

# HP PAGEWIDE MANAGED COLOR FLOW MFP E77660ZS (2GP14A)



## Blue Angel User Information DE-UZ 219

The HP printing system HP PageWide Managed Color Flow MFP E77660zs is awarded with the environmental label Blue Angel (DE-UZ 219, edition January 2021) in Germany, for meeting altogether more than 100 strict certification criteria. In the following, essential environmental information on the device is summarised. Comprehensive information on the Blue Angel product requirements and detailed product specifications are available at [www.blauer-engel.de](http://www.blauer-engel.de).



### PRINTING PAPER

This device is suitable for using recycled paper in accordance with EN 12281.

### DOUBLE SIDED PRINTING/COPYING IN DELIVERY STATUS

The device is equipped with an automatic duplexer for double-sided printing and copying. Duplex printing is the default setting. Furthermore, the device features the capability to print out several pages of a digital file on one single page.

### PRINT/COPY SPEED

80 pages per minute using HP "GO" mode.

60 pages per minute using normal mode (delivery setting).

### LONGEVITY

- Spare parts and exchange parts for the repair of this device model are still available at least five years after end of production.
- Cleaning, maintenance and disposal should only be performed by experts in accordance with the instructions in the product documentation.

### INFORMATION ON POST-CONSUMER RECYCLED PLASTIC

HP contributes to the conservation of resources by using post-consumer recycled plastic for production of new HP products. These plastics are recycled waste plastics stemming from private or commercial end-consumers. This HP device contains 15-20% of post-consumer recycled plastic.

### RETURN OF EQUIPMENT

HP offers customers in Germany the opportunity to return used equipment. Information on the return of equipment is available at your local HP sales or customer-service centre or at <http://www.hp.com/recycle>.

### RETURN OF CONSUMABLES

In Germany and many other countries, HP ink cartridges for this device can be returned cost-free to HP as part of the return and recycling programme. The packaging of each new HP ink cartridge contains information on how to participate in this programme. Or visit our website: <http://www.hp.com/recycle>.

## YIELD OF CONSUMABLES

Determined according to ISO/IEC standard 24711, the HP ink cartridges shipped with the product have the following yields:

HP 991XC black ink cartridge (M0K29XC): 22,000 pages  
HP 991XC cyan ink cartridge (M0K06XC): 16,000 pages  
HP 991XC magenta ink cartridge (M0K10XC): 16,000 pages  
HP 991XC yellow ink cartridge (M0K25XC): 16,000 pages

The HP ink cartridges shipped with this product offer a lower yield than the Original HP 991XC ink cartridges.

Further information can be found at <http://www8.hp.com/h71041/learn-about-supplies/us/en/overview.php>.

## AIR EMISSIONS

With original HP inks, the device passes the air emission test for monochrome and colour printing according to DE-UZ 219. Since plastics of new electrical devices generally release small amounts of volatile substances into the room air, we recommend providing sufficient air exchange in rooms where new devices are set up.

## NOISE EMISSIONS

### Declared sound power level for one-sided printing ( $L_{WA}$ )

In monochrome print mode 60 pages/minute:	6.72 Bels and 67.2 dB
In colour print mode 60 pages/minute:	6.70 Bels and 67.0 dB

## ENERGY

### Energy information on HP PageWide Managed Color Flow MFP E77660zs

The consumption of electric power depends on its properties and on the way it is used. HP PageWide Managed Color Flow MFP E77660zs is designed and pre-set in a way to allow you to reduce electricity costs.

Directly after the last print or copy job, HP PageWide Managed Color Flow MFP E77660zs switches over to an electric power saving mode. If the device switches over to electric power saving modes, you can save electricity and operating costs. If the device is to print or copy again, there can be a short delay – this is called recovery time. However, the device meets the strict Blue Angel requirements for a recovery time (<http://www.blauer-engel.de>).

You can save electricity costs by shortening the device's delay times as it will switch over to an electric power saving mode more quickly. If you extend the delay time or deactivate the electric power saving mode, you should consider that consequently the device will consume more electric power and might no longer meet the maximum value for electric power consumption of the Blue Angel. We recommend not extending the delay times.

The device is so designed as to ensure that it can be switched to the Off-mode (standby) by pressing the on/off switch up to twice a day without suffering damage. This device does not have a switch by which it can be completely disconnected from the mains. When after having switched off the device you pull out the power plug, electric power consumption is completely stopped.


The table below lists the individual power consumption values as well as delay and recovery times (factory setting). With these values the device meets the Blue Angel requirements.

### Overview of HP PageWide Managed Color Flow MFP E77660zs operating modes

Page throughput for A4 paper size (according to ISO/IEC 24734/24735):

In monochrome print mode:	60 pages/minute with a resolution of 236 dpcm (600 dpi)
In colour print mode:	60 pages/minute with a resolution of 236 dpcm (600 dpi)
In monochrome copy mode:	60 pages/minute with a resolution of 236 dpcm (600 dpi)
In colour copy mode:	60 pages/minute with a resolution of 236 dpcm (600 dpi)

(dpcm = dots per centimetre [Bildpunkte pro Zentimeter]); (dpi = dots per inch [Bildpunkte pro Zoll])

Switch symbol	Operation mode <sup>1</sup>	Power consumption <sup>2</sup> watts	Delay time <sup>3</sup> minutes	Recovery time seconds
Maximum power consumption (at switch-on): 1178 watts				
	Printing (continuous operation at 60 pages/minute), monochrome	685	immediately	immediately
	Ready	41.79	immediately	immediately
	Sleep 1	19.92	0 (0...118) <sup>4</sup>	7
	Sleep 2	3.62	16 (0...119) <sup>4</sup>	17
	Sleep 3	1.59	7 <sup>5</sup>	17
	Off-mode (standby)	0.3	switch activated	–
	Disconnection from mains	0	e.g. pull out power plug	–

<sup>1</sup> After the last print or copy job, the device switches over to electric power saving modes in several steps. By and by, electric power consumption is reduced in these modes. The device will switch over to the Ready mode first. After the delay times stated above, the device switches over to Sleep 1 mode, Sleep 2 mode, and then to Sleep 3 mode.

<sup>2</sup> Averaged value, measured without accessories.

<sup>3</sup> Delay time is the time that elapses after the end of the printing or copying process until the device enters the respective mode. The figures in brackets indicate the user-selectable range within which delay times can be adjusted. The delay time values apply to all primary functions of the device: printing, copying.

<sup>4</sup> The combination of Sleep 1 and Sleep 2 will not exceed 119 minutes.

<sup>5</sup> After switching over to Sleep 2 mode.

#### Typical electricity consumption (TEC) of HP PageWide Managed Color Flow MFP E77660zs

Measured with Blue Angel energy settings enabled, as stated in the table above. The typical electricity consumption (TEC) of HP PageWide Managed Color Flow MFP E77660zs is 0.71 kWh/week.

TEC determined according to standard use cycle (per ENERGY STAR version 3.0), based on typical workplace dynamics (8 hours on each of the 5 workdays of a calendar week; 3200 pages printed per workday). Energy testing follows ENERGY STAR 2.0 protocol with the following Blue Angel specifics: A4 format paper and line voltage of 230V. For the standard use cycle according to ENERGY STAR version 3.0 for this device, the following values were used: 32 print jobs per working day, each with 100 pages, single-sided at monochrome printing (3200 pages/day).

