Blue Angel Information

Dell B5460dn (FW LW30.DN2.P311 or higher)

File this information with the product documentation for future reference. This information is being supplied based on the requirements of the Blue Angel award as indicated on the Blue Angel award Web site www.blauer-engel.de (RAL-UZ 171).

Congratulations on the purchase of a Dell product with the Blue Angel Award. This product has been tested against strict emissions and noise standards. The construction of the product allows easy disassembly and recycling when its useful life is complete. Upon return of this product to the recycling center, the components are recycled in an environmentally responsible manner, and reusable material is returned to the production cycle. To recycle your device, go to http://www.dell.com/recycle. Under “Home & Home Office,” choose your region and then your country. Click **Zu Dell-Recycling**, and follow the instructions on the site. To recycle cartridges or photoconductors, go to http://www.dell.com/recycle. Under “Home & Home Office,” choose your region and then your country. Click **Druckerverbrauchsmaterialien**, and then follow the instructions on the site.

Store print cartridges out of the reach of children. Remember to keep all supply items away from children. The print cartridges, shipped with the product, have been sealed as a precaution to prevent toner dust from escaping. Take care not to inhale the toner dust and avoid toner contact with the skin. If your skin does come in contact with toner, wash with soap and cold water.Never open the print cartridges by force. Personnel installing, cleaning, disposing, or performing maintenance of print cartridges should refer to the printer or print cartridge documentation before performing such tasks. Normal usage requires removal of a print cartridge on the following occasions: at initial product installation to remove the print cartridge's protective packaging, at a Toner Low message to gently shake the cartridge if specified in the *User’s Guide*, at the end of the cartridge life to replace it and if necessary, during life to clear a paper jam.

See the printer packaging for information on the yield of the print cartridge shipped with this product.

The supplies items are recycled in an environmentally responsible manner. The photoconductive drums that cannot be renewed are forwarded to an aluminum recycler. The substance emission requirements of Blue Angel were tested and met by using the print supplies items supplied and recommended by the manufacturer. Because new electronic products generally emit volatile chemicals into the air, ensure there is a sufficient air exchange in rooms where the new product is set up during the first days of use of the product.

Spare parts and print cartridges are available for at least 5 years after production of this product.

The product includes a duplex unit, allowing pages to be printed on both sides of the paper resulting in cost savings.

This product contains a battery that is not user replaceable.

The product is suitable for the use of recycled paper according to DIN 19309, respective to the European standard EN17181:2002. As with any paper, we recommend printing several samples on the type of paper being considered before buying large quantities.

For more information on the Blue Angel program, visit www.blauer-engel.de.

Energy data for the Dell B5460dn

According to RAL-UZ 171 (Edition July 2012)

General Information on energy, power, and the units of Watts and kilowatt hours

Energy

Energy is the capacity to do physical work. Energy is needed, for example, to heat water, to power a lamp, or to print a sheet of paper. Energy is needed for this product to operate.

Energy has several common units, including Joules and BTU/Hour, but the most common unit is the kilowatt-hour (kwh).

Power

Power is the energy transferred per unit of time. The common unit of power is a Watt.

Conversion between different units

The following are standard conversions between the units of energy and power:

1000 Watts = 1 kilowatt

1 kilowatt-hour = 1 kilowatt x 1 hour = 1000 Watts x 1 hour

Energy consumption of a device = the power consumption of the device x the time over which the device consumes this power.

Specific power consumption information on the Dell B5460dn

The amount of electricity a device consumes depends as much on its properties as much as it does the way you use it. The device is designed in a way to allow the user to reduce energy consumption. The device immediately switches to a low power Ready mode after every print job. In this low power Ready mode, the device can immediately respond to print jobs. If no print jobs occur after 5 minutes or an additional 25 minutes, the device switches to an Energy mode (2-tier). In the Energy Saving modes, the device can respond with negligible delay to print jobs. This device meets the stringent requirements of the Blue Angel Eco Label in default timeout and recovery time. Please see www.blauer-engel.de for more information.

The product is designed with a power switch located on the back of the printer. The power switch is accessible to the user even when paper handling options, paper trays, a duplex unit, or a finisher are used.

The following table shows the individual values of power consumption as well as default timeouts and recovery times. All values are preset upon delivery. With these values, the device meets the Blue Angel Requirements.

Survey of the operating modes of the Dell B5460dn

During the measurement, the Dell B5460dn were connected to a data network. Print speed was determined according to ISO 24734:2009.

Printing speed for A4-sized pages for monochrome printing: 60 pages per minute (ppm).

Button/key symbol	Operating mode	Power consumption (Watts)[1]	Activation time (minutes) [2]	Return time (seconds)[3]
None	Maximum power consumption at switch on[4]	1200 W		
None	Printing power (60 ppm)	759.0 W		
None	Ready	43.79 W	0.0	0.0
None	Energy Saving Mode A	24.77 W	5[5]	2.6
☾ (solid amber moon)	Energy Saving Mode B	2.5 W	30[6]	6.7
☾ (fading amber moon)	Hibernate Mode[7]	0.44 W	3 days[7]	
Power switch located on the back of device	Plugged-in Off mode (same as switched off)[8]	0.1 W	Switch activated	

[1] For a device without options. This is a time-averaged value. Instantaneous values may be higher.

[2] Amount of time that elapses after the end of the print job until the device enters that mode.

[3] Amount of time that the device takes to return to the Ready mode.

[4] 2 seconds or less when the device is turned on.

[5] Cannot be modified by the user.

[6] Can be modified from 1–120 minutes.

[7] The default timeout for Hibernate Mode is 3 days. The timeout for Hibernate Mode is disabled if the product is connected to an Ethernet or Fax connection. The customer can modify the Hibernate Mode Timeout and can also program the Hibernate Mode to turn on and off depending on the time and the day of the week. Hibernate mode can be turned on or off by pressing and holding the moon button.

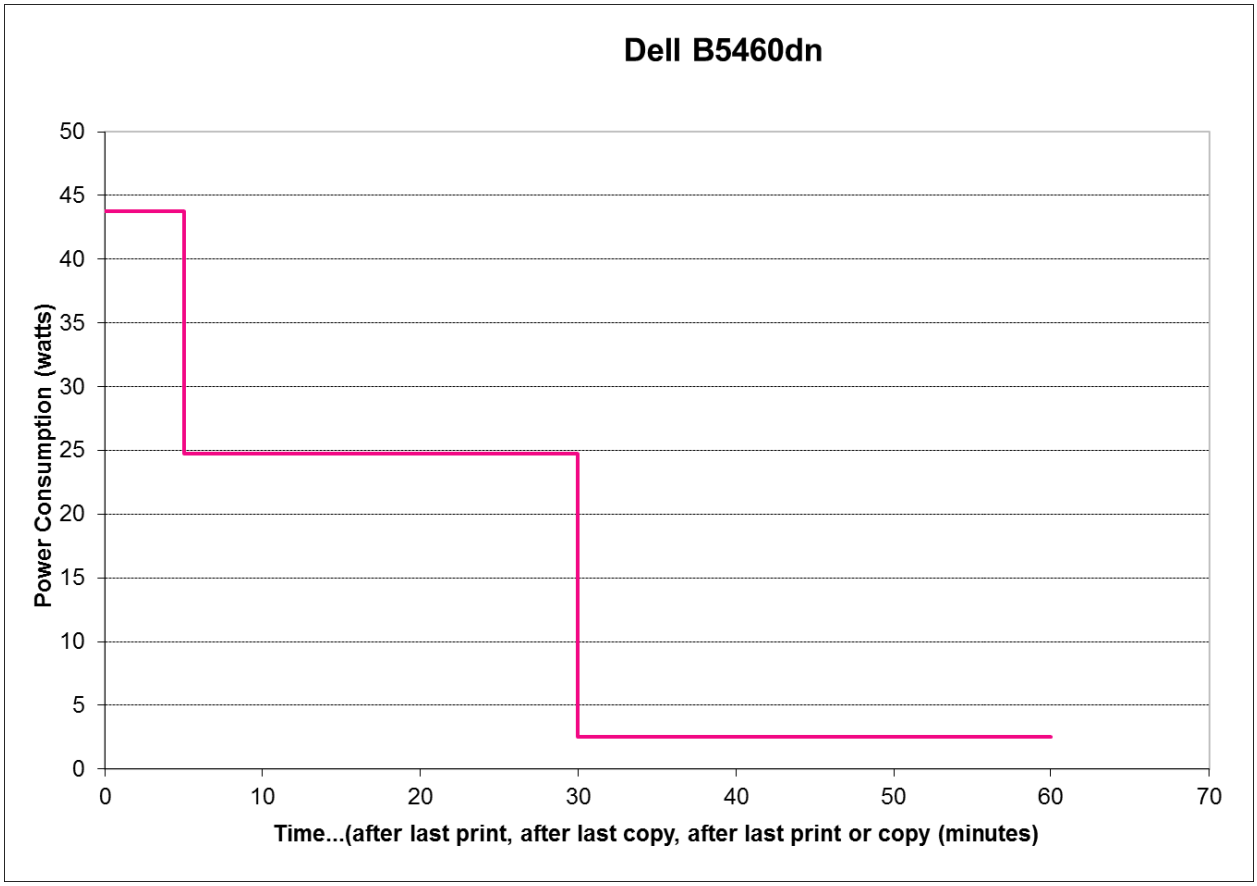
[8] The device is designed to not incur any damage when being switched on and off up to twice per day.

Energy consumption of the Dell B5460dn

ENERGY STAR version 1.1 uses an energy consumption calculation for the downtime of the product, called the Typical Electricity Consumption (TEC). This TEC calculation estimates the weekly energy consumption of a product for a given usage pattern. The following table details the results of the TEC calculation for the Dell B5460dn. The value was measured with the settings mentioned above (delivery status).:

Speed used for TEC measurement (ISO 24734)	60 A4 PPM	
Print jobs per day	32	
Pages printed by the Dell B5460dn	56 per print job	1792 per workday
A week consists of 5 workdays and 2 weekend days		
Resulting energy consumption per week	3.793 kWh/week	

You can partly change the activation times of the energy-saving modes. If you shorten an activation time, the printer will switch over to an energy-saving mode more quickly, reducing electricity costs. If you extend an activation time, the printer will stay in a mode of increased power consumption for a longer period and therefore use more electricity. We recommend not extending activation times.



Acoustics section

Noise level

According to RAL-UZ 171	Declared sound power level, dB(A)[1,2]
Product	Monochrome printing
Dell B5460dn	71.8

1 L_{WAd} measured according to RAL-UZ 171 (July 2012 Edition). Values may be different than Declared Sound Power Level according to ISO 7779 and ISO 9296.2.

2 Office devices with L_{WAd} > 63,0 dB(A) is not suitable for operation in rooms where predominantly intellectual work is done. Due to their noise emissions, these devices should be set up in separate rooms.