

COMPARISON OF 13-INCH CLASS LAPTOPS

We compared the Dell™ XPS™ 13 laptop to others in its class from vendors including Acer®, Apple®, ASUS®, Fujitsu®, HP, Lenovo®, Samsung®, and Toshiba®. Figure 1 compares the systems using publicly available data at each vendor’s respective Web site. We gathered this data at the links provided on 04/21/2017 (click on model names to follow them) and report only what each vendor disclosed on their sites.

According to vendor-provided data, the Dell XPS 13:

- is the smallest 13-inch laptop
- has the longest battery life of any 13-inch laptop

Brand	Model	Thickness		Dimensions		Total area (sq. inches)	Weight	
		mm	inches	mm	inches		Lbs.	Kg.
Dell	XPS 13	9mm-15mm	0.33-0.6	304 × 200	11.98 × 7.88	94.4	2.7 (non-touch) 2.9 (touch)	1.2 (non-touch) 129 (touch)
Acer	Aspire S 13 (S5-371-52JR) (S5-371-55DC) (S5-371-75ML)		0.57-0.6		12.9 x 11.3	145.8	2.87	
Acer	Aspire S 13 (S5-371T-58CC) (S5-371T-76UX) (S5-371T-537V) (S5-371T-57WW) (S5-371T-76CY)		0.57-0.6		12.9 x 9	116.1	3	
Acer	Aspire S 13 (S5-371T-78TA)		0.57-0.6		12.9 x 9	116.1	3	



Brand	Model	Thickness		Dimensions		Total area (sq. inches)	Weight	
		mm	inches	mm	inches		Lbs.	Kg.
Acer	Aspire V 13 (V3-372T-77US)		0.8		12.9 × 9	116.1	3.53	
Acer	Swift 7 (SF713-51-M90J)		0.39		12.8 × 9	115.2	2.48	
Apple	MacBook Air (13-inch)	3mm-17mm	0.11-0.68	325 × 227	12.8 × 8.94	114.4	2.96	1.35
Apple	MacBook Pro (13-inch 2015)	18	0.71	314 × 219	12.35 × 8.62	106.5	3.48	1.58
Apple	MacBook Pro (13-inch)	14.9	0.59	304.1 × 212.4	11.97 × 8.36	100.1	3.02	1.37
ASUS	ZenBook UX303UA	19.2	0.8	323 × 223	12.7 × 8.8	111.8	3.2	
ASUS	ZenBook UX303UB	19.2	0.8	323 × 223	12.7 × 8.8	111.8	3.2	
ASUS	ZenBook UX305UA		0.63		12.7 × 8.89	112.9	2.86	
ASUS	ZenBook UX305CA		0.5		12.8 × 8.9	113.9	2.65	
ASUS	Zenbook UX305FA		0.5		12.8 × 8.9	113.9	2.6	
ASUS	ZenBook UX306UA		0.54		12.76 × 8.89	113.4	2.9	
ASUS	ZenBook UX330UA		0.53		12.7 × 8.7	112.9	2.64	
Fujitsu	LIFEBOOK E736		0.79-1.06		12.64 × 8.98	113.5	3.5	

Brand	Model	Thickness		Dimensions		Total area (sq. inches)	Weight	
		mm	inches	mm	inches		Lbs.	Kg.
HP	EliteBook 1030 G1		0.62		12.2 x 8.27	100.9	2.55	
HP	ENVY 13		0.55		12.83 x 8.9	114.2	2.87	
HP	Spectre - 13t Spectre 13-v151nr		0.41		12.8 x 9.03	115.6	2.45	
HP	ProBook 430 G3		0.78-0.83		12.83 x 9.19	117.9	3.31	
HP	ProBook 430 G4		0.78		12.99 x 9.19	119.4	3.28	
Lenovo	Ideapad 710S		0.55		12.09 x 8.42	101.8	2.6	
Lenovo	Ideapad 710S Plus		0.58		12.16 x 8.66	105.3	2.6	
Lenovo	ThinkPad 13		0.78		12.68 x 8.78	111.3	3.2	
LG	gram (13Z970-A.AAS5U1) (13Z970-U.AAW5U1)		0.6		1.21 x 8.3	100.43	2.07	
Panasonic	Toughbook 31		2.9		11.5 x 11.9	136.9	7.9	
Sager	NP3130		0.7		12.89 x 8.86	115	2.87	
Samsung	Notebook 9 (NP900X3L-K06US)		0.53		12.35 x 8.6	106.2	2.8	

Brand	Model	Thickness		Dimensions		Total area (sq. inches)	Weight	
		mm	inches	mm	inches		Lbs.	Kg.
Samsung	Notebook 9 (NP900X3N-K01US) (NP900X3N-K04US)		0.55		12.18 x 8.19	99.75	1.8	
Toshiba	Portege A30		0.84		12.4 x 9.0	111.6	3.44	
Toshiba	Portege Z30		0.55-0.70		12.4 x 8.9	110.4	2.65	
VAIO	VAIO Z		0.59-0.66		12.76 x 8.48	108.2	2.58	
VAIO	VAIO S		0.52-0.71		12.68 x 8.53	108.1	2.34	

Figure 1: Dimensional information. All links and data current as of 04/21/2017.

Brand	Model	Battery info	Battery Claim
Dell	XPS 13	60Whr integrated	22 hours
Acer	Aspire S 13 (S5-371-52JR) (S5-371-55DC) (S5-371-75ML)	3-cell Lithium Ion (Li-Ion) 4030 mAh	11 hours listed on the overview page 13 hours listed on the features page
Acer	Aspire S 13 (S5-371T-58CC) (S5-371T-76UX) (S5-371T-537V) (S5-371T-57WW) (S5-371T-76CY)	3-cell Lithium Polymer (Li-Po) 4850 mAh	13 hours listed on features page

Brand	Model	Battery info	Battery Claim
Acer	Aspire S 13 (S5-371T-78TA)	3-cell Lithium Polymer (Li-Po) 4670 mAh	13 hours listed on features page
Acer	Aspire V 13 (V3-372T-77US)	4-cell Lithium Ion (Li-Ion) 3220 mAh	12.5 hours
Acer	Swift 7 (SF713-51-M90J)	4-cell Lithium Ion (Li-Ion) 2770 mAh	9 hours
Apple	MacBook Air (13-inch)	Built-in 54 Wh Li-Po battery	12 hours wireless Web time 12 hours iTunes Movie Playback
Apple	MacBook Pro (13-inch 2015)	Built-in 74.9 Wh Li-Po battery	10 hours wireless Web time 12 hours iTunes Movie Playback
Apple	MacBook Pro (13-inch)	Built-in 49.2 Wh Li-Po battery	10 hours wireless Web time 10 hours iTunes Movie Playback
ASUS	ZenBook UX303UA	3-cells Polymer Battery 50 Whrs	7 hours
ASUS	ZenBook UX303UB	3-cells Polymer Battery 50 Whrs	7 hours
ASUS	ZenBook UX305UA	56 Whrs Polymer Battery	12 hours
ASUS	ZenBook UX305CA	45 Whrs Polymer Battery	10 hours (MM2014)
ASUS	Zenbook UX305FA	44 Whrs Polymer Battery	10 hours daily working 8 hours video playing
ASUS	ZenBook UX306UA	57 Whrs	7 hours
ASUS	ZenBook UX330UA	57 Whrs Polymer Battery	Up to 12 Hours web browsing
Fujitsu	LIFEBOOK E736	Li-Ion battery 6-cell, 5,800 mAh, 63 Wh Li-Ion battery 6-cell, 6,700 mAh, 72 Wh 2nd battery (optional) Li-Ion battery 6-cell, 2,600, mAh, 28 Wh	11 hours 30 minutes (first battery) MM2014 19 hours and 30 minutes (Dual battery+SSD) MM2014

Brand	Model	Battery info	Battery Claim
HP	EliteBook 1030 G1	4-cell, 40 WHr Li-ion	No official claim. LAPTOP Magazine claims 13 hours.
HP	ENVY 13	3-cell 57.8 WHr Lithium-ion Battery	14 hours (MM2014)
HP	Spectre - 13t Spectre 13-v151nr	4-cell 38 Wh Li-ion	9 hours and 45 minutes
HP	ProBook 430 G3	4-Cell (44 WHr) Battery 4-Cell (40 WHr) Long Life Battery 6-cell (55 WHr) Long Life Battery	No official claim. Notebook Check claims 6 hours, 17 mins while using WiFi.
HP	ProBook 430 G4	3-cell, 48 WHr Li-ion	No official claim. MSPoweruser claims 16 hours.
LG	gram (13Z970-A.AAS5U1) (13Z970-U.AAW5U1)	60 Wh	Up to 15 hours.
Panasonic	Toughbook 31	60 Wh	Up to 18 hours.
Sager	NP3130	36 Wh	4+ hours.
Lenovo	Ideapad 710S	4-cell, 46 Wh, Li-Cylindrical	8 hours of local video playback
Lenovo	Ideapad 710S Plus	46 Wh	Up to 7 hours
Lenovo	ThinkPad 13	42 Wh	11 hours
Samsung	Notebook 9 (NP900X3L-K06US)	2-cell / Li-Ion 30 Wh	10 hours (MM2007) 7.5 hours (MM2014)
Samsung	Notebook 9 (NP900X3N-K01US) (NP900X3N-K04US)	2-cell / Li-Ion 30 Wh	No official claim. Laptop Suggest claims Up to 10 hours of moderate-to-light use.

Brand	Model	Battery info	Battery Claim
Toshiba	Portege A30	4-cell, Li-Ion, 45 Wh	9.08 hours (MM2014)
Toshiba	Portege Z30	4-cell, Li-Ion, 52 Wh	15.25 hours (MM2014)
VAIO	VAIO Z	Lithium Polymer	Up to 15 hours, 30 mins
VAIO	VAIO S	Lithium Polymer	Up to 9 hours

Figure 2: Battery information. All links and data current as of 04/21/2017.

ABOUT PRINCIPLED TECHNOLOGIES



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