

# The new printing paradigm

# HP PageWide Managed Color MFP E77600 series





Affordable color printing for every office



Minimal interruptions. Maximum uptime.



The world's most secure printing<sup>1</sup>

# Affordable color printing for every office



Color printing is within every business' budget with HP PageWide Technology. Print professional-quality color for a breakthrough low cost on sizes up to 12 x 18 inches (305 x 457 mm)—results you expect from HP for an exceptional value you can rely on.



# Breakthrough low-cost color

Depend on lasting value. Get the results you expect from HP PageWide Technology that delivers a game-changing low cost per color page.

Original HP PageWide cartridges provide the consistent printing performance, quality, and affordability businesses demand. Optional high-yield cartridges offer an even better value, so you can print more pages and replace cartridges less often.<sup>3</sup>

Add a touch of color to documents—without raising printing costs. Help your work stand out by including a small color logo or highlighted text for the same cost as a black-and-white page.



# Fast performance, economical prints

Equip employees to speed through tasks with high-performance, professional-quality printing. Print even faster—and save even more per page—by setting your MFP to General Office mode. 5 Get the quality your business needs while helping to reduce printing costs.

Minimize interruptions in productivity with an HP PageWide Enterprise device designed with the fewest parts in its class for the least maintenance.<sup>6</sup>



# Best-in-class energy efficiency<sup>2</sup>

Help keep energy costs down with the most efficient device in its class.<sup>2</sup> HP PageWide Technology conserves resources without compromising performance.

This device meets rigorous standards for ISO class 5 cleanrooms—perfect for sensitive environments. Keep noise to a minimum with a device designed to be quiet. Place it near people without disrupting work.

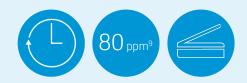
Help reduce your environmental impact. Consume up to 50% less paper, with automatic two-sided printing. Easily recycle your Original HP cartridges at no charge through HP Planet Partners.<sup>7</sup>

# Minimal interruptions. Maximum uptime.

Annoying interruptions and complex maintenance can slow down printing and, ultimately, the pace of business. Avoid pauses in productivity with an HP PageWide device designed for maximum uptime—so you can count on reliable results day in and day out.

#### Move business forward

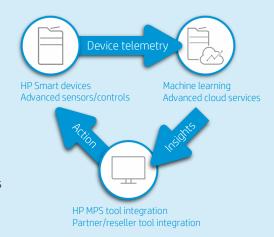
Print up to 50% faster than the competition<sup>8</sup>—as fast as 80 pages per minute (ppm) (E77660 MFP series).<sup>9</sup> These devices wake up and print fast, so your pages are ready right when you need them. Preview and edit scans, adjust images, and launch print, scan, copy, and fax jobs<sup>10</sup>—all at the 8.0-inch (20.3 cm) color touchscreen. For more information, see Appendix A on page 20.



With the E77600 MFP series, accelerate workflow with single-pass, two-sided scanning up to 120 images per minute (ipm), simplex, and up to 240 ipm, duplex (Flow models). 11 Scan documents directly to Microsoft® Office 365® and SharePoint®, plus email, USB, and network folders. 12 Or scan from the easy-access USB port. 13

#### Maximize uptime

HP Smart Device Services (SDS) help keep business moving by avoiding lapses in productivity. Reduce time spent calling and waiting, with technology that allows your service provider to quickly pinpoint issues before they become a problem. Remote diagnostic tools help provide faster, more efficient fixes. Simple issues can be resolved remotely, and service calls go faster when techs know exactly what they need for the right fix.



HP devices communicate their health and call your service provider for help when they need it. Empower advanced analytics with smart sensors, event logs, device telemetry, and access for remote configurations and adjustments that let your service provider know how devices are working.

### Expand your capacity

Tailor this device to the needs of your business with a wide range of paper-handling accessories. Optional trays support media sizes up to  $12 \times 18$  inches ( $305 \times 457$  mm), including a 550-sheet paper tray, 550-sheet paper tray and stand, and  $3\times550$ -sheet paper tray and stand. <sup>14</sup> For details, see Paper-handling accessories on page 11.



With the dns and zs models, organize, staple, and collate documents with inner finishing that helps you save time and look professional. With the z+ models, advanced external finishing helps you ramp up production. 15

Print up to 4,650 pages without reloading paper, using the optional 4,000-sheet high-capacity input (HCI) tray and stand, with support for letter (A4) size. <sup>16</sup>

# The world's most secure printing<sup>1</sup>



Only HP Enterprise printers repair themselves from attacks in real time, with built-in security to help keep your network safe. Automatically monitor threats, detect intrusions, and validate operating software with security offered only by HP.<sup>1</sup>



## Always on guard

Only HP Enterprise printers offer built-in security features that are always on guard.<sup>1</sup>

- With HP Sure Start, each device regularly checks its operating code and repairs itself from attempted hacks.
- Whitelisting checks firmware during startup to help ensure it's authentic, good code digitally signed by HP.
- Run-time intrusion detection continually monitors activity to detect and stop attacks, then automatically reboots.
- HP Connection Inspector inspects outgoing network connections to stop suspicious requests like malware.

Thwart potential attacks by receiving instant notification of security issues, so immediate action can be taken. This device works with tools like Splunk, ArcSight, McAfee, and SIEMonster.



# Take security to the next level

Help protect this device with more than 250 embedded security features. <sup>17</sup> Protect information in transit over the network and stored on the device—keys, passwords, certificates, and more. Store data on the 256-bit encrypted HP High-Performance Secure Hard Disk.

Easily develop, deploy, and integrate HP and third-party solutions with HP Open Extensibility Platform (OXP). Add features such as card readers and more through the Hardware Integration Pocket (HIP). <sup>18</sup> Further safeguard data stored on the device, using the HP Trusted Platform Module. <sup>19</sup>



### Centralize control to help build business efficiency

Centralize control of your printing environment with HP Web Jetadmin—and help build business efficiency. <sup>20</sup> Optional HP JetAdvantage Security Manager offers an effective, policy-based approach to help secure HP printing and imaging devices. <sup>21</sup> Easily set security configuration policies and automatically validate settings for every HP printer and MFP in your fleet.

HP JetAdvantage Secure Print<sup>22</sup> and HP Access Control (HPAC) help secure documents by requiring authentication to release print jobs. In addition, extend capabilities and easily customize with HPAC— integrate job accounting, manage rights, and establish quotas for things such as color use.<sup>23</sup> Save IT time and make printing easy for the entire enterprise by using a single driver for all HP devices.<sup>24</sup>



#### For more information

#### Fleet management

HP Web Jetadmin visit: hp.com/go/wja

Solution brief: <a href="http://h20195.www2.hp.com/V2/GetPDF.aspx/4AA5-2718ENW.pdf">http://h20195.www2.hp.com/V2/GetPDF.aspx/4AA5-2718ENW.pdf</a>
Video: <a href="http://hp.brightcovegallery.com/solutions/detail/video/4271055504001/">http://hp.brightcovegallery.com/solutions/detail/video/4271055504001/</a>

HP Universal Print Driver visit: hp.com/go/upd

Solution brief: http://h20195.www2.hp.com/V2/GetPDF.aspx/4AA2-4781ENW.pdf

#### Security

HP JetAdvantage Security Solutions visit: hp.com/qo/printsecurity

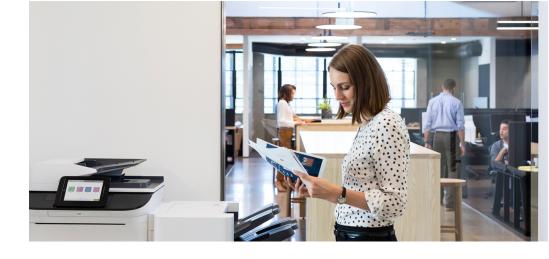
Solution brief: <a href="http://h20195.www2.hp.com/V2/GetPDF.aspx/4AA3-1295ENW.pdf">http://h20195.www2.hp.com/V2/GetPDF.aspx/4AA3-1295ENW.pdf</a>
Video: <a href="http://hp.brightcovegallery.com/products/detail/video/4270905124001/">http://hp.brightcovegallery.com/products/detail/video/4270905124001/</a>

HP JetAdvantage Security Manager visit: hp.com/qo/securitymanaqer

Brochure: http://h20195.www2.hp.com/V2/GetPDF.aspx/4AA3-9275ENW.pdf

Video: http://hp.briqhtcovegallery.com/products/detail/video/4270837770001/

# Give workgroups the speed they need



Accelerate workflow, improve accuracy, and easily connect people throughout your organization with the E77600 MFP series models. Complete high-volume scan jobs super-fast—up to 240 ipm for Flow models<sup>11</sup>—and avoid extra steps with a device designed for maximum productivity.



## Easily scan and edit text

Capture text from documents with high accuracy. Easily scan documents, edit text, and save as a Microsoft Word or searchable PDF file with HP Scan and I.R.I.S. Readiris™ Pro OCR Software.



#### Fast scanning and input

Turn stacks of paper documents into digital files. Load up to 200 pages into the automatic document feeder (ADF) for fast, unattended scanning. <sup>25,26</sup>

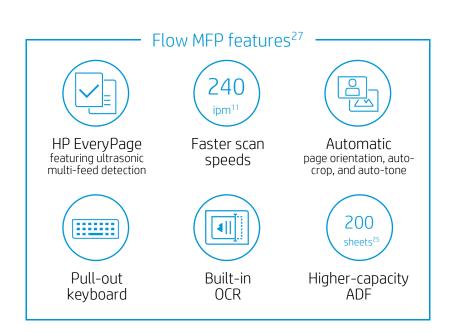
Enter data more quickly and accurately using the pull-out keyboard, one of the features available on all Flow models.<sup>27</sup>



#### Every page, every time

Capture every page easily—with confidence. HP EveryPage gives employees smooth paper-handling capabilities to detect potential errors or missed pages on the spot—for scan jobs of all kinds.<sup>27</sup>

Help ensure every scanned document is properly oriented, cropped to size, and grayscale-optimized.



# Get to know the HP PageWide Managed Color MFP E77650 series

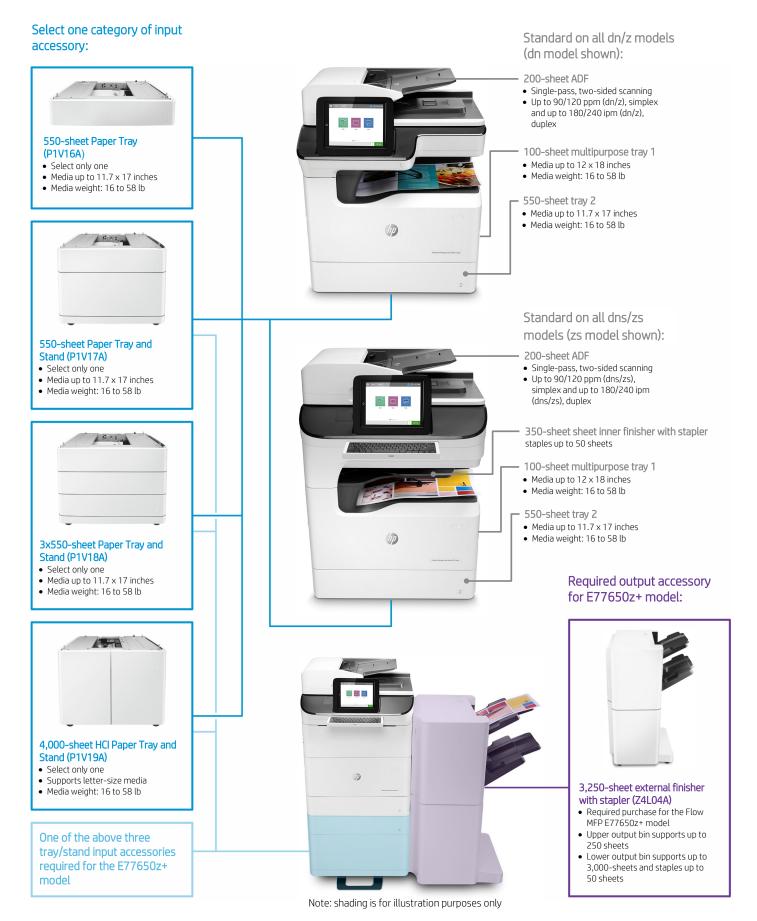
#### HP PageWide Managed Color MFP E77650dns shown



# Series at a glance

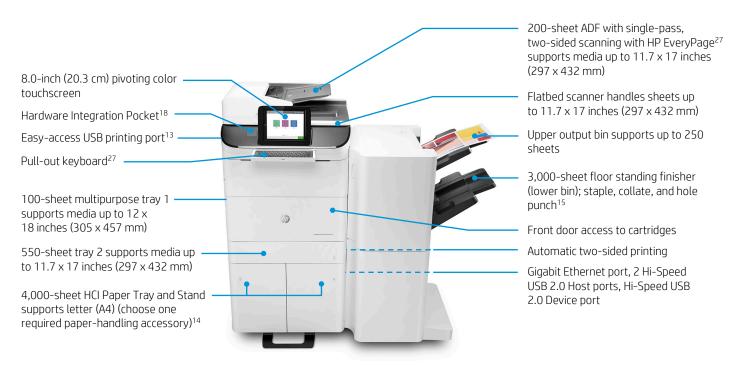
Model	MFP E77650dn	MFP E77650dns	Flow MFP E77650z	Flow MFP E77650zs	Flow MFP E77650z+ <sup>28</sup>
Engine part number	2CF56A	2CF57A	2CF58A	2CF59A	2CF60A
Speed option part number	2GP04A	2GP07A	2GP10A	2GP13A	2GP16A
Functions	Print, scan, copy				
Print speeds (Professional/General Office mode), black and color, letter and A49	Up to 50/70 ppm				
Advanced workflow features including pull-out keyboard and HP EveryPage	Not available	Not available	✓	✓	<b>√</b>
Automatic page orientation, cropping, and tone adjustment	Not available	Not available	<b>√</b>	✓	<b>✓</b>
Control panel display	8.0-inch (20.3 cm) pivoting color touchscreen				
Finishing options	Not available	Inner finisher (standard)	Not available	Inner finisher (standard)	External finisher (required)
Paper-handling	For information on opti	onal, standard, and required pa	aper-handling capabilities	for each model, please see pa	ge 11.

# HP PageWide Managed Color MFP E77650 series - Configuration

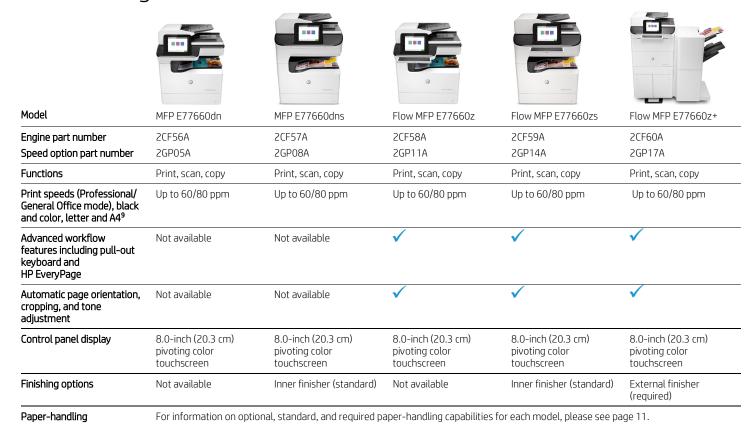


# Get to know the HP PageWide Managed Color MFP E77660 series

HP PageWide Managed Color Flow MFP E77660z+ shown

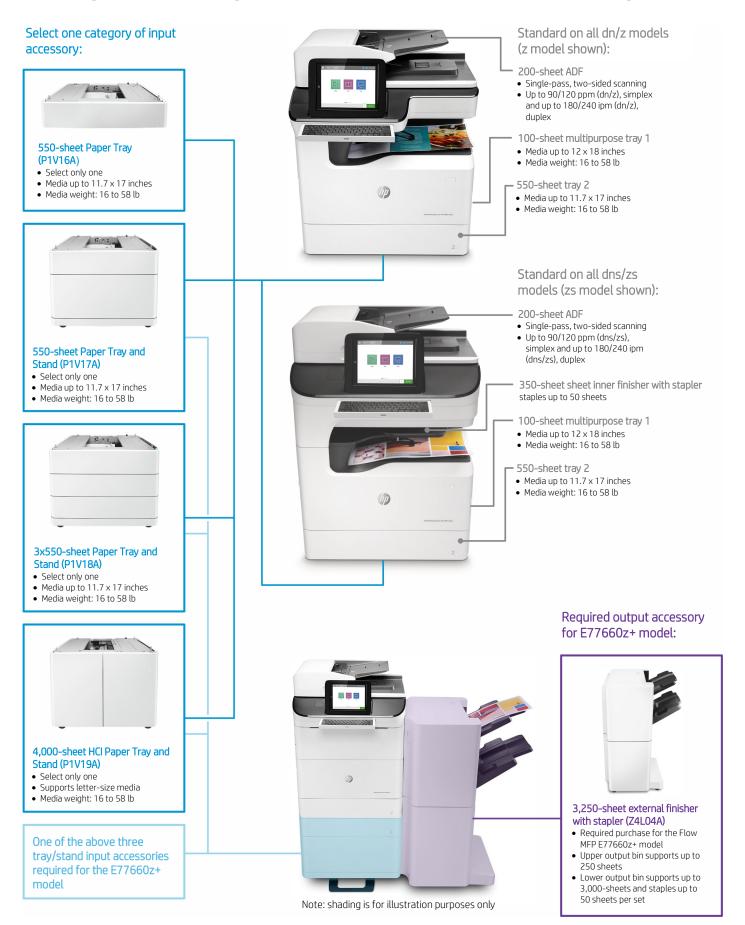


## Series at a glance



HP PageWide Managed Color MFP E77600 series

# HP PageWide Managed Color MFP E77660 series - Configuration



## Paper-handling capabilities

The HP PageWide Managed Color MFP E77600 series models may be configured with optional input and output accessories described in the table below. Standard and required accessories are also noted in the table.

All models come standard with a 100-sheet multipurpose tray that supports up to  $12 \times 18$  inches (305 x 457 mm) and one 550-sheet tray that supports up to  $11.7 \times 17$  inches (297 x 432 mm).

For the Flow MFP E77650z+/60z+ models, one of the following accessories must be added: 550-sheet paper tray and stand, 3x550-sheet paper tray and stand, or 4,000-sheet HCl paper tray and stand. For all other models, one of the following optional accessories can be added: 550-sheet paper tray, 550-sheet paper tray and stand, 3x550-sheet paper tray and stand, or 4,000-sheet HCl paper tray and stand. The 550-sheet trays support up to 11.7 x 17 inches (297 x 432 mm). The optional HCl tray supports letter (A4).

Other optional accessories, such as hole punch accessories. are included in the ordering information on page 19.



# HP PageWide Managed Color MFP E77650 series technical specifications

	HP PageWide Managed Color MFP E77650dn	HP PageWide Managed Color MFP E77650dns	HP PageWide Managed Color Flow MFP E77650z	HP PageWide Managed Color Flow MFP E77650zs	HP PageWide Managed Color Flow MFP E77650z+			
Engine part number	2CF56A	2CF57A	2CF58A	2CF59A	2CF60A <sup>28</sup>			
Speed option part number	2GP04A	2GP07A	2GP10A	2GP13A	2GP16A <sup>28</sup>			
Functions	Standard: Print, copy	, scan; Optional: Fax <i>(all i</i>	models)					
Control panel/data entry	8.0-inch (20.3 cm) pivoting color touchscreen; easy-access USB; <sup>13</sup> Hardware Integration Pocket <sup>18</sup>							
			Plus: pull-out keyboar	<sup>r</sup> d				
Print speed (black and color, letter and A4) <sup>9</sup>			·					
Single-sided	Up to 50/70 ppm (Pr	ofessional/General Office	mode) (all models)					
Two-sided	Up to 35/49 ipm (Pro	ofessional/General Office	mode) (all models)					
First page out (black and color, letter and A4)	· ·	t as 7.1 seconds, Professi t as 17.4 seconds, Profes						
Print resolution			600 x 600 input dpi (on Un: 200 optimized dpi from 60					
Scanning resolution	Up to 600 dpi (all mo	odels)						
ADF scan speed (letter and A4) <sup>11</sup>								
Single-sided	Up to 90 ppm (black	and color)	Up to 120 ppm (black	and color)				
Two-sided	Up to 180 ipm (black	Up to 180 ipm (black and color)  Up to 240 ipm (black and color)						
Features								
Printing	pages per sheet (2, 4 orientation, high-qua panel shortcuts, stor	I, 6, 9, 16), collation, book ality grayscale and black i e print jobs; print from ea	s, HP EasyColor, print previ klet printing, cover pages, t nk only, General Office/Pro asy-access USB Microsoft W	ray selection, scaling, port fessional/Presentation dp /ord and PowerPoint files	rait/landscape i print modes, control			
Scanning	(297 x 1,000 mm); <sup>25</sup> selectable scan resol bit depth: 24-bit (col	Advanced features: optin lution 75 to 600 dpi, auto or); 8-bit (gray); Scan file	; 200-sheet ADF with single nize text/picture, image adj detect color, edge erase, je type supported by softwar ext (.txt), TIFF (.tif); TWAIN	ustments, job build, outpu bb notification, blank page e: Bitmap (.bmp), JPEG (.jp	it quality setting, suppression, Quick Sets;			
				ith ultrasonic multi-feed d gnition (OCR), auto-orienta				
Digital sending	Scan to email with LDAP email address lookup, scan to network folder, scan to USB, send to FTP, send to Internet fax, SMTP over SSL, blank page removal, edge erase, auto color sense, auto crop to content, compact PDF, scan to Microsoft SharePoint <sup>32</sup>							
			Plus: send to LAN fax; detect, auto-straighte	OCR, auto-tone, auto-orien, auto-crien, auto-crop-to-page	entation, multi-pick			
File formats <sup>31</sup>		Digital Send: PDF, JPEG, TIFF, MTIFF, XPS, PDF/A; Scan to easy access USB: PDF, JPEG, TIFF, MTIFF, XPS, PDF/A; Print from easy access USB: PDF, PS, Print Ready files (.prn, .pcl, .cht)						
Copying	Copy speed: up to 50 copies per minute and first copy out as fast as 9.0 seconds; <sup>33</sup> Auto scale, Reduce/Enlarge from scanner glass (25 to 400%), Collate, Auto-color detection, Two-sided copying, Job build, image adjustments (darkness, background clean-up, sharpness); Copy resolution: Up to 600 x 600 dpi							
Optional faxing	Fax speed: <sup>34</sup> 3 seconds per page/33.6 kbps (letter/A4); fax forwarding, receive fax polling, broadcasting to up to 210 locations, speed dial up to 1000 numbers, each with 210 destinations, auto-fax reduction, auto-redialing, stored faxes, fax archiving, scale-to-fit, fax address book, LAN/Internet fax, fax number confirmation, holiday fax schedule							
			Black (fine): 204 x 196 dpi 300 dpi (400 x 400 dpi for		300 x 300 dpi (400 x 400			
Processor	1.2 GHz (all models)							
Memory	3584 MB <sup>35</sup>		5632 MB <sup>36</sup>					
Storage		ecure Hard Disk (AES 256 Secure Erase-Job Data, 9	hardware encryption or gr Secure ATA Erase-Disk)	eater; Secure erase capab	ilities: Secure File Erase-			

	HP PageWide Managed Color MFP E77650dn	HP PageWide Managed Color MFP E77650dns	HP PageWide Managed Color Flow MFP E77650z	HP PageWide Managed Color Flow MFP E77650zs	HP PageWide Managed Color Flow MFP E77650z+			
Durability ratings		•	1	1				
RMPV <sup>37</sup>	2,500 pages to as high as 40,000 pages (all models)							
RMSV <sup>26</sup>	2,000 pages to as high as 75,000 pages (all models)							
Duty cycle <sup>38</sup>	Up to 200,000 pages (all models)							
Media specifications								
Input capacity	·	Up to 650 sheets (up to 4,650 sheets maximum <sup>16</sup> ) (all models)  Tray 1: up to 100 sheets  Tray 2: up to 550 sheets						
Output capacity	Up to 500 sheets	Up to 850 sheets, including standard 350-sheet inner finisher with stapler (staples up to 50 sheets)	Up to 500 sheets	Up to 850 sheets, including standard 350-sheet inner finisher with stapler (staples up to 50 sheets)	Up to 3,250 sheets, with required external finisher (staples up to 50 sheets)			
Two-sided printing	Automatic (all models,	)	-1	-1	1			
Media sizes	Tray 1: $12 \times 18$ in, $11 \times 17$ in, legal, oficio (8.5 × 13 in), letter, letter-R, executive, statement, $5 \times 8$ in, $5 \times 7$ in, $4 \times 6$ in, envelope #10; A3, A4, A4-R, A5, A5-R, A6, RA3, RA4, SRA4, B4, B5 (JIS), 8K (270 $\times$ 390 mm), 16K (195 $\times$ 270 mm), 8K (260 $\times$ 368 mm), 16K (184 $\times$ 260 mm), 8K (273 $\times$ 394 mm), 16K (197 $\times$ 273 mm), oficio (216 $\times$ 340 mm), envelopes (B5, C5, C6); Custom media sizes: $3.9 \times 5.83$ to $12 \times 18$ in (99.1 $\times$ 127 to 304.8 $\times$ 457.2 mm)							
	Tray 2, optional 1x550-sheet tray, 1x550-sheet tray/stand, and 3x550-sheet tray/stand: 11 x 17 in, legal, oficio (8.5 x 13 in), letter, letter-R, executive; A3, A4, A4-R, A5, SRA4, B4, B5 (JIS), 8K (270 x 390 mm), 16K (195 x 270 mm), 8K (260 x 368 mm), 16K (184 x 260 mm), 8K (273 x 394 mm), 16K (197 x 273 mm), oficio (216 x 340 mm); Custom media sizes: 8.27 x 5.83 to 11.7 x 17 in (210.1 x 148.1 to 297.2 x 431.8 mm)							
	Optional HCI trays 3 and 4: Letter and A4 only							
	Duplex: 12 × 18 in, 11 × 17 in, legal, oficio (8.5 × 13 in), letter, letter-R, executive; A3, A4, A4-R, A5, A5-R, RA3, RA4, SRA4, B4, B5 (JIS), B6 (JIS), 10 × 15 cm, 8K (270 × 390 mm), 16K (195 × 270 mm), 8K (260 × 368 mm), 16K (184 × 260 mm), 8K (273 × 394 mm), 16K (197 × 273 mm), Postcard (JIS), DPostcard (JIS), oficio 216 × 340 mm							
	ADF: 11.7 x 39 in, ledg	er, legal, 8.5 x 13 in, lette	er; A3, B4-JIS, A4, B5-JIS, <i>A</i>	45, B6-JIS, A6				
Media weights	Tray 1: 16 to 58 lb (60 to 220 g/m²), 80 lb (300 g/m²) photo paper only  Tray 2, optional 1x550-sheet tray, 1x550-sheet tray/stand, 3x550-sheet tray/stand, and HCl trays 3 and 4: 16 to 58 lb (60 to 220 g/m²)							
	ADF: 12 to 53 lb (45 to 199 g/m²)							
Media types	Paper (plain, inkjet, ink	jet brochure/glossy), pho	oto paper, envelopes, labe	els, cards				
Print languages	HP PCL 6, HP PCL 5c, HP postscript level 3 emulation, PDF 1.7							
Fonts	105 internal TrueType fonts scalable in HP PCL, 92 internal scalable fonts in HP Postscript level 3 emulation (Euro symbol built-in); 1 internal Unicode Font (Andale Mono WorldType); 2 Internal Windows Vista® 8 Fonts (Calibri, Cambria); additional font solutions available via third-party flash memory cards; HP LaserJet Fonts and IPDS Emulation available at							

unced authentication vork: IPsec/firewall in, 802.1X authent ule (TPM) comes sta : Storage Encryptio e, SSL/TLS (HTTPS) ce: Security lock slo Red Balloon Securi king with self-heali cks outgoing netwo urity Management: ( accessible in ArcSig	n solutions (e.g., badge re with Certificate, Pre-Shar ication (EAP-PEAP, EAP-T andard n, Encrypted PDF and Em , Encrypted Credentials t, USB port disablement, ty Technology (constant i	eders) ed Key, and Kerberos autl LS), SNMPv3, HTTPS, Cert ail (uses FIPS 140 validate Hardware Integration Poc	user PIN codes, optional nentication, Supports WJA ificates, Access Control Li ed cryptographic libraries	A-10 IPsec configuration ist, HP Trusted Platform	
in, 802.1X authent ule (TPM) comes sta : Storage Encryptio e, SSL/TLS (HTTPS) ce: Security lock slo Red Balloon Securi king with self-heali cks outgoing netwo urity Management: ( accessible in ArcSig	ication (EAP-PEAP, EAP-T andard n, Encrypted PDF and Em , Encrypted Credentials t, USB port disablement, ty Technology (constant i ng capability), whitelisting	LS), SNMPv3, HTTPS, Cert ail (uses FIPS 140 validate Hardware Integration Poc	cificates, Access Control Li	st, HP Trusted Platform	
e, SSL/TLS (HTTPS) ce: Security lock slo Red Balloon Securi king with self-heali cks outgoing netwo irity Management: ( accessible in ArcSig	, Encrypted Credentials t, USB port disablement, ty Technology (constant i ng capability), whitelisting	Hardware Integration Poc		from Microsoft), Secure	
Red Balloon Securi king with self-heali cks outgoing netwo Irity Management: ( accessible in ArcSig	ty Technology (constant i ng capability), whitelisting				
accessible in ArcSig		g (loads only known good	ttacks), HP Sure Start Sec code (DLLs, EXEs, etc.)), F	ure Boot (BIOS integrity HP Connection Inspector	
more security settin	Compatible with HP JetAd ht, Splunk, McAfee, and S		r, <sup>21</sup> Device Security Syslog	Messages processed	
	gs go to <u>http://h10032.w</u>	ww1.hp.com/ctg/Manual	<u>/c03602120</u>		
	ty Manager; <sup>21</sup> HP SNMP P Kit for HP Universal Print		lmin Software; <sup>20</sup> HP WS Pi	ro Proxy Agent; Printer	
lows 8/8.1 all 32- a		ling RT OS for Tablets), W	Tablets), Windows 7 all 3 indows Vista all 32-bit ed P Pro, etc.)		
	5 X 10.10 Yosemite, OS X	10.11 El Capitan			
ile OS: Android™	) object (7.0. 7.1. 7.2. 7.2. 7.	7 4 7 5 7 6 7 7 7 0 7 0	00 01 02 02 04 05	0.C) Linux Fodoro (22	
Linux Boss (5.0), Linux Debian (7.0, 7.1, 7.2, 7.3, 7.4, 7.5, 7.6, 7.7, 7.8, 7.9, 8.0, 8.1, 8.2, 8.3, 8.4, 8.5, 8.6), Linux Fedora (22, 23, 24), Linux Mint (17, 17.1, 17.2, 17.3, 18), Linux Red Hat Enterprise (6.0, 7.0), Linux SUSE (13.2, 42.1), Linux Ubuntu (12.04, 14.04, 15.10, 16.04, 16.10)  Other OS: UNIX®					
Citrix MetaFrame Presentation Server 3.0, Citrix MetaFrame XP Presentation Server (Feature Release 1, 2, and 3), Citrix on Windows Server® 2003/2003R2, Citrix on Windows Server 2008/2008R2/2008 R2 SP1, Citrix on Windows Server 2012/2012R2, Citrix Presentation Server 4.0/4.5, Citrix XenApp 5.0 (plus Feature Pack 2 & 3) for Windows Server 2008 Terminal Services 32- and 64-bit, Citrix XenApp 6.0/6.5 (for Windows Server 2008 R2 Terminal Services, 32- and 64-bit), Citrix XenApp 6.0/6.5/7.5 (for Windows Server 2008 R2 SP1 Terminal Services, 32- and 64-bit), Citrix XenApp 7.5 (for Windows Server 2012 and 2012 R2 Terminal Services, 32- and 64-bit), Citrix XenDesktop 5.6 (for Windows Server 2008 R2 SP1 Terminal Services, 32- and 64-bit), Citrix XenDesktop 7.0/7.5 (for Windows Server 2012 and 2012 R2 Terminal Services, 32- and 64-bit), Citrix XenDesktop 7.0/7.5 (for Windows Server 2012 and 2012 R2 Terminal Services, 64-bit)					
Novell NetWare 6.5/SP8 Novell Clients <u>novell.com/iprint</u> , Novell iPrint Appliance v1.0, Novell Open Enterprise Server 11/SP1, Novell Open Enterprise Server 2 for Linux, Novell Servers novell.com/iprint					
Windows Server 2003/2003 R2 32-/64-bit (SP1/SP2) Standard/Enterprise/Datacenter (+ Cluster & Terminal Services), Windows Server 2003/2003 R2 32-bit (SP1/SP2), Standard/Enterprise (+ Cluster & Terminal Services), Windows Server 2008 32-/64-bit (SP2) Standard/Enterprise (+ Cluster & Terminal Services), Windows Server 2008 R2 64-bit (SP1) Standard/Enterprise (+ Cluster & Terminal Services), Windows Server 2008/2008 R2 32-/64-bit (SP1/SP2) Standard/Enterprise/Datacenter (+ Cluster & Terminal Services), Windows Server 2012/2012 R2 64-bit Standard/Foundation/Essentials/Datacenter (+ Cluster & Terminal Services), Windows Server 2016/ 64-bit Standard/Essential/Datacenter (+ Cluster & Terminal Services)					
mpatible operating	system (see above); 2 GB	available hard disk space	; OS hardware requireme	nts (see <u>microsoft.com</u> )	
	system (see above); Inter	net; 1.3 GB available harc	disk space; OS hardware	requirements (see	
.75 in (813 x 616	Operating: 32 x 24.25 x 31.125 in (813 x 616 x 791 mm)	Operating: 32 x 24.25 x 26.75 in (813 x 616 x 680 mm)	Operating: 32 x 24.25 x 31.125 in (813 x 616 x 791 mm)	Operating: 49 x 27.3 x 48.1 in (1245 x 693 x 1222 mm)	
5 x 26.75 in (896	Maximum: <sup>44</sup> 35.25 x 28.25 x 31.125 in (896 x 718 x 791 mm)	Maximum: <sup>44</sup> 35.25 x 28.25 x 26.75 in (896 x 718 x 680 mm)	Maximum: <sup>44</sup> 35.25 x 28.25 x 31.125 in (896 x 718 x 791 mm)	Maximum: <sup>44</sup> 98.2 x 46.3 x 60.4 in (2495 x 1175 x 1535 mm)	
lb (69 kg)	181 lb (82 kg)	153 lb (69 kg)	181 lb (82 kg)	376.3 lb (171 kg)	
HP PageWide Managed MFP; HP setup ink cartridges (yield after setup ~8,000 pages for CMY and ~10,000 pages for black); 45 Installation guide, Support flyer; documentation on CD-ROM; Power cord					
				0,000 pages for	
k); <sup>45</sup> Installation gui lay parts only warra	de, Support flyer; docume	entation on CD-ROM; Pow rt options vary by product	er cord t, country, and local legal r		
	ninal Services, 32- a 64-bit), Citrix XenDe ell NetWare 6.5/SP8 iP1, Novell Open En dows Server 2003/2 dows Server 2003/2 dows Server 2003/2 3 32-/64-bit (SP2) 9 dard/Enterprise (+) dard/Enterprise/Da dard/Foundation/E intial/Datacenter (+) mpatible operating mpatible operating e.com) rating: 32 x 24.25 .75 in (813 x 616 0 mm) mum: 44 35.25 x 5 x 26.75 in (896 8 x 680 mm)  lb (69 kg)	ninal Services, 32- and 64-bit), Citrix XenDesl 64-bit), Citrix XenDesktop 7.0/7.5 (for Windo ell NetWare 6.5/SP8 Novell Clients novell.con iP1, Novell Open Enterprise Server 2 for Linux dows Server 2003/2003 R2 32-/64-bit (SP1/ dows Server 2003/2003 R2 32-bit (SP1/SP2) iB 32-/64-bit (SP2) Standard/Enterprise (+ Cluster & Terminal Service dard/Enterprise/Datacenter (+ Cluster & Terminal Service dard/Foundation/Essentials/Datacenter (+ Cluster & Terminal Service mpatible operating system (see above); 2 GB mpatible operating system (see above); 1nter e.com) rating: 32 x 24.25 .75 in (813 x 616 0 mm) mum: 44 35.25 x 5 x 26.75 in (896 8 x 680 mm)  Maximum: 44 35.25 x 28.25 x 31.125 in (896 x 718 x 791 mm)	ninal Services, 32- and 64-bit), Citrix XenDesktop 5.6/7.0/7.5 (for Wind 64-bit), Citrix XenDesktop 7.0/7.5 (for Windows Server 2012 and 2012 all NetWare 6.5/SP8 Novell Clients novell.com/iprint, Novell iPrint ApplisP1, Novell Open Enterprise Server 2 for Linux, Novell Servers novell.cc dows Server 2003/2003 R2 32-/64-bit (SP1/SP2) Standard/Enterprise dows Server 2003/2003 R2 32-bit (SP1/SP2), Standard/Enterprise (+ CB 32-/64-bit (SP2) Standard/Enterprise (+ Cluster & Terminal Services), Windows Server 2008 dard/Enterprise (+ Cluster & Terminal Services), Windows Server 2008 dard/Enterprise (+ Cluster & Terminal Services), Windows Server 2008 dard/Enterprise (+ Cluster & Terminal Services), Windows Server 2008 dard/Foundation/Essentials/Datacenter (+ Cluster & Terminal Services) antial/Datacenter (+ Cluster & Terminal Services)  Impatible operating system (see above); 2 GB available hard disk space mpatible operating system (see above); Internet; 1.3 GB available hard e.com)  Internet; 1.3 GB available hard e.com  Maximum: 44 35.25 × 31.125 in (813 × 616 × 791 mm)	ninal Services, 32- and 64-bit), Citrix XenDesktop 5.6/7.0/7.5 (for Windows Server 2008 R2 SP1 64-bit), Citrix XenDesktop 7.0/7.5 (for Windows Server 2012 and 2012 R2 Terminal Services, 64 fell NetWare 6.5/SP8 Novell Clients novell.com/iprint, Novell iPrint Appliance v1.0, Novell Open Enterprise Server 2 for Linux, Novell Servers novell.com/iprint dows Server 2003/2003 R2 32-/64-bit (SP1/SP2) Standard/Enterprise/Datacenter (+ Cluster & Terminal Services) as 2-/64-bit (SP2) Standard/Enterprise (+ Cluster & Terminal Services) as 2-/64-bit (SP2) Standard/Enterprise (+ Cluster & Terminal Services), Windows Server 2008/2008 R2 32-/64-bit (SP2) Standard/Enterprise (+ Cluster & Terminal Services), Windows Server 2008/2008 R2 32-/64-bit (SP2) dard/Enterprise (+ Cluster & Terminal Services), Windows Server 2008/2008 R2 32-/64-bit (SP2) dard/Enterprise (+ Cluster & Terminal Services), Windows Server 2012/2012 R2 64-dard/Foundation/Essentials/Datacenter (+ Cluster & Terminal Services), Windows Server 2012/2012 R2 64-dard/Foundation/Essentials/Datacenter (+ Cluster & Terminal Services), Windows Server 2012/2012 R2 64-dard/Foundation/Essentials/Datacenter (+ Cluster & Terminal Services), Windows Server 2016/intial/Datacenter (+ Cluster & Terminal Services),	

	HP PageWide Managed Color MFP E77650dn	HP PageWide Managed Color MFP E77650dns	HP PageWide Managed Color Flow MFP E77650z	HP PageWide Managed Color Flow MFP E77650zs	HP PageWide Managed Color Flow MFP E77650z+			
Environmental and power								
Temperatures <sup>46</sup>		Recommended operating: 63 to 77° F (17 to 25° C); Operating: 59 to 86° F (15 to 30° C); Storage before initial setup (Non-Purged): $-40$ to $140^\circ$ F ( $-40$ to $60^\circ$ C); Storage after initial setup (Purged): $32$ to $140^\circ$ F ( $0$ to $60^\circ$ C).						
Relative Humidity	Recommended operati 10 to 80% RH	ng range: 30 to 70% RH; (	Operating range: 10 to 80 <sup>1</sup>	% RH; Non-operating rang	ge:			
Acoustic pressure emissions	Ready: Inaudible Print: 53 dB(A) <sup>47</sup> Scan: 56 dB(A) <sup>48</sup>	Ready: Inaudible Print: 53 dB(A) <sup>47</sup> Scan: 56 dB(A) <sup>48</sup>	Ready: Inaudible Print: 54dB(A) <sup>49</sup> Scan: 57dB(A) <sup>50</sup>	Ready: Inaudible Print: 51 dB(A) <sup>47</sup> Scan: 58 dB(A) <sup>50</sup>	Not available			
Acoustic power emissions	Ready: Inaudible Print: 6.7 B(A) Scan: 7.1 B(A) <sup>48</sup>	Ready: Inaudible Print: 6.7 B(A) Scan: 7.1 B(A) <sup>48</sup>	Ready: Inaudible Print: 6.8 B(A) Scan: 7.2 B(A) <sup>50</sup>	Ready: Inaudible Print: 6.6 B(A) Scan: 7.2 B(A) <sup>50</sup>	Not available			
Power <sup>51</sup>	Power supply type: Built-in power supply; Power requirements: Input voltage: 100 to 240 VAC, 50/60 Hz; Power Consumption: 660 watts (print/copy), 42 watts (ready), 1.6 watts (sleep), 0.2 watts (auto-off), 0.2 watts (off)							
Energy-saving features	HP Auto-On/Auto-Off Technology <sup>52</sup> (all models)							
Environmental specifications	ENERGY STAR® certifie	d; EPEAT® Gold <sup>53</sup> (all mod	lels)					
Typical Electricity Consumption (TEC)	2.03 kWh/week	2.03 kWh/week	2.03 kWh/week	2.03 kWh/week	3.987 kWh/week			

# HP PageWide Managed Color MFP E77660 series technical specifications

	HP PageWide Managed Color MFP E77660dn	HP PageWide Managed Color MFP E77660dns	HP PageWide Managed Color Flow MFP E77660z	HP PageWide Managed Color Flow MFP E77660zs	HP PageWide Managed Color Flow MFP E77660z+		
Engine part number	2CF56A	2CF57A	2CF58A	2CF59A	2CF60A		
Speed option part number	2GP05A	2GP08A	2GP11A	2GP14A	2GP17A		
Functions	Standard: Print, copy, scan (all models) Optional: Fax (all models)						
Control panel/data entry	8.0-inch (20.3 cm) pivot	ing color touchscreen; ea	asy-access USB <sup>13</sup> ; Hardwa	re Integration Pocket <sup>18</sup>			
			Plus: pull-out keyboard (Flow models)				
Print speed (black and color, letter and A4) <sup>9</sup>							
Single-sided	Up to 60/80 ppm (Profe	essional/General Office m	ode) (all models)				
Two-sided	Up to 40/56 ipm (Profe	ssional/General Office mo	ode) (all models)				
First page out (black and color, letter	From ready: <sup>29</sup> as fast as 7.1 seconds <i>(all models)</i>						
and A4)	From sleep: <sup>30</sup> as fast as 17.4 seconds <i>(all models)</i>						
Print resolution			0 x 600 input dpi (on Unsp 10 optimized dpi from 600				
Scanning resolution	Up to 600 dpi (all mode	ls)					
ADF scan speed (letter and A4)11							
• •			i .				
Single-sided	Up to 90 ppm (black an	d color)	Up to 120 ppm (black a	nd color)			

	HP PageWide Managed Color MFP E77660dn	HP PageWide Managed Color MFP E77660dns	HP PageWide Managed Color Flow MFP E77660z	HP PageWide Managed Color Flow MFP E77660zs	HP PageWide Managed Color Flow MFP E77660z+			
Features			•					
Printing	HP PageWide Technology with pigmented inks, HP EasyColor, print preview, automatic two-sided printing, print multiple pages per sheet (2, 4, 6, 9, 16), collation, booklet printing, cover pages, tray selection, scaling, portrait/landscape orientation, high-quality grayscale and black ink only, General Office/Professional/Presentation dpi print modes, control panel shortcuts, store print jobs; print from easy-access USB Microsoft Word and PowerPoint files							
Scanning	(297 x 1,000 mm); <sup>25</sup> Ad selectable scan resolut bit depth: 24-bit (color	Flatbed scanner: 11.7 x 17 in (297 x 432 mm); 200-sheet ADF with single-pass, two-sided scanning up to 11.7 x 39 in (297 x 1,000 mm); Advanced features: optimize text/picture, image adjustments, job build, output quality setting, selectable scan resolution 75 to 600 dpi, auto detect color, edge erase, job notification, blank page suppression, Quick Set bit depth: 24-bit (color); 8-bit (gray); Scan file type supported by software: Bitmap (.bmp), JPEG (.jpg), PDF (.pdf), PNG (.png Rich Text (.rtf), Searchable PDF (.pdf), Text (.txt), TIFF (.tif); TWAIN version 2.131						
				n ultrasonic multi-feed de nition (OCR), auto-orienta				
Digital sending	to LAN fax, SMTP over	SSL, OCR, blank page rem	can to network folder, sca oval, edge erase, auto colo uto crop-to-page, compac	or sense, auto crop to cor	ntent, auto tone, auto-			
File formats <sup>31</sup>	PDF, JPEG, TIFF, MTIFF, USB: PDF, PS, print rea		-access USB: PDF, JPEG, T	IFF, MTIFF, XPS, PDF/A; P	rint from easy-access			
	Plus (OCR): TEXT, Unicode TEXT, RTF, Searchable PDF, Searchable PDF/A, HTML, CSV; Scan to easy-access USB: TEXT, Unicode TEXT, R' Searchable PDF, Searchable PDF/A, HTML, CSV							
Copying	Copy speed: up to 60 copies per minute and first copy out as fast as 7.9 seconds; <sup>33</sup> Auto scale, Reduce/Enlarge from scanner glass (25 to 400%), Collate, Auto-color detection, Two-sided copying, Job build, image adjustments (darkness, background clean-up, sharpness); Copy resolution: Up to 600 x 600 dpi							
Optional faxing	Fax speed: <sup>34</sup> 3 seconds per page/33.6 kbps (letter/A4); fax forwarding, receive fax polling, broadcasting to up to 210 locations, speed dial up to 1000 numbers, each with 210 destinations, auto-fax reduction, auto-redialing, stored faxes, fax archiving, scale-to-fit, fax address book, LAN/Internet fax, fax number confirmation, holiday fax schedule  Fax resolution: Black (standard): 204 x 98 dpi; black (fine): 204 x 196 dpi; black (photo grayscale): 300 x 300 dpi (400 x 400 dpi for received faxes only): Color (fine): 300 x 300 dpi (400 x 400 dpi for received faxes only)							
Processor	1.2 GHz (all models)							
Memory	3584 MB <sup>35</sup>		5632 MB <sup>36</sup>					
Storage		ure Hard Disk (AES 256 ha ecure Erase-Job Data, Sec	nrdware encryption or greature ATA Erase-Disk)	ater; Secure erase capabil	ities: Secure File Erase-			
Durability ratings								
RMPV <sup>37</sup>	2,500 pages to as high	as 50,000 pages (all mod	dels)					
RMSV <sup>26</sup>	2,000 pages to as high	as 50,000 pages	2,000 pages to as high	as 75,000 pages				
Duty cycle <sup>38</sup>	Up to 250,000 pages (	all models)	1					
Media specifications								
Input capacity	Up to 650 sheets (up to 4,650 sheets maximum <sup>16</sup> ) ( <i>all models</i> )  Tray 1: up to 100 sheets  Tray 2: up to 550 sheets							
Output capacity	Up to 500 sheets	Up to 850 sheets, including standard 350-sheet inner finisher with stapler (staples up to 50 sheets)	Up to 500 sheets	Up to 850 sheets, including standard 350-sheet inner finisher with stapler (staples up to 50 sheets)	Up to 3,250 sheets, with required external finisher (staples up to 50 sheets)			
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	HP PageWide Managed Color MFP E77660dn	HP PageWide Managed Color MFP E77660dns	HP PageWide Managed Color Flow MFP E77660z	HP PageWide Managed Color Flow MFP E77660zs	HP PageWide Managed Color Flow MFP E77660z+			
Media sizes	Tray 1: 12 × 18 in, 11 × 17 in, legal, oficio (8.5 × 13 in), letter, letter-R, executive, statement, 5 × 8 in, 5 × 7 in, 4 × 6 in, envelope #10; A3, A4, A4-R, A5, A5-R, A6, RA3, RA4, SRA4, B4, B5 (JIS), 8K (270 × 390 mm), 16K (195 × 270 mm), 8K (260 × 368 mm), 16K (184 × 260 mm), 8K (273 × 394 mm), 16K (197 × 273 mm), oficio (216 × 340 mm), envelopes (B5, C5, C6); Custom media sizes: 3.9 × 5.83 to 12 × 18 in (99.1 × 127 to 304.8 × 457.2 mm)							
	Tray 2, optional 1x550-sheet tray, 1x550-sheet tray/stand, and 3x550-sheet tray/stand: 11 x 17 in, legal, oficio (8.5 x 13 in), letter, letter-R, executive; A3, A4, A4-R, A5, SRA4, B4, B5 (JIS), 8K (270 x 390 mm), 16K (195 x 270 mm), 8K (260 x 368 mm), 16K (184 x 260 mm), 8K (273 x 394 mm), 16K (197 x 273 mm), oficio (216 x 340 mm); Custom media sizes: 8.27 x 5.83 to 11.7 x 17 in (210.1 x 148.1 to 297.2 x 431.8 mm)							
	Optional HCI trays 3 and 4: Letter and A4 only Duplex: $12 \times 18$ in, $11 \times 17$ in, legal, oficio (8.5 × 13 in), letter, letter-R, executive; A3, A4, A4-R, A5, A5-R, RA3, RA4, SRA4, B4, B5 (JIS), B6 (JIS), $10 \times 15$ cm, 8K ( $270 \times 390$ mm), $16K$ ( $195 \times 270$ mm), 8K ( $260 \times 368$ mm), $16K$ ( $184 \times 260$ mm), 8K ( $273 \times 394$ mm), $16K$ ( $197 \times 273$ mm), Postcard (JIS), DPostcard (JIS), oficio $216 \times 340$ mm							
	ADF: 11.7 x 39 in, ledge	er, legal, 8.5 x 13 in, letter	; A3, B4-JIS, A4, B5-JIS, A	5, B6-JIS, A6				
Media weights	•	to 220 g/m²), 80 lb (300 g -sheet tray, 1x550-sheet	g/m²) photo paper only tray/stand, and 3x550-sh	neet tray/stand, optional F	HCI trays 3 and 4: 16 to			
	ADF: 12 to 53 lb (45 to	199 g/m²)						
Media types	Paper (plain, inkjet, inkj	et brochure/glossy), phot	o paper, envelopes, label	s, cards				
Print languages	HP PCL 6, HP PCL 5c, H	P postscript level 3 emula	ation, PDF 1.7					
Fonts	built-in); 1 internal Union font solutions available	105 internal TrueType fonts scalable in HP PCL, 92 internal scalable fonts in HP Postscript level 3 emulation (Euro symbol built-in); 1 internal Unicode Font (Andale Mono WorldType); 2 Internal Windows Vista 8 Fonts (Calibri, Cambria); additional font solutions available via third-party flash memory cards; HP LaserJet Fonts and IPDS Emulation available at <a href="https://doi.org/10.1081/nc.nd/">https://doi.org/10.1081/nc.nd/</a>						
Connectivity		2.0; 2 Hi-Speed USB 2.0 l k; 1 Hardware Integration	Host (1 easy-access and 1 Pocket <sup>18</sup>	external accessible); 1 Gi	gabit Ethernet			
Mobile printing	HP ePrint, <sup>39</sup> Apple AirPrint, <sup>40</sup> Mopria-certified, Google Cloud Print 2.0							
	Optional: Wireless direc	ct printing <sup>41</sup> and NFC touc	n-to-print <sup>42</sup> (with purchase	e of HP Jetdirect 3000w N	IFC/Wireless Accessory)			
Network capabilities	Standard: via HP Jetdirect Ethernet embedded print server supports: 10Base-T, 100Base-Tx, 1000Base-T; 802.3az (EEE) support on Fast Ethernet and Gigabit Ethernet; IPsec							
	Optional: 802.11a/b/g/	'n wireless networking (w	ith purchase of optional H	P Jetdirect 2900nw Print	Server) <sup>41</sup>			
Network protocols	IPv4/IPv6: Apple Bonjour Compatible (Mac OS v10.2.4 or higher), SNMPv1/v2c/v3, HTTP, HTTPS, FTP, TFTP, Port 9100, LPD, WS Discovery, IPP, Secure-IPP, IPsec/Firewall; IPv6: DHCPv6, MLDv1, ICMPv6; IPv4: Auto-IP, SLP, Telnet, IGMPv2, BOOTP/DHCP, WINS, IP Direct Mode, WS Print							
Security	Identity Management: Kerberos authentication, LDAP authentication, 1000 user PIN codes, optional HP and third-party advanced authentication solutions (e.g., badge readers)							
	Network: IPsec/firewall with Certificate, Pre-Shared Key, and Kerberos authentication, Supports WJA-10 IPsec configuration Plug in, 802.1X authentication (EAP-PEAP, EAP-TLS), SNMPv3, HTTPS, Certificates, Access Control List, HP Trusted Platform Module (TPM) comes standard							
		on, Encrypted PDF and Em ), Encrypted Credentials	nail (uses FIPS 140 validat	ed cryptographic libraries	from Microsoft), Secure			
	with Red Balloon Secur checking with self-heal	ity Technology (constant ing capability), whitelistin	Hardware Integration Pod in-device monitoring for a g (loads only known good uspicious requests; may re	ittacks), HP Sure Start Sec code (DLLs, EXEs, etc.)), I	ture Boot (BIOS integrity HP Connection Inspector			
	Security Management: Compatible with HP JetAdvantage Security Manager, <sup>21</sup> Device Security Syslog Messages processed and accessible in ArcSight, Splunk, McAfee, and SIEMonster SIEMs							
	For more security setting	ngs go to <u>http://h10032.v</u>	vww1.hp.com/ctg/Manual	<u>/c03602120</u>				
Printer management		rity Manager; <sup>21</sup> HP SNMP F e Kit for HP Universal Prin	Proxy Agent; HP Web Jetad t Driver <sup>24</sup>	dmin Software; <sup>20</sup> HP WS P	ro Proxy Agent; Printer			
Compatible operating systems <sup>43</sup>	Windows 8/8.1 all 32-a Premium, Professional	and 64-bit editions (exclu	ions (excluding RT OS for ding RT OS for Tablets), W 2-bit editions (XP Home, X ( 10.11 El Capitan	indows Vista all 32-bit ed	2- and 64-bit editions, litions (Home Basic,			
	Mobile OS: Android		capitali					
	Linux Boss (5.0), Linux	17.1, 17.2, 17.3, 18), Line	7.4, 7.5, 7.6, 7.7, 7.8, 7.9, ux Red Hat Enterprise (6.0					

	HP PageWide Managed Color MFP E77660dn	HP PageWide Managed Color MFP E77660dns	HP PageWide Managed Color Flow MFP E77660z	HP PageWide Managed Color Flow MFP E77660zs	HP PageWide Managed Color Flow MFP E77660z+		
Compatible network operating systems	Windows Server 2003/2 2012/2012R2, Citrix Pro Terminal Services 32- a Citrix XenApp 6.0/6.5/7 Windows Server 2012 a Terminal Services, 32- a	2003R2, Citrix on Window esentation Server 4.0/4.5 nd 64-bit, Citrix XenApp 6 .5 (for Windows Server 20 and 2012 R2 Terminal Ser and 64-bit), Citrix XenDes	MetaFrame XP Presentations Server 2008/2008R2/2, Citrix XenApp 5.0 (plus Foldes) Server 2006. Terminal Server 2008 R2 SP1 Terminal Server 2016, 64-bit), Citrix XenDoktop 5.6/7.0/7.5 (for Windows Server 2012 and 2012)	008 R2 SP1, Citrix on Win eature Pack 2 & 3) for Win er 2008 R2 Terminal Serv ices, 32- and 64-bit), Citri esktop 5.6 (for Windows S dows Server 2008 R2 SP1	dows Server ndows Server 2008 ices, 32- and 64-bit), x XenApp 7.5 (for server 2008 R2 Terminal Services, 32-		
			<u>n/iprint</u> , Novell iPrint Appl x. Novell Servers novell.co		nterprise Server		
	11/SP1, Novell Open Enterprise Server 2 for Linux, Novell Servers <u>novell.com/iprint</u> Windows Server 2003/2003 R2 32-/64-bit (SP1/SP2) Standard/Enterprise/Datacenter (+ Cluster & Terminal Services), Windows Server 2003/2003 R2 32-bit (SP1/SP2), Standard/Enterprise (+ Cluster & Terminal Services), Windows Server 2008 32-/64-bit (SP2) Standard/Enterprise (+ Cluster & Terminal Services), Windows Server 2008 R2 64-bit (SP1) Standard/Enterprise (+ Cluster & Terminal Services), Windows Server 2008/2008 R2 32-/64-bit (SP1/SP2) Standard/Enterprise/Datacenter (+ Cluster & Terminal Services), Windows Server 2012/2012 R2 64-bit Standard/Foundation/Essentials/Datacenter (+ Cluster & Terminal Services), Windows Server 2016/ 64-bit Standard/ Essential/Datacenter (+ Cluster & Terminal Services)						
System requirements, Windows	A compatible operating	system (see above); 2 GE	B available hard disk space	; OS hardware requireme	nts (see <u>microsoft.com</u> )		
System requirements, Macintosh	A compatible operating <u>apple.com</u> )	system (see above); Inter	rnet; 1.3 GB available hard	l disk space; OS hardware	requirements (see		
Dimensions (width x depth x height)	Operating: 32 x 24.25 x 26.75 in (813 x 616 x 680 mm)	Operating: 32 x 24.25 x 31.125 in (813 x 616 x 791 mm)	Operating: 32 x 24.25 x 26.75 in (813 x 616 x 680 mm)	Operating: 32 x 24.25 x 31.125 in (813 x 616 x 791 mm)	Operating: 49.0 x 27.3 x 48.1in (1245 x 693 x 1222 mm)		
	Maximum: <sup>44</sup> 35.25 x 28.25 x 26.75 in (896 x 718 x 680 mm)	Maximum: <sup>44</sup> 35.25 x 28.25 x 31.125 in (896 x 718 x 791 mm)	Maximum: <sup>44</sup> 35.25 x 28.25 x 26.75 in (896 x 718 x 680 mm)	Maximum: <sup>44</sup> 35.25 x 28.25 x 31.125 in (896 x 718 x 791 mm)	Maximum: <sup>44</sup> 98.2 x 46.3 x 60.4 in (2495 x 1175 x 1535 mm)		
Weight (with print cartridges)	153 lb (69 kg)	181 lb (82 kg)	153 lb (69 kg)	181 lb (82 kg)	376.3 lb (171 kg)		
What's in the box		MFP; HP Setup Ink Cartric cumentation on CD-ROM;	lge (yield after setup ~8,0 Power cord	00 pages CMY and ~10,00	00 black); <sup>45</sup> Installation		
Warranty			rt options vary by productervice and support options		requirements. Go to		
Software included <sup>31</sup>			CL 6 (XPS) Printer Driver, OS App Source for printe				
Environmental and power							
Temperatures <sup>46</sup>			C); Operating: 59 to 86º F er initial setup (Purged): 3		fore initial setup (Non-		
Relative Humidity	Recommended operatir 10 to 80% RH	ng range: 30 to 70% RH; (	Operating range: 10 to 80°	% RH; Non-operating rang	je:		
Acoustic pressure emissions	Ready: Inaudible Print: 54 dB(A) <sup>54</sup> Scan: 56 dB(A) <sup>48</sup>	Ready: Inaudible Print: 51 dB(A) <sup>54</sup> Scan: Not available	Ready: Inaudible Print: 55 dB(A) <sup>54</sup> Scan: 57 dB(A) <sup>50</sup>	Ready: Inaudible Print: 51 dB(A) <sup>54</sup> Scan: 58 dB(A) <sup>50</sup>	Not available		
Acoustic power emissions <sup>47</sup>	Ready: Inaudible Print: 6.8 B(A) Scan: 7.1 B(A) <sup>48</sup>	Ready: Inaudible Print: Not available Scan: Not available	Ready: Inaudible Print: 6.8 B(A) Scan: 7.2 B(A) <sup>50</sup>	Ready: Inaudible Print: 6.6 B(A) Scan: 7.3 B(A) <sup>50</sup>	Not available		
Power <sup>51</sup>			requirements: Input volta eady), 1.6 watts (sleep), (				
Energy-saving features	HP Auto-On/Auto-Off T	echnology <sup>52</sup> (all models)					
Environmental specifications	ENERGY STAR certified;	EPEAT Gold <sup>53</sup> (all models	)				
Typical Electricity Consumption (TEC)	2.03 kWh/week	2.03 kWh/week	2.03 kWh/week	2.03 kWh/week	4.296 kWh/week		

# Ordering information

Engine (E77650/60dn): HP PageWide Managed Color MFP E77650/60dn	2CF56A
Speed option (E77650/60dn): HP PageWide Managed Color MFP E77650dn	2GP04A
Engine (E77650/60dns):	2GP05A
HP PageWide Managed Color MFP E77650/60dns  Speed option (E77650/60dps):	2CF57A
HP PageWide Managed Color MFP E77650dns HP PageWide Managed Color MFP E77660dns	2GP07A 2GP08A
Engine (E77650/60z): HP PageWide Managed Color MFP E77650/60z	2CF58A
Speed option (E77650/60z): HP PageWide Managed Color MFP E77650z HP PageWide Managed Color MFP E77660z	2GP10A 2GP11A
Engine (E77650/60zs): HP PageWide Managed Color MFP E77650/60zs	2CF59A
Speed option (E77650/60zs): HP PageWide Managed Color MFP E77650zs	2GP13A 2GP14A
Engine (E77650/60z+):	2GF14A 2CF60A
Speed option (E77650/60z+):	
HP PageWide Managed Color MFP E77650z+ <sup>28</sup> HP PageWide Managed Color MFP E77660z+	2GP16A 2GP17A
HP 990XC Black Contract PageWide Cartridge (~22,000 pages) HP 990X Cyan Contract PageWide Cartridge (~16,000 pages) HP 990X Magenta Contract PageWide Cartridge (~16,000 pages) HP 990X Yellow Contract PageWide Cartridge (~16,000 pages)	M0K28XC M0K05XC M0K09XC M0K24XC
HP 991X Cyan Contract PageWide Cartridge (~16,000 pages)	MOK29XC MOK06XC
HP 991X Yellow Contract PageWide Cartridge (~16,000 pages)	M0K10XC M0K25XC
	M0K30XC M0K07XC
HP 992X Magenta Contract PageWide Cartridge (~16,000 pages)	M0K11XC
	M0K26XC M0K31XC
HP 993X Cyan Contract PageWide Cartridge (~16,000 pages)	M0K08XC
	M0K12XC M0K27XC
	W1B43A
HP PageWide Service Fluid Container (~150,000 pages)	W1B44A
	W1B45A J8J95A
	J8J96A
E776650/z+/60z+ models only: HP LaserJet Stapler/Stacker Finisher Staples	Y1G14A
HP PageWide Managed 550-sheet Paper Tray	P1V16A P1V17A
HP PageWide Managed 3x550-sheet Paper Tray and Stand	P1V18A
HP PageWide Managed 4000-sheet HCl Paper Tray and Stand	P1V19A
	B5L29A E5K48A
HP Foreign Interface Harness	B5L31A
	J8031A
	J8030A CC487A
HP Internal USB ports	B5L28A
E776650z+/60z+ models only: HP PageWide Stapler/Stacker External Finisher	Z4L04A
HP LaserJet Hole Punch 2/3 Accessory	Y1G10A
HP LaserJet Hole Punch 2/4 Accessory HP LaserJet Hole Punch Swedish Accessory	Y1G11A Y1G12A
HP Web Jetadmin: <u>hp.com/qo/wja</u>	
HD I DIVORCAL DRINGS DD COM/GO/LIDG	
HP Universal Print Driver: <u>hp.com/go/upd</u> HP JetAdvantage Security Manager: <u>hp.com/go/securitymanager</u>	
HP JetAdvantage Security Manager: <u>hp.com/qo/securitymanager</u> HP JetAdvantage Security Manager: <u>hp.com/qo/securitymanager</u> HP JetAdvantage On Demand Cloud Solutions: <u>hp.com/qo/jetadvantageondemand</u> HP LaserJet Fonts, Barcodes, and IPDS Emulation available at <u>hp.com/qo/laserjetfonts</u>	
	HP PageWide Managed Color MFP E77650/60dn  Speed option (E77650/60dn)  HP PageWide Managed Color MFP E77650dn  HP PageWide Managed Color MFP E77650dn  HP PageWide Managed Color MFP E77650/60dns  Speed option (E77650/60dns)  HP PageWide Managed Color MFP E77650/60dns  Speed option (E77650/60dns)  HP PageWide Managed Color MFP E77650/60dns  HP PageWide Managed Color MFP E77650/60dns  Engine (E77650/60d)  HP PageWide Managed Color MFP E77650/60z  Speed option (E77650/60z)  HP PageWide Managed Color MFP E77650/2  HP PageWide Managed Color MFP E77660/2  HP PageWide Managed Color MFP E77660/2  HP PageWide Managed Color MFP E77660/2  HP 990X CBlack Contract PageWide Cartridge (~22,000 pages)  HP 990X CBlack Contract PageWide Cartridge (~16,000 pages)  HP 990X Magenta Contract PageWide Cartridge (~16,000 pages)  HP 991X CBlack Contract PageWide Cartridge (~16,000 pages)  HP 991X Magenta Contract PageWide Cartridge (~16,000 pages)  HP 991X Magenta Contract PageWide Cartridge (~16,000 pages)  HP 991X Magenta Contract PageWide Cartridge (~16,000 pages)  HP 992X CBlack Contract PageWide Cartridge (~16,000 pages)  HP 993X CBlack Contract PageWide Cartridge (~16,000 pages)  HP 993X Magenta Contract PageWide Cartridge (~16,000 pages)  HP 993X Magenta Contract PageWide Cartridge (~

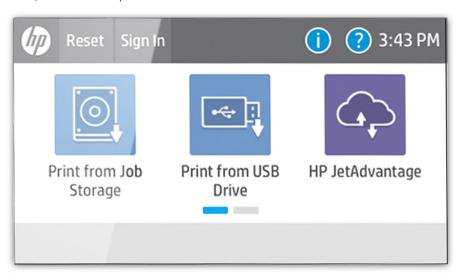
# Appendix A: Control panel features

# To access additional apps on the new printer user interface, simply swipe right to left

# The new MFP user interface enables swipe, rotate, and drag-and-drop capabilities

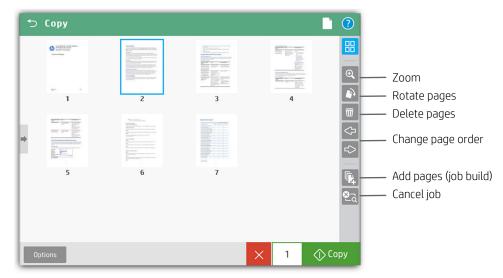
### Upgrade to a modern interface

The HP PageWide Managed E-series is powered by HP FutureSmart 4.0 firmware. Its modern, tablet-like 8.0-inch (20.3 cm) keeps things simple and intuitive across your fleet of Enterprise devices. A scalable control panel interface improves future extensibility and allows for customization, along with a robust set of new apps and usability features. You can even customize with your own wallpaper image and company logo. The new Message Center, with more detailed information and helpful animations, makes it easy to address device events. The simplified home screen displays just a few core apps by default. Additional apps are easily accessed by swiping right to left, like with a smartphone or tablet.



#### Edit jobs right at the MFP

The MFP control panel features an enhanced image preview—now for both copies and scans. Right from the MFP's 8.0-inch (20.3 cm) color touchscreen control panel, you can easily preview and edit scans before sending them. You can apply changes (like rotating) to a single page, or to multiple pages at once. Batch separation allows users to create separate PDF or PDF/A files from scanned pages. Flow models can also create PDF OCR and PDF/A OCR files.



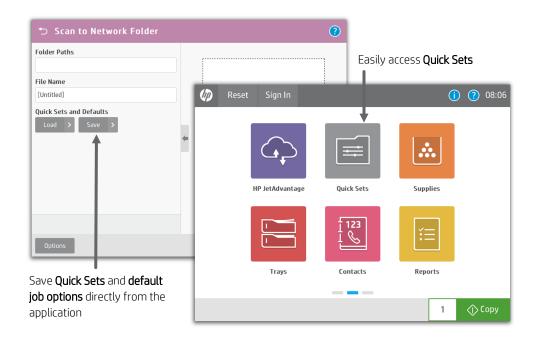
You can start a **preview** prior to committing to the copy job

#### Use Quick Sets to launch automated workflows

The digital sending capability on the E77650/E77660 MFP series models allows users to route documents to a variety of destinations like email recipients, network folders, fax, FTP, a USB device, or Microsoft SharePoint.

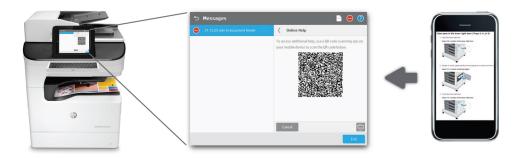
Quick Sets automate all of the steps of a complicated workflow and provide easy access to the configurations you use most, such as page size, resolution, and file format. You can also specify security settings, such as encrypted PDFs to be delivered through encrypted and signed emails.

Help users find what they need by moving individual Quick Sets to any screen or folder using the home screen customization feature. With Quick Sets, IT can promote or block access to certain device features. Calls to the helpdesk can be reduced when users have everything they need and are restricted from accessing settings they shouldn't tamper with.



#### Troubleshoot with ease

The HP PageWide Managed E-series can help save your IT department valuable time when it comes to troubleshooting problems. The Remote Control Panel allows users to operate the user interface remotely, so IT can troubleshoot problems without running to the MFP. Users can also quickly troubleshoot technical issues with HP's innovative, cloud-based Online Help services that are relevant and up to date. Easily solve problems from your PC or mobile device. A Quick Response (QR) code on the touchscreen links to Online Help using smartphones and tablets. You can also find these links in the HP Embedded Web Server event log.



- <sup>1</sup> Based on HP review of 2018 published security features of competitive in-class printers. Only HP offers a combination of security features that can monitor to detect and automatically stop an attack then self-validate software integrity in a reboot. For a list of printers, visit: <a href="https://doi.org/10/19/19/19/19/19/9/">https://doi.org/10/19/19/9/</a>. For more information, visit: <a href="https://doi.org/10/19/19/9/">https://doi.org/10/19/9/</a>. For more information, visit: <a href="https://doi.org/10/19/19/9/">https://doi.org/10/19/9/</a>. For more information, visit: <a href="https://doi.org/10/19/9/">https://doi.org/10/19/9/</a>. For more information, visit: <a href="https://doi.org/10/19/9/">https://doi.o
- <sup>2</sup> Energy claim based on TEC data reported on <u>energystar.gov</u> as of February 2018. Data normalized to determine energy efficiency of in-class A3 color laser printers and MFPs with published speeds of 20 to 80 ppm, excluding other HP PageWide products. Subject to device settings. Actual results may vary.
- <sup>3</sup> High-yield cartridges are not included in printer purchase; purchase separately. Learn more at hp.com/go/learnaboutsupplies.
- <sup>4</sup> Available only as part of an HP Managed Print Services (MPS) contract. Feature applies to pages with the equivalent of an approximately ½ x ½-inch or 12.7 mm x 12.7 mm square of color coverage. For details, contact your HP MPS account manager.
- <sup>5</sup> Comparison based on printing in Professional Mode.
- <sup>6</sup> Fewer service parts claim based on HP analysis of leading in-class A3 color laser printers and MFPs as of February 2018; calculations use publicly available and/or published manufacturer rated yields for long-life consumables and assume 600,000 pages printed (using a 60% black/40% color ratio). Learn more at hp.com/qo/pagewideclaims.
- <sup>7</sup> Program availability varies. For more information, visit <u>hp.com/recycle</u>.
- <sup>8</sup> Comparison of HP PageWide A3 devices with the majority of in-class color ink/laser MFPs (\$3,000-\$10,299 and €2,820-€10,199), and color ink/laser single function printers (\$1,500-\$4,299 and €1,410-€4,099) as of April 2018, excluding other HP PageWide products; competitive set based on market share data as reported by IDC as of Q4 2017, MSRP data provided by gap intelligence and/or Buyers Lab. HP PageWide speeds based on General Office mode and exclude first page. Learn more at hp.com/qo/printerspeeds.
- <sup>9</sup> The HP PageWide Managed Color MFP E77660 series prints up to 60/80 ppm, letter and A4, simplex (Professional mode/General Office mode). The HP PageWide Managed Color MFP E77650 series prints up to 50/70 ppm, letter and A4, simplex (Professional mode/General Office mode). ISO speeds measured using ISO/IEC 24734. Excludes first page or first set of ISO test pages. For details see <a href="hp.com/qo/printerclaims">hp.com/qo/printerclaims</a>.
- <sup>10</sup> Fax capability is optional on the HP PageWide Managed Color MFP E77650 and E77660 series models.
- <sup>11</sup> Scan speeds measured from ADF. Actual processing speeds may vary depending on scan resolution, network conditions, computer performance, and application software.
- <sup>13</sup> An administrator must enable the easy-access USB port before use.
- <sup>14</sup> The E77650z+ and E77660z+ models are required to add one of the following accessories: 550 sheet Paper Tray and Cabinet, 3x550-sheet Paper Tray and Stand, 4,000-sheet HCI Paper Tray and Stand.
- <sup>15</sup> The 350-sheet inner finisher is available on the HP PageWide Managed Color MFP E77650dns, Flow MPF E77650zs, and Flow MPF E77660zs models only. Those models have a maximum output capacity of 850 sheets. The 3,250-sheet external finisher is a required accessory for the z+ models. The z+ models have a maximum output capacity of 3,250 sheets. Models without the inner or external finisher have a maximum output capacity of 500 sheets.
- <sup>16</sup> Purchase of optional paper tray required to reach maximum input capacity.
- <sup>17</sup> Some features require additional purchase. A FutureSmart service pack update may be required to activate security features. Learn more at <a href="https://doi.org/printsecurity.18">https://doi.org/printsecurity.18</a> Solutions deployed through the Hardware Integration Pocket (HIP) may require additional purchase.
- <sup>19</sup> Use of the standard HP Trusted Platform Module accessory may require a firmware upgrade.
- <sup>20</sup> HP Web Jetadmin is available for download at no additional charge at hp.com/qo/wja.
- <sup>21</sup> HP JetAdvantage Security Manager must be purchased separately. For details, see <u>hp.com/qo/securitymanager</u>.
- <sup>22</sup> HP JetAdvantage Secure Print works with any network-connected printer or MFP. On-device authentication is available for many HP LaserJet, PageWide, and OfficeJet Pro devices and selected non-HP devices. Some devices may require a firmware upgrade. Internet connection required for cloud storage and retrieval of print jobs. Print-job release from a mobile device requires a network connection and QR code. For more information and a list of supported printers and MFPs, see hp.com/go/JetAdvantageSecurePrint.
- <sup>23</sup> Color access control capabilities vary from device to device.
- <sup>24</sup> The HP Universal Print Driver is available for download at no additional charge at <u>hp.com/qo/upd</u>.
- 25 The 200-sheet ADF can scan documents up to 11.7 x 17 in (297 x 432 mm), as well as up to 11.7 x 39 in (297 x 1000 mm) when "long scan size" is selected.
- <sup>26</sup> The HP PageWide Managed Color MFP E77650dn/dns and E77660dn/dns models have a recommended monthly scan volume (RMSV) of 2,000 to 50,000 pages. The HP PageWide Managed Color Flow MFP E77650z/zs/z+ and E77660z/zs/z+ models have an RMSV of 2,000 to 75,000 pages. HP recommends that the number of scanned pages per month be within the stated range for optimum device performance, based on factors including supplies replacement intervals and device life over an extended warranty period.
- <sup>27</sup> The pull-out keyboard, HP EveryPage, ultrasonic detection, and embedded OCR are available with HP PageWide Managed Color Flow MFP E77650z/zs/z+ and E77660z/zs/z+ models only.
- <sup>28</sup> The HP PageWide Managed Color Flow MFP E77650z+ is only available in NA.
- <sup>29</sup> Measured using ISO/IEC 17629. Exact speed for first page out varies depending on the system configuration, software application, driver, and document complexity. Learn more at <a href="hp.com/go/printerclaims">hp.com/go/printerclaims</a>.
- <sup>30</sup> Measured after 15 minutes in sleep. Exact speed varies depending on the system configuration, software application, driver, document complexity, and time in sleep.
- <sup>31</sup> Scan software not included in box. HP Scan and TWAIN driver available for download: <u>hp.com/support</u>.
- <sup>32</sup> An administrator must enable the Scan to SharePoint® feature before use.
- <sup>34</sup> Based on standard ITU-T test image #1 at standard resolution and MMR encoding, the HP fax device can transmit at 3 sec/page for V.34 and 6 sec/page for V.17.
- <sup>35</sup> Future firmware updates may support 4608 MB by adding DIMM memory module.
- <sup>36</sup> Future firmware updates may support 6656 MB by adding DIMM memory module.
- <sup>37</sup> Recommended Monthly Page Volume: HP recommends that the number of printed pages per month be within the stated range for optimum device performance, based on factors including supplies replacement intervals and device life over an extended warranty period.

- <sup>38</sup> Duty cycle is defined as the maximum number of pages per month of imaged output. HP recommends that the number of printed pages per month be within the stated range for optimum device performance, based on factors including supplies replacement intervals and device life over an extended warranty period.
- <sup>39</sup> Printer requires ePrint account registration. App or software may be required. Wireless operations are compatible with 2.4 GHz operations only. Learn more at hp.com/go/mobileprinting.
- <sup>40</sup> Supports the following devices running iOS 4.2 or later: iPad®, iPad 2, iPhone® (3GS or later), iPod touch® (3rd generation or later). Works with HP's AirPrint®-enabled printers and requires the printer be connected to the same network as your iOS device. Wireless performance is dependent on physical environment and distance from the access point.
- <sup>41</sup> The HP PageWide Managed E-series models can add wireless networking with the purchase of the optional HP Jetdirect 2900nw Print Server. Wireless performance is dependent on physical environment and distance from access point and may be limited during active VPN connections.
- <sup>42</sup> Touch-to-print capability is optional for all models with the purchase of the optional HP Jetdirect 3000w NFC/Wireless Direct Accessory. Mobile device must support Near Field Communication (NFC)-enabled printing. For more information, see <a href="https://doi.org/10.1002/jpc.1
- <sup>43</sup> Full solution software available only for Windows® 7 and newer, UPD software available only for Windows 7 and newer, HP Software for Mac and Windows is no longer included on the CD, but can be downloaded from 123.hp.com, Legacy Windows Operating Systems (XP, Vista, and equivalent servers) get print and scan drivers only with a reduced feature set, Windows RT OS for Tablets (32- and 64-bit) uses a simplified HP print driver built into the RT OS.
- 44 Maximum dimensions of the device are measured with all paper trays folded out, document feeder lifted, and standard or required accessories installed.
- <sup>45</sup> Toner cartridge yields established using ISO/IEC test standards. Actual yields and costs vary considerably depending on images printed, number of color pages printed, and other factors.
- <sup>46</sup> If stored below the lowest specified operating temperature, unit must slowly warm up to an approved operating temperature (HP recommends waiting 24 hours at approved operating temperature prior to using the printer).
- <sup>47</sup> Printing at 51 ppm.
- <sup>48</sup> Scanning at 114 ppm with ADF running.
- <sup>49</sup> Printing at 54 ppm.
- <sup>50</sup> Scanning at 129 ppm with ADF running.
- <sup>51</sup> Power requirements are based on the country/region where the printer is sold. Do not convert operating voltages. This will damage the printer and void the product warranty. Power consumption values typically based on measurement of 115V device.
- <sup>52</sup> HP Auto-On/Auto-Off Technology capabilities are subject to printer and settings.
- <sup>53</sup> EPEAT® registered where applicable. EPEAT registration varies by country. See <u>epeat.net</u> for registration status by country.
- 54 Printing at 61 ppm.
- <sup>55</sup> Availability dependent on firmware or software updates or upgrades.
- <sup>56</sup> Online help must be enabled on the printer or MFP. Mobile device must have an Internet connection to access online services.

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