

# COMPARISON OF 15-INCH CLASS NOTEBOOKS

For comparison to the Dell™ XPS™ 15 notebook, we identified 15-inch-class notebooks that are currently shipping from the following vendors: Acer®, Apple®, ASUS®, HP, Lenovo®, and Toshiba®. Figures 1 through 3 compare the systems, which have a 15.6 inch screen size unless otherwise noted, using publically available data at each vendor’s respective website. We gathered this data on 09/09/2015 at the links provided (click on the model names to follow these links). Dell provided us with information about the forthcoming Dell XPS 15 notebook.

According to vendor-provided data for the notebooks for which we gathered information (Figures 1 through 3), the new Dell XPS 15:

- is the smallest 15-inch notebook<sup>1</sup>
- has a 5.4 percent smaller footprint than the MacBook Pro® with Retina® Display (15-inch)
- is the lightest performance-class 15-inch notebook<sup>2</sup>

Brand	Model	Thickness		Dimensions		Total area (sq. inches)	Weight	
		mm	inches	mm	inches		Lbs.	Kg.
Dell	XPS 15	12.0–17.0	0.46 (front) – 0.66 (rear)	357 × 235	14.06 × 9.25	130.055	4.09	1.85
Acer	<a href="#">Aspire VN7-591-76TR</a>		0.86 (front) 0.94 (rear)		15.3 x 10.1	154.53	5.29	
Acer	<a href="#">Aspire VN7-591G-70RT</a>		0.86 (front) 0.94 (rear)		15.3 x 10.1	154.53	5.29	
Acer	<a href="#">Aspire VN7-591G-71W9</a>		0.86 (front) 0.94 (rear)		15.3 x 10.1	154.53	5.29	
Acer	<a href="#">Aspire VN7-591G-72K6</a>		0.86 (front) 0.94 (rear)		15.3 x 10.1	154.53	5.29	
Acer	<a href="#">Aspire VN7-591G-729V</a>		0.86 (front) 0.94 (rear)		15.3 x 10.1	154.53	5.29	
Acer	<a href="#">Aspire VN7-591G-73Y5</a>		0.86 (front) 0.94 (rear)		15.3 x 10.1	154.53	5.29	
Acer	<a href="#">Aspire VN7-591G-77FS</a>		0.86 (front) 0.94 (rear)		15.3 x 10.1	154.53	5.29	

<sup>1</sup> Used in this report, the term “footprint” refers to the total surface area of the notebook.

<sup>2</sup> Used in this report, the term “performance-class” refers to having similar processors and similar discrete graphics cards.



Brand	Model	Thickness		Dimensions		Total area (sq. inches)	Weight	
		mm	inches	mm	inches		Lbs.	Kg.
Acer	<a href="#">Aspire VN7-591G-7857</a>		0.86 (front) 0.94 (rear)		15.3 x 10.1	154.53	5.29	
Acer	<a href="#">Aspire VN7-591G-79YZ</a>		0.86 (front) 0.94 (rear)		15.3 x 10.1	154.53	5.29	
Apple	<a href="#">MacBook Pro with Retina Display (15")</a>	18	0.71	358.9 x 247.1	14.13 x 9.73	137.4849	4.49	2.04
ASUS	<a href="#">G501JW</a>		0.8		15.1 x 10	151	4.54	
ASUS	<a href="#">G550JK</a>		1.1		15 x 10	150	5.7	
ASUS	<a href="#">G56JR</a>	27.2-34		380 x 255				2.7
ASUS	<a href="#">G56JK</a>		1.1-1.3		15 x 10	150	5.9	
ASUS	<a href="#">GL551JW</a>	28-31.5		383 x 255				2.7
ASUS	<a href="#">N550JV</a>	27.7		383 x 255				2.6
ASUS	<a href="#">N550JK</a>		1.1		15.1 x 10	151	6	
ASUS	<a href="#">N550JX</a>	27.7		383 x 255			5.7	
ASUS	<a href="#">N551JM</a>	28-31.5		383 x 255				2.7
ASUS	<a href="#">N551JQ</a>		0.6-1.3		15 x 10	150	6	
ASUS	<a href="#">X550JK</a>		1.15-1.2		15 x 10	150	5.4	
ASUS	<a href="#">ZenBook NX500</a>	19 (with 6 cell battery)		378 x 255 (with 6 cell battery)			5 (with 6 cell battery)	
ASUS	<a href="#">ZenBook Pro UX501</a>	21.3	0.8	383 x 255	15.1 x 10	151	4.5 (with 6 cell battery)	
HP	<a href="#">HP ENVY - 15t Quad Windows 7 Laptop</a>		0.67		14.94 x 9.87	147.4578	5.06	
HP	<a href="#">HP ENVY - 15t Slim Quad Laptop</a>		1.1		14.94 x 9.87	147.4578	5.06	
HP	<a href="#">HP OMEN - 15t Quad Touch Laptop</a>		0.78		15.07 x 9.67	145.7269	4.68	

Brand	Model	Thickness		Dimensions		Total area (sq. inches)	Weight	
		mm	inches	mm	inches		Lbs.	Kg.
HP	<a href="#">HP OMEN - 15t Quad Touch Select Laptop</a>		0.78		15.07 × 9.67	145.7269	4.68	
HP	<a href="#">HP OMEN Notebook - 15-5110nr</a>		0.78		15.07 × 9.67	145.7269	4.68	
Lenovo	<a href="#">Y50</a>		0.9		15.23 × 10.37	157.9351	5.29	
Lenovo	<a href="#">Y50 Touch</a> (six various models all match the criteria)		0.9		15.23 x 10.37	157.9351	5.7	
Lenovo	<a href="#">Y50-70 UHD</a> (six various models all match the criteria)		0.9		15.23 x 10.37	157.9351	5.29	
Toshiba	<a href="#">Satellite P50T-BST2GX5</a>		1.1		14.9 × 9.6	143.04	Starting at 5.1	

Figure 1: Dimension information we gathered for the notebooks. All links and data current as of 09/09/15.

Figure 2 details the available screen information for the systems we researched. According to vendor-provided data, the new Dell XPS 15 has a display with up to 60 percent more pixels than the MacBook Pro with Retina Display (15-inch).

Brand	Model	Screen resolution		Pixels
		Horizontal	Vertical	
Dell	XPS 15	3,840	2,160	8,294,400
Acer	<a href="#">Aspire VN7-591-76TR</a>	1,920	1,080	2,073,600
Acer	<a href="#">Aspire VN7-591G-70RT</a>	1,920	1,080	2,073,600
Acer	<a href="#">Aspire VN7-591G-71W9</a>	3,840	2,160	8,294,400
Acer	<a href="#">Aspire VN7-591G-72K6</a>	1,920	1,080	2,073,600
Acer	<a href="#">Aspire VN7-591G-729V</a>	3,840	2,160	8,294,400

Brand	Model	Screen resolution		Pixels
		Horizontal	Vertical	
Acer	<a href="#">Aspire VN7-591G-73Y5</a>	1,920	1,080	2,073,600
Acer	<a href="#">Aspire VN7-591G-77FS</a>	1,920	1,080	2,073,600
Acer	<a href="#">Aspire VN7-591G-7857</a>	1,920	1,080	2,073,600
Acer	<a href="#">Aspire VN7-591G-79YZ</a>	3,840	2,160	8,294,400
Apple <sup>3</sup>	<a href="#">MacBook Pro with Retina Display (15")</a>	2,880	1,800	5,184,000
ASUS	<a href="#">G501JW</a>	3,840	2,160	8,294,400
ASUS	<a href="#">G550JK</a>	1,920	1,080	2,073,600
ASUS	<a href="#">G56JR</a>	1,366	768	1,049,088
ASUS	<a href="#">G56JK</a>	1,920	1,080	2,073,600
ASUS	<a href="#">GL551JW</a>	1,920	1,080	2,073,600
ASUS	<a href="#">N550JV</a>	1,920	1,080	2,073,600
ASUS	<a href="#">N550JK</a>	1,920	1,080	2,073,600
ASUS	<a href="#">N550JX</a>	1,920	1,080	2,073,600
ASUS	<a href="#">N551JM</a>	1,920	1,080	2,073,600
ASUS	<a href="#">N551JQ</a>	1,920	1,080	2,073,600
ASUS	<a href="#">X550JK</a>	1,366	768	1,049,088
ASUS	<a href="#">ZenBook NX500</a>	1,920	1,080	2,073,600
ASUS	<a href="#">ZenBook Pro UX501</a>	3,840	2,160	8,294,400
HP	<a href="#">HP ENVY - 15t Quad Windows 7 Laptop</a>	1,920	1,080	2,073,600
HP	<a href="#">HP ENVY - 15t Slim Quad Laptop</a>	1,920	1,080	2,073,600
HP	<a href="#">HP OMEN - 15t Quad Touch Laptop</a>	1,920	1,080	2,073,600
HP	<a href="#">HP OMEN - 15t Quad Touch Select Laptop</a>	1,920	1,080	2,073,600
HP	<a href="#">HP OMEN Notebook - 15-5110nr</a>	1,920	1,080	2,073,600
Lenovo	<a href="#">Y50</a>	1,920	1,080	2,073,600

<sup>3</sup> The Apple MacBook Pro has a 15.4" screen.

Brand	Model	Screen resolution		Pixels
		Horizontal	Vertical	
Lenovo	<a href="#">Y50 Touch</a> (six various models all match the criteria)	1,920	1,080	2,073,600
Lenovo	<a href="#">Y50-70 UHD</a> (six various models all match the criteria)	3,840	2,160	8,294,400
Toshiba	<a href="#">Satellite P50T-BST2GX5</a>	3,840	2,160	8,294,400

Figure 2: Screen information we gathered about the notebooks. All links and data current as of 09/09/15.

Figure 3 details the available processor and graphics card information for the systems we researched.

Brand	Model	Processor	Graphics card
Dell	XPS 15	6th generation Intel® Core™ processors up to quad-core i7	NVIDIA GeForce GTX 960M
Acer	<a href="#">Aspire VN7-591-76TR</a>	Intel Core i7-4720HQ	NVIDIA GeForce GTX 960M with 4 GB of dedicated memory
Acer	<a href="#">Aspire VN7-591G-70RT</a>	Intel Core i7-4720HQ	NVIDIA GeForce GTX 960M with 4 GB of dedicated memory
Acer	<a href="#">Aspire VN7-591G-71W9</a>	Intel Core i7-4720HQ	NVIDIA GeForce GTX 860M with 4 GB of dedicated memory
Acer	<a href="#">Aspire VN7-591G-72K6</a>	Intel Core i7-4720HQ	NVIDIA GeForce GTX 860M with 4 GB of dedicated memory
Acer	<a href="#">Aspire VN7-591G-729V</a>	Intel Core i7-4720HQ	NVIDIA GeForce GTX 960M with 4 GB of dedicated memory
Acer	<a href="#">Aspire VN7-591G-73Y5</a>	Intel Core i7-4720HQ	NVIDIA GeForce GTX 860M with 4 GB of dedicated memory
Acer	<a href="#">Aspire VN7-591G-77FS</a>	Intel Core i7-4720HQ	NVIDIA GeForce GTX 960M with 4 GB of dedicated memory
Acer	<a href="#">Aspire VN7-591G-7857</a>	Intel Core i7-4720HQ	NVIDIA GeForce GTX 860M with 4 GB of dedicated memory

Brand	Model	Processor	Graphics card
Acer	<a href="#">Aspire VN7-591G-79YZ</a>	Intel Core i7-4720HQ	NVIDIA GeForce GTX 960M with 4 GB of dedicated memory
Apple	<a href="#">MacBook Pro with Retina Display (15")</a>	<ul style="list-style-type: none"> <li>• 2.5GHz quad-core Intel Core i7 processor (Turbo Boost up to 3.7GHz) with 6MB shared L3 cache</li> <li>• Configurable to 2.8GHz quad-core Intel Core i7 (Turbo Boost up to 4.0GHz) with 6MB shared L3 cache</li> </ul>	AMD Radeon R9 M370X with 2 GB of GDDR5 memory
ASUS	<a href="#">G501JW</a>	Intel Core i7 4720HQ	NVIDIA GeForce GTX 960M with 4 GB of GDDR5 VRAM
ASUS	<a href="#">G550JK</a>	<ul style="list-style-type: none"> <li>• Intel Core i7 4710HQ</li> <li>• Intel Core i5 4200H</li> </ul>	NVIDIA GeForce GTX 850M with 2 GB or 4 GB of DDR3
ASUS	<a href="#">G56JR</a>	<ul style="list-style-type: none"> <li>• Intel Core i7 4700HQ</li> <li>• Intel Core i5 4200H</li> </ul>	NVIDIA GeForce GTX 760M with 2 GB of GDDR5
ASUS	<a href="#">G56JK</a>	<ul style="list-style-type: none"> <li>• Intel Core i7 4710HQ</li> <li>• Intel Core i5 4200H</li> </ul>	NVIDIA GeForce GTX 850M with 2 GB of DDR3
ASUS	<a href="#">GL551JW</a>	Intel Core i7 4720HQ	NVIDIA GeForce GTX 960M with 2 GB of GDDR5
ASUS	<a href="#">N550JV</a>	Intel Core i7 4700HQ	NVIDIA GeForce GT 750M with 2 GB or 4 GB of DDR3
ASUS	<a href="#">N550JK</a>	<ul style="list-style-type: none"> <li>• Intel Core i7 4700HQ</li> <li>• Intel Core i7 4710HQ</li> </ul>	NVIDIA GeForce GTX 850M with 2 GB of DDR3
ASUS	<a href="#">N550JX</a>	<ul style="list-style-type: none"> <li>• Intel Core i7 4720HQ</li> <li>• Intel Core i5 4200H</li> </ul>	NVIDIA GeForce GTX 950M with 2 GB or 4 GB of DDR3
ASUS	<a href="#">N551JM</a>	Intel Core i7 4710HQ Intel Core i5 4200H	NVIDIA GeForce GTX860M 2G/4G GDDR5
ASUS	<a href="#">N551JQ</a>	Intel Core i7 4710HQ	NVIDIA GeForce GT 845M with 2 GB of DDR3 VRAM
ASUS	<a href="#">X550JK</a>	Intel Core i7 4710HQ	NVIDIA GeForce GTX 850M with 2 GB of DDR3
ASUS	<a href="#">ZenBook NX500</a>	Intel Core i7 4712HQ	NVIDIA GeForce GTX 850M with 2 GB of GDDR5 VRAM

Brand	Model	Processor	Graphics card
ASUS	<a href="#">ZenBook Pro UX501</a>	Intel Core i7-4720HQ	NVIDIA GeForce GTX 960M with 2 GB of GDDR5 VRAM
HP	<a href="#">HP ENVY - 15t Quad Windows 7 Laptop</a>	Intel Core i7-4722HQ	NVIDIA GeForce GTX 950M 4GB
HP	<a href="#">HP ENVY - 15t Slim Quad Laptop</a>	Intel Core i7-4722HQ	NVIDIA GeForce GTX 950M 4GB
HP	<a href="#">HP OMEN - 15t Quad Touch Laptop</a>	Intel Core i7-4720HQ	NVIDIA GeForce GTX 960M 2GB/4GB
HP	<a href="#">HP OMEN - 15t Quad Touch Select Laptop</a>	Intel Core i7-4720HQ	NVIDIA GeForce GTX 960M 4GB
HP	<a href="#">HP OMEN Notebook - 15-5110nr</a>	Intel Core i7-4720HQ	NVIDIA GeForce GTX 960M 2GB GDDR5
Lenovo	<a href="#">Y50</a>	<ul style="list-style-type: none"> <li>Intel Core i7-4710HQ</li> <li>Intel Core i7-4700HQ</li> </ul>	NVIDIA GeForce GTX 860M 2GB or 4GB
Lenovo	<a href="#">Y50 Touch</a> (six various models all match the criteria)	Intel Core i7-4720HQ	NVIDIA GeForce GTX 860M 4GB
Lenovo	<a href="#">Y50-70 UHD</a> (six various models all match the criteria)	Intel Core i7-4710HQ	NVIDIA GeForce GTX 860M 4GB
Toshiba	<a href="#">Satellite P50T-BST2GX5</a>	Intel Core i7-4720HQ	AMD Radeon R9 M265X with 2GB dedicated GDDR5 memory

Figure 3: Processor and graphics card information we gathered about the notebooks. All links and data current as of 09/09/15.

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