe SSDs in RAID 0 array

HP Zbook 15 G4
15.6-inch
3.0GHz Intel Xeon E3-1505M v6 quad-core CPU, NVIDIA Quadro M2200, 32GB RAM, 512GB NVMe PCIe SSD

PNY PREVAIL PRO P4000
15.6-inch
2.8GHz Intel Core i7-7700HQ quad-core CPU, NVIDIA Quadro P4000, 32GB RAM, 512GB NVMe PCIe SSD and 2TB 5400rpm SATA HD

	@Xi PowerGo XT 2018	Lenovo ThinkPad P52s	HP Zbook x2	Lenovo ThinkPad P71	HP Zbook 15 G4	PNY PREVAIL PRO P4000
Price as tested	\$4,558	\$2,196	\$3,710	\$5,517	\$3,095	\$4,499
Date tested	8/7/18	6/12/18	4/5/18	12/14/17	12/1/17	11/28/17
Operating System	Windows 10	Windows 10	Windows 10	Windows 10	Windows 10	Windows 10
SPECviewperf 12 (higher is better)						
catia-04	165.95	28.64	30.81	145.81	71.62	110.72
creo-01	138.65	33.26	34.75	119.20	69.15	94.21
energy-01	14.87	0.55	0.63	14.51	5.29	12.40
maya-04	128.84	20.96	23.25	92.67	50.99	73.75
medical-01	63.65	9.41	11.02	66.51	25.62	50.11
showcase-01	73.41	12.55	15.94	65.73	32.19	60.28
snx-02	172.95	43.91	26.33	250.00	58.62	111.05
sw-03	181.61	50.01	57.28	151.51	97.14	121.45
SPECapc SOLIDWORKS 2015 (higher is better)						
Graphics Composite	5.32	1.94	2.36	3.64	6.60	3.44
Shaded Graphics Sub-Composite	3.48	1.17	1.44	2.11	3.33	2.00
Shaded w/Edges Graphics Sub-Composite	4.38	1.64	2.22	2.79	4.65	2.66
Shaded using RealView Sub-Composite	3.87	1.48	1.72	2.54	4.73	2.42
Shaded w/Edges using RealView Sub-Composite	4.36	1.98	3.05	3.22	7.85	2.98
Shaded using RealView and Shadows Sub-Composite	4.46	1.69	1.54	2.93	5.40	2.79
Shaded with Edges using RealView and Shadows Graphics Sub-Composite	4.61	2.00	2.57	3.45	8.34	3.17
Shaded using RealView and Shadows and Ambient Occlusion Graphics Sub-Composite	14.75	3.01	3.17	9.61	15.31	9.00
Shaded with Edges using RealView and Shadows and Ambient Occlusion Graphics Sub-Composite	13.51	3.54	4.77	9.66	21.43	9.12
Wireframe Graphics Sub-Composite	4.15	2.43	2.65	3.13	3.41	3.11
CPU Composite	5.40	1.72	1.75	2.39	4.07	2.21
SPECwpc v2.0 (higher is better)						
Media and Entertainment	4.14	1.71	1.97	3.38	2.63	2.53
Product Development	2.70	1.82	2.13	3.47	2.57	2.53
Life Sciences	4.40	1.83	2.25	4.18	3.01	3.03
Financial Services	5.37	1.91	0.85	3.14	2.87	2.47
Energy	4.08	1.42	0.87	6.43	2.11	2.67
General Operations	1.55	1.20	1.68	1.90	1.62	1.11
Time						
Autodesk Render Test (in seconds, (lower is better))	29.30	89.70	78.00	48.40	72.70	58.90
Battery Life (in hours:minutes, higher is better)	3:56	5:33	5:00	6:05	13:30	4:00

Numbers in blue indicate best recorded results. Numbers in red indicate worst recorded results.