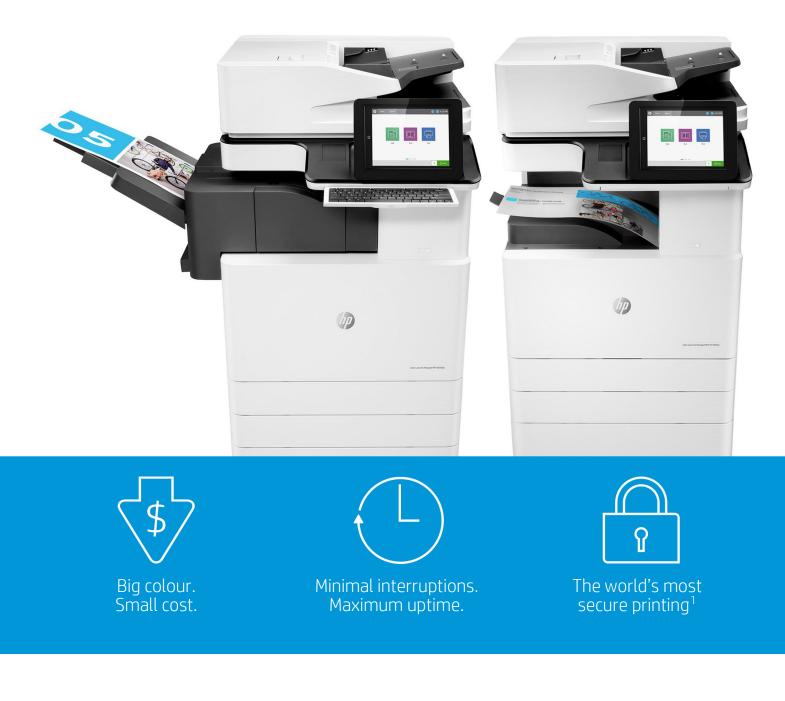


# The next generation of quality, productivity, and security

# HP Color LaserJet Managed MFP E77800 series HP Color LaserJet Managed MFP E87600 series



# Big colour. Small cost.



Quality colour printing for a great value is a smart choice for any business. Produce premium, professional-quality colour documents at a competitive low cost with an HP Color LaserJet Managed MFP built to make your work—and your business—look its best.



# Premium colour at a low cost

Print premium, professional-quality documents with vivid colour images and graphics that stand out, for a competitive low cost.

Create consistent, professional quality documents and get the performance you count on. Original HP toner cartridges and drums are specially designed and precisely engineered for HP printers and MFPs—so you can rely on fast, consistent results.



# Fast, professional performance

Equip employees to speed through tasks with an MFP that delivers the professional performance you expect from an enterprise machine.

Choose from a range of modular paperhandling, solution, and connectivity accessories designed to adapt to the needs of workgroups of all sizes.

Avoid interruptions with an HP Color LaserJet Managed MFP designed to be streamlined with minimal parts for simple service and maximum productivity.<sup>2</sup>



### Energy efficient

Help keep energy costs down without compromising performance. This device features fusers that warm rapidly and cool quickly, so they start printing sooner, complete jobs faster, and help you conserve more energy.<sup>3</sup>

Save paper and conserve resources with automatic two-sided printing, scanning, and copying. Consume up to 50% less paper by printing on both sides of the page.

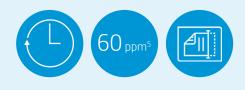
Easily recycle your Original HP cartridges at no charge through HP Planet Partners.<sup>4</sup>

# 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 Color LaserJet Managed MFP designed for maximum uptime—so you can count on reliable results day in and day out.

### Move business forward

Grab the documents you need and go. This device wakes up quickly and prints fast—up to 60 pages per minute (ppm) (E87660dn/z models).<sup>5</sup> Your pages are ready right when you need them.



Accelerate workflow with single-pass, two-sided scanning up to 120 images per minute (ipm), simplex, and up to 240 ipm, duplex (Flow models).<sup>6</sup>

Scan documents directly to Microsoft<sup>®</sup> Office 365 (Flow models only) and SharePoint<sup>®</sup>, plus email, USB, and network folders.<sup>7</sup>

# Minimise downtime

HP Smart Device Services (SDS) remote diagnostic insights and remediation capabilities help minimise downtime. HP devices are smart and communicate their health before the device stops. SDS helps optimise HP devices for your usage environment with machine-to-machine learning, predictive analytics, and advanced device controls that can be made remotely.





HP MPS tool integration Partner/reseller tool integration SDS keeps your data and network secure—it only tracks device ID and telemetry data, and it does not collect customer names, user data, or job content.

SDS uses the same secure network protocols used by web banking applications, Microsoft Outlook, and Office 365.

# Expand your capacity

Tailor this MFP to the needs of your business with a wide range of optional paper-handling accessories. Optional trays support media sizes up to A3. For a list of compatible accessories by model, see the paper-handling accessories table on page 10.



Organise, staple, and collect documents with an optional booklet finisher that helps you save time and look professional.

Print up to 6,140 pages without reloading paper, using the optional 2,000-sheet high-capacity input tray and the optional 3,000-sheet high-capacity side input tray, with support for media sizes up to A4 (E87600 series).<sup>8</sup>

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



Only HP Enterprise devices 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 devices 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 stops malware from "calling home" to malicious servers, stealing data, and compromising your network, then automatically triggers a self-healing reboot.

Thwart potential attacks by receiving instant notification of security issues, so immediate action can be taken. This MFP works with leading Security Information and Event Management (SIEM) tools like Splunk and ArcSight.



# Take security to the next level

Help protect your MFP with more than 250 embedded security features.<sup>9</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.

Give workgroups what they need to succeed. Easily develop, deploy, and integrate HP and third-party solutions with the HP Open Extensibility Platform (OXP). Add features such as card readers and more through the Hardware Integration Pocket (HIP).<sup>10</sup>

Add another layer of protection and further safeguard information stored on the device, using the optional HP Trusted Platform Module.<sup>11</sup>



#### Build business efficiency

Centralise control of your printing environment with HP Web Jetadmin—and help build business efficiency.<sup>12</sup> Optional HP JetAdvantage Security Manager offers an effective, policy-based approach to help secure HP printing and imaging devices.<sup>13</sup> Easily set security configuration policies and automatically validate settings for every HP printer and MFP in your fleet.

Simplify business printing with the industry's first SaaS (Software as a Service) portal<sup>14</sup> for managing both apps and users.<sup>15</sup>

Regulate colour use and reduce printing costs. With HP Color Access Control, you can authorise permission to only specific users who need it.<sup>16</sup>

Save IT time and make printing easy for the entire enterprise by using a single driver for all HP devices.<sup>17</sup>

+ For more information about security, please see Appendix A, page 17; for details about fleet management, please see Appendix B, page 20.

# Give workgroups the speed they need



Accelerate workflow, improve accuracy, and easily connect people throughout your organisation. Complete high-volume scan jobs super-fast—up to 240 ipm for Flow models<sup>6</sup>—and avoid extra steps with a Flow MFP designed for maximum productivity.



### Easily scan and edit text

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

Preview and edit scans, adjust images, and launch print, scan, copy, and fax (optional) jobs—all at the 20.3 cm (8.0-inch) colour touchscreen. For more information, see Appendix C on page 21.



### Fast scanning and input

Enter data more quickly and accurately using the pull-out keyboard, one of the features available on all Flow models.<sup>18</sup>

Turn stacks of paper documents into digital files. Load up to 250 pages into the automatic document feeder (ADF) (E77800 series Flow models and all E87600 series models) for fast, unattended scanning.<sup>19</sup>

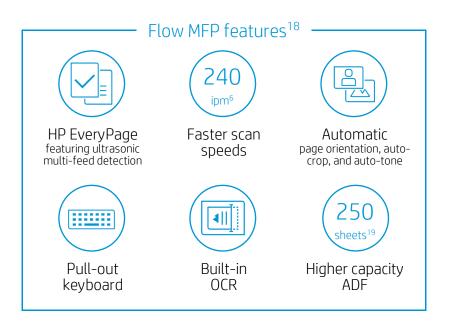
Walk up and print from or scan to a memory device using the easy-access USB port.<sup>20</sup>



#### 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>18</sup>

Help ensure every scanned document is properly oriented, cropped to size, and greyscale-optimised.



# Product walk-around



#### Series at a glance

Model	MFP E77822dn	Flow MFP E77822z	MFP E77825dn	Flow MFP E77825z	MFP E77830dn	Flow MFP E77830z
(product number)	(Z8Z00A)	(Z8Z01A)	(Z8Z02A)	(Z8Z03A)	(Z8Z04A)	(Z8Z05A)
Functions	Print, copy, and scar	(fax and wireless option	al) <i>(all models)</i>			
Print speed (A4 and letter, black and colour)⁵	Up to 22 ppm	Up to 22 ppm	Up to 25 ppm	Up to 25 ppm	Up to 30 ppm	Up to 30 ppm
ADF capacity; supports media sizes up to A3	100 sheets	250 sheets	100 sheets	250 sheets	100 sheets	250 sheets
Scan speeds (A4 and letter, black and colour) <sup>6</sup>	80 ppm/160 ipm, simplex/duplex	120 ppm/240 ipm, simplex/duplex	80 ppm/160 ipm, simplex/duplex	120 ppm/240 ipm, simplex/duplex	80 ppm/160 ipm, simplex/duplex	120 ppm/240 ipm, simplex/duplex
Input capacity	Standard: 1,140 she	ets; Maximum: 3,140 sh	eets (all models)			
Advanced workflow features	Send to Microsoft SharePoint	Same as E77822dn, plus: HP EveryPage technology, pull-out keyboard, auto-tone, auto-orientation, auto-page-crop,	Send to Microsoft SharePoint	Same as E77825dn, plus: HP EveryPage technology, pull-out keyboard, auto-tone, auto-orientation, auto-page-crop,	Send to Microsoft SharePoint	Same as E77830dn, plus: HP EveryPage technology, pull-out keyboard, auto-tone, auto-orientation, auto-page-crop,

embedded OCR

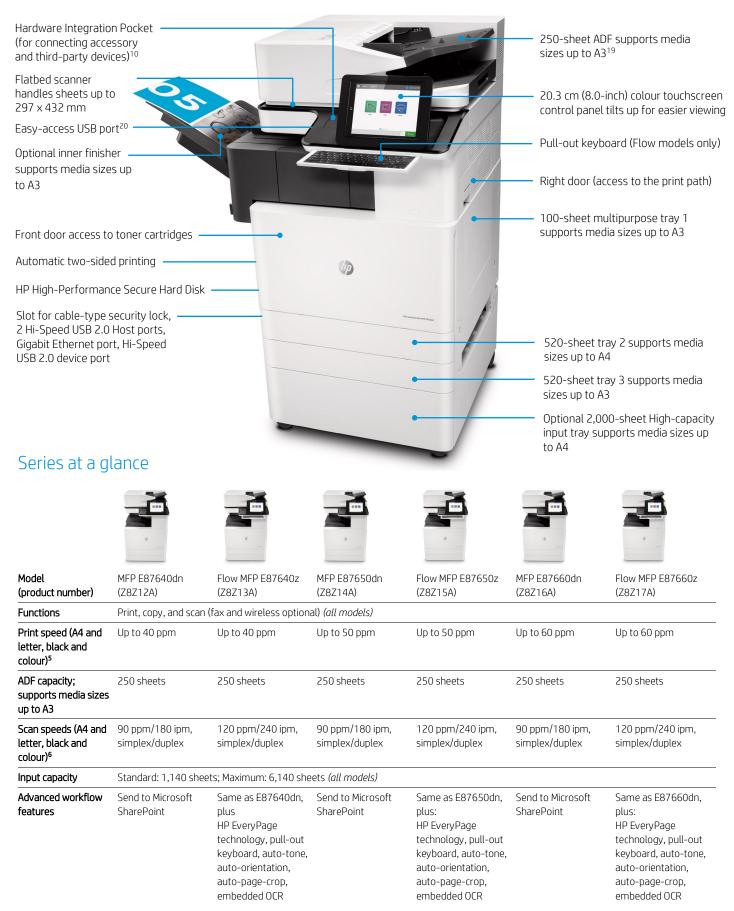
embedded OCR

embedded OCR

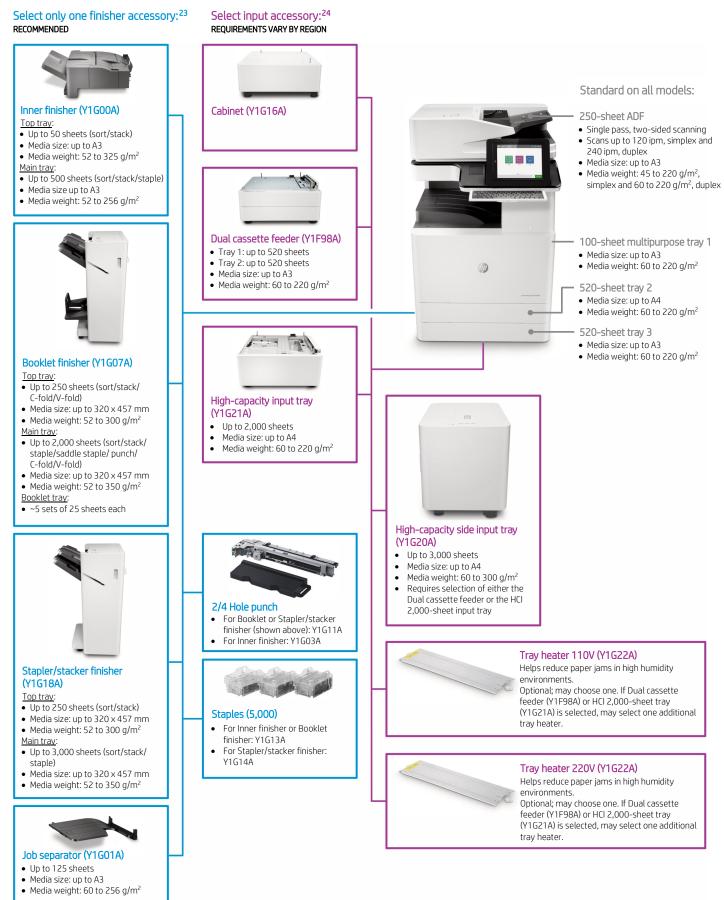
# HP Color LaserJet Managed MFP E77800 series - Configuration



# Product walk-around



# HP Color LaserJet Managed MFP E87600 series - Configuration



# Paper-handling accessories

All MFP E77800 and E87600 series models come standard with the following input trays: 100-sheet multipurpose tray that supports media sizes up to A3, 520-sheet tray 2 that supports media sizes up to A4, and 520-sheet tray 3 that supports media sizes up to A3. The MFP E77800 and E87600 series may be configured with optional input and finisher accessories described in the tables below.

Other optional accessories, such as hole punch accessories, are included in the Ordering information on page 15.

# HP Color LaserJet Managed MFP E77822/E77825/E77830

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Cabinet (Y1G17A) <sup>22</sup>	Dual cassette feeder (Y1F97A) <sup>22</sup>	High-capacity input tray (Y1F99A) <sup>22</sup>	Inner finisher (Y1G00A) <sup>21,25</sup>	Booklet finisher (Y1G07A) <sup>21,25</sup>	Stapler/stacker finisher (Y1G18A) <sup>21,25</sup>
Requirements vary b	y region; only one can b	e added at a time.	One finisher accessory is rec	ommended; only one can be ad	ded at a time.
Input capacity: N/A	Tray 1: up to 520 sheets Tray 2: up to 520 sheets	Up to 2,000 sheets	Top tray: up to 50 sheets Main (finishing) tray: up to 500 sheets	Top tray: up to 250 sheets Main (finishing) tray: up to 3,000 sheets Booklet tray: ~5 sets of 25 sheets each	Top tray: up to 250 sheets Main (finishing) tray: up to 3,000 sheets
			Requires selection of HP LaserJet Second Exit (Y1G23A)	Requires selection of HP LaserJet Second Exit (Y1G23A)	Requires selection of HP LaserJet Second Exit (Y1G23A)

# HP Color LaserJet Managed MFP E87640/E87650/E87660

Cabinet (Y1G16A) <sup>24</sup>	Dual cassette feeder (Y1F98A) <sup>24</sup>	High- capacity input tray (Y1G21A) <sup>24</sup>	High-capacity side input tray (Y1G20A) <sup>26</sup>	Inner finisher (Y1G00A) <sup>23</sup>	Booklet finisher (Y1G07A) <sup>23</sup>	Stapler/stacker finisher (Y1G18A) <sup>23</sup>
			led at a time. Jual cassette feeder or the	One finisher accesso	ry is recommended; only one c	an be added at a time.
Input capacity: N/A	Tray 1: up to 520 sheets Tray 2: up to 520 sheets	Up to 2,000 sheets	Up to 3,000 sheets	Top tray: up to 50 sheets Main (finishing) tray: up to 500 sheets	Top tray: up to 250 sheets Main (finishing) tray: up to 3,000 sheets Booklet tray: ~5 sets of 25 sheets each	Top tray: up to 250 sheets Main (finishing) tray: up to 3,000 sheets

# Technical specifications

	HP Color LaserJet Managed MFP E77800 series – dn models	HP Color LaserJet Managed MFP E77800 series – Flow z models	HP Color LaserJet Managed MFP E87600 series – dn models	HP Color LaserJet Managed MFP E87600 series – Flow z models			
Product number	E77822dn: Z8Z00A	E77822z: Z8Z01A	E87640dn: Z8Z12A	E87640z: Z8Z13A			
	E77825dn: Z8Z02A	E77825z: Z8Z03A	E87650dn: Z8Z14A	E87650z: Z8Z15A			
	E77830dn: Z8Z04A	E77830z: Z8Z05A	E87660dn: Z8Z16A	E87660z: Z8Z17A			
Control panel/data entry	20.3 cm (8.0-inch) pivoting col	our touchscreen; easy-access US	B; <sup>20</sup> Hardware Integration Pocke	t <sup>10</sup>			
		Plus: pull-out keyboard		Plus: pull-out keyboard			
Print speed (A4 and letter, black and colour)⁵	E77822dn/z: Up to 22 ppm		E87640dn/z: Up to 40 ppm				
DIACK AND COLOUR)	E77825dn/z: Up to 25 ppm E77830dn/z: Up to 30 ppm		E87650dn/z: Up to 50 ppm				
Print resolution			E87660dn/z: Up to 60 ppm				
	Up to 1200 x 1200 dpi reduced		Up to 600 x 600 dpi				
Scanning resolution	Up to 600 x 600 dpi <i>(all model</i>	5/					
ADF scan speed (A4 and letter, black and colour) <sup>6</sup>							
Single-sided	Up to 80 ppm	Up to 120 ppm	Up to 90 ppm	Up to 120 ppm			
Two-sided	Up to 160 ipm	Up to 240 ipm	Up to 180 ipm	Up to 240 ipm			
Features	· · ·						
Printing	HP Laser technology, print pre	view, automatic two-sided printir	ng, portrait/landscape orientatior	n, control panel shortcuts, stor			
	print jobs Better remote diagnosis and repair; higher first-time fix rates; full toner, LLC utilisation; capture un-billed pages from						
		personal printers; onsite access t					
Scanning	<ul> <li>Flatbed scanner: 297 x 432 mm (11.7 x 17 in); ADF with single-pass, two-sided scanning up to 297 x 432 mm (11.7 x 17 in);</li> <li>Scan input modes: Front panel applications: Copy, E-mail, Fax, Save to Network Folder, Save to USB, Save to Device Memory;</li> <li>Open Extensibility Platform (OXP) applications</li> <li>Advanced features: Optimise text/picture, image adjustments, job build, output quality setting, selectable scan resolution up to 600 dpi, auto detect colour, edge erase, job notification, blank page suppression; Quick Sets; Scan file format: JPEG, PDF, TIFF, XPS</li> </ul>						
		Plus: HP EveryPage with ultrasonic multi-feed detection, embedded optical character recognition (OCR), auto-orientation, auto-crop- to-page, auto-tone		character recognition (OCR)			
Digital sending	to Internet fax, Local Address E	ultrasonic multi-feed detection, embedded optical character recognition (OCR), auto-orientation, auto-crop-	removal, edge erase, auto colou	ultrasonic multi-feed detection, embedded optica character recognition (OCR) auto-orientation, auto-crop to-page, auto-tone to sFTP, send to LAN fax, send ir sense, auto-crop to content,			
Digital sending File formats	to Internet fax, Local Address E	ultrasonic multi-feed detection, embedded optical character recognition (OCR), auto-orientation, auto-crop- to-page, auto-tone cfolder, save to USB drive, send to Book, SMTP over SSL, blank page, auto-orientation, multi-pick deter Digital send: PDF, Hi- compression PDF, JPEG, TIFF, MTIFF, XPS, PDF/A, TEXT (OCR), Unicode TEXT (OCR), RTF (OCR), Searchable PDF (OCR), HTML (OCR), CSV (OCR) Scan to easy-access USB: PDF, JPEG, TIFF, MTIFF, XPS, PDF/A, TEXT (OCR), Unicode TEXT (OCR), RTF (OCR), Searchable PDF (OCR), HTML (OCR), CSV (OCR) Print from easy-access USB:	removal, edge erase, auto colou	ultrasonic multi-feed detection, embedded optica character recognition (OCR) auto-orientation, auto-crop to-page, auto-tone to sFTP, send to LAN fax, send ir sense, auto-crop to content, o-page Digital send: PDF, Hi- compression PDF, JPEG, TIFF, MTIFF, XPS, PDF/A, TEXT (OCR), Unicode TEXT (OCR), RTF (OCR), Searchab PDF (OCR), HTML (OCR), CSN (OCR) Scan to easy-access USB: PDF, JPEG, TIFF, MTIFF, XPS PDF/A, TEXT (OCR), Unicode TEXT (OCR), RTF (OCR), Searchable PDF (OCR), HTM (OCR), CSV (OCR) Print from easy-access USE			
File formats	to Internet fax, Local Address E compact PDF, auto-tone scale, Digital send: PDF, Hi- compression 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)	ultrasonic multi-feed detection, embedded optical character recognition (OCR), auto-orientation, auto-crop- to-page, auto-tone colder, save to USB drive, send to Book, SMTP over SSL, blank page auto-orientation, multi-pick dete Digital send: PDF, Hi- compression PDF, JPEG, TIFF, MTIFF, XPS, PDF/A, TEXT (OCR), Unicode TEXT (OCR), RTF (OCR), Searchable PDF (OCR), HTML (OCR), CSV (OCR) Scan to easy-access USB: PDF, JPEG, TIFF, MTIFF, XPS, PDF/A, TEXT (OCR), Unicode TEXT (OCR), RTF (OCR), Searchable PDF (OCR), HTML (OCR), CSV (OCR) Print from easy-access USB: PDF, PS, Print Ready files (.prn, .pcl, .cht)	removal, edge erase, auto colou ect, auto-straighten, auto-crop-t Digital send: PDF, Hi- compression 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)	ultrasonic multi-feed detection, embedded optic character recognition (OCR) auto-orientation, auto-crop to-page, auto-tone to sFTP, send to LAN fax, send ir sense, auto-crop to content to-page Digital send: PDF, Hi- compression PDF, JPEG, TIFF, MTIFF, XPS, PDF/A, TEXT (OCR), Unicode TEXT (OCR), RTF (OCR), Searchab PDF (OCR), HTML (OCR), CS <sup>1</sup> (OCR) Scan to easy-access USB: PDF, JPEG, TIFF, MTIFF, XPS PDF/A, TEXT (OCR), Unicode TEXT (OCR), RTF (OCR), Searchable PDF (OCR), HTM (OCR), CSV (OCR) Print from easy-access USE PDF, PS, Print Ready files (.prn, .pcl, .cht)			
5 5	to Internet fax, Local Address E compact PDF, auto-tone scale, Digital send: PDF, Hi- compression 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) Two-sided copying, reduce/en background cleanup, sharpnes content orientation, collation, I	ultrasonic multi-feed detection, embedded optical character recognition (OCR), auto-orientation, auto-crop- to-page, auto-tone cook, SMTP over SSL, blank page, auto-orientation, multi-pick dete Digital send: PDF, Hi- compression PDF, JPEG, TIFF, MTIFF, XPS, PDF/A, TEXT (OCR), Unicode TEXT (OCR), RTF (OCR), Searchable PDF (OCR), HTML (OCR), CSV (OCR) Scan to easy-access USB: PDF, JPEG, TIFF, MTIFF, XPS, PDF/A, TEXT (OCR), Unicode TEXT (OCR), RTF (OCR), Searchable PDF (OCR), HTML (OCR), CSV (OCR) Print from easy-access USB: PDF, PS, Print Ready files	removal, edge erase, auto colou ect, auto-straighten, auto-crop-t Digital send: PDF, Hi- compression 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)	ultrasonic multi-feed detection, embedded optic character recognition (OCR auto-orientation, auto-crop to-page, auto-tone to sFTP, send to LAN fax, send r sense, auto-crop to content o-page Digital send: PDF, Hi- compression PDF, JPEG, TIFF, MTIFF, XPS, PDF/A, TEXT (OCR), Unicode TEXT (OCR), RTF (OCR), Searchab PDF (OCR), HTML (OCR), CS' (OCR) Scan to easy-access USB: PDF, JPEG, TIFF, MTIFF, XPS PDF/A, TEXT (OCR), NTF (OCR), Searchable PDF (OCR), HTM (OCR), CSV (OCR) Print from easy-access USE PDF, PS, Print Ready files (.prn, .pcl, .cht) tents (darkness, contrast, th), N-Up, N or Z-ordering, mode scans, erase edges,			
File formats	to Internet fax, Local Address E compact PDF, auto-tone scale, Digital send: PDF, Hi- compression 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) Two-sided copying, reduce/en background cleanup, sharpness content orientation, collation, t automatically detect colour/m Fax speed: <sup>27</sup> 33.6 kbps /3 secc each with 210 destinations, au	ultrasonic multi-feed detection, embedded optical character recognition (OCR), auto-orientation, auto-crop- to-page, auto-tone cook, SMTP over SSL, blank page, auto-orientation, multi-pick dete Digital send: PDF, Hi- compression PDF, JPEG, TIFF, MTIFF, XPS, PDF/A, TEXT (OCR), Unicode TEXT (OCR), RTF (OCR), Searchable PDF (OCR), HTML (OCR), CSV (OCR) Scan to easy-access USB: PDF, JPEG, TIFF, MTIFF, XPS, PDF/A, TEXT (OCR), Unicode TEXT (OCR), RTF (OCR), Searchable PDF (OCR), HTML (OCR), CSV (OCR) Print from easy-access USB: PDF, PS, Print Ready files (.prn, .pcl, .cht) large from scanner glass (25 to 4 is), optimised text/picture (text, n	removal, edge erase, auto colou ect, auto-straighten, auto-crop-t Digital send: PDF, Hi- compression 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) 100%), scalability, image adjustm nixed, printed picture, photograp orage, watermark, stamps, book to tion: Up to 600 x 600 dpi; Up to S warding, receive fax polling, spee stored faxes, fax archiving	ultrasonic multi-feed detection, embedded optic character recognition (OCR) auto-orientation, auto-crop to-page, auto-tone to sFTP, send to LAN fax, send r sense, auto-crop to content to-page Digital send: PDF, Hi- compression PDF, JPEG, TIFF, MTIFF, XPS, PDF/A, TEXT (OCR), Unicode TEXT (OCR), RTF (OCR), Searchab PDF (OCR), HTML (OCR), CST (OCR) Scan to easy-access USB: PDF, JPEG, TIFF, MTIFF, XPS PDF/A, TEXT (OCR), RTF (OCR), Searchable PDF (OCR), HTM (OCR), CSV (OCR) Print from easy-access USE PDF, PS, Print Ready files (.prn, .pcl, .cht) nents (darkness, contrast, o,999 copies			

	HP Color LaserJet Managed MFP E77800 series – dn models	HP Color LaserJet Managed MFP E77800 series – Flow z models	HP Color LaserJet Managed MFP E87600 series – dn models	HP Color LaserJet Managed MFP E87600 series – Flow z models	
Memory (standard and maximum)	6 GB	7 GB	7 GB (all E87600 series models)		
Storage	16 GB encrypted eMMC (for stored jobs and solutions) and one 320 GB Standard embedded HP High- Performance Secure Hard Disk (for copy/scan functions); AES 256 hardware encryption or greater); Secure erase capabilities (Secure File Erase-Temporary Job Files, Secure Erase-Job Data, Secure Erase-Job Data, Secure ATA Erase-Disk) <sup>28</sup> <b>Note:</b> After key system and software resources are uploaded to the device, there is ~5 GB remaining for print job storage purposes. By upgrading to the optional 500 GB HDD, you will have ~489 GB remaining for print job storage purposes after resources are loaded.	Two 320 GB Standard, embedded High-Performance Secure Hard Disk (total 640 GB); AES 256 hardware encryption or greater); Secure erase capabilities (Secure File Erase-Temporary Job Files, Secure Erase-Job Data, Secure ATA Erase-Disk)			
	<b>Optional:</b> HP High- Performance Secure Hard Disk, 500 GB (B5L29A) can be used in place of the 16 GB eMMC <sup>29</sup>	<b>Optional:</b> HP High-Performanc one 320 GB HDD <sup>29</sup>	e Secure Hard Disk, 500 GB (B5L	29A) can be used in place of	
Durability ratings					
RMPV <sup>30</sup>	As high as 50,000 pages <i>(all m</i>	odels)			
Duty cycle <sup>31</sup>	Up to 300,000 pages (all mode	els)			
Media specifications					
Input capacity	Up to 1,140 sheets, standard; Tray 1: up to 100 sheets Tray 2: up to 520 sheets Tray 3: up to 520 sheets	up to 3,140 sheets, maximum <sup>8</sup>	Up to 1,140 sheets, standard; Tray 1: up to 100 sheets Tray 2: up to 520 sheets Tray 3: up to 520 sheets	up to 6,140 sheets, maximum <sup>t</sup>	
Output capacity	500-sheet face-down output t	in (all models)			
Two-sided printing	Automatic (all models)				
Media sizes	<ul> <li>Tray 1: A3, A4, A4R, A5, A5R, A6, SRa3, SRA3, Ra4, B4 (JIS), B5 (JIS), B6 (JIS), Oficio, 8K, 16K, Postcard, Dpostcard ( envelopes (B5, C5, C6, DL); letter, letter R, legal, executive, statement, Oficio, 11 x 17 in, 12 x 18 in, 4 x 6 in, 5 x 7 i 10 x 15 in, 8K, 16K, envelopes (No. 9, No. 10, Monarch); Custom media sizes: 98 x 139.7 to 320 to 457 mm; 3.9 x 18.3 in</li> <li>Tray 2: A4, A4R, A5, A5R, A6, Ra4, B4 (JIS), B5 (JIS), B6(JIS), Oficio, 8K, 16K, envelopes (B5, C5, C6, DL); letter, letter executive, statement, Oficio, 1 x 17 in, 12 x 18 in, 4 x 6 in, 5 x 7 in, 5 x 8 in, 10 x 15 in, 16K, envelopes (B5, C5, C6, DL); letter, letter executive, statement, Oficio, 4 x 6 in, 5 x 7 in, 5 x 8 in, 10 x 15 in, 16K, envelopes (No. 9, No. 10, Monarch); Custom 98 x 139.7 to 297 to 390 mm; 3.9 x 5.6 in to 11.9 x 15.6 in</li> <li>Tray 3: A3, A4, A4R, A5, A5R, A6, SRa3, SRA3, Ra4, B4 (JIS), B5 (JIS), B6 (JIS), Oficio, 8K, 16k, Postcard, Dpostcard (Jost A), and the statement of the</li></ul>				
	139.7 to 320 to 457.2 mm; 3.9 Duplex: A3, A4, A4R, A5, A5R, A legal, executive, statement, Of	46, SRa3, SRA3, Ra4, B4 (JIS), B5 icio, 11 x 17 in, 12 x 18 in, 8k, 16	(JIS), B6 (JIS), Oficio, 8K, 16k, Dpc k	ostcard (JIS); letter, letter R,	
Media weights	ADF: A3, A4, A4R, A5, A6, B4, B5, 16K, Dpostcard (JIS); legal, Oficio, executive, statement, ledger Trays 1, 2, and 3: 60 to 70 g/m <sup>2</sup> (thin), 71 to 90 g/m <sup>2</sup> (plain), 91 to 105 g/m <sup>2</sup> (thick), 106 to 176 g/m <sup>2</sup> (heavy), 177 to 220 g/m <sup>2</sup> (extra heavy), 106 to 163 g/m <sup>2</sup> (thin glossy) (16 to 58 lb) ADF: Simplex: 42 to 220 g/m <sup>2</sup> (12 to 58 lb); Duplex: 60 to 220 g/m <sup>2</sup> (16 to 58 lb)				
Media types	105g, HP Matte 120g, HP Soft Heavy Glossy 111-130g, HP M 150g, HP Glossy 200g, Cardsto	e 90g, Light 60-74g, Intermediat Gloss 120g, HP Glossy 120g, Mid atte 150g, HP Glossy 150g, Extra ock 176-220g, Card Glossy 176-2 parency, Labels, Letterhead, Env	l-Weight 96-110g, Heavy 11-13( a Heavy 131-175g, Extra Heavy G 220g, Light Paperboard 221-255	Dg, Mid-Wt Glossy 96-110g, Glossy 131-175g, HP Matte g, Paperboard 256-300g,	
Print languages	HP PCL 6, HP Postscript level 3	emulation, PDF (v 1.7), Apple Air	Print <sup>32</sup> compatible		
Fonts and typefaces	84 scalable TrueType fonts (al	l models)			
Connectivity	Standard: 2 Hi-Speed USB 2.0 Pocket <sup>10</sup>	Host; Hi-Speed USB 2.0 device; G	igabit Ethernet 10/100/1000T n	etwork; Hardware Integration	
	Optional: Fax modem				

	HP Color LaserJet Managed MFP E77800 series – dn models	HP Color LaserJet Managed MFP E77800 series – Flow z models	HP Color LaserJet Managed MFP E87600 series – dn models	HP Color LaserJet Managed MFP E87600 series – Flow z models				
Mobile printing capability	Management security: SNMPv3, SSL/TLS, WPA2-Enterprise, 802.1X authentication (EAP-PEAP, EAP-TLS), IPP over TLS, IPsec/Firewall with Certificate, Pre-Shared Key Authentication, and Kerberos Authentication; Support for HP Web Jetadmin 10; <sup>12</sup> IPsec Configuration using IPsec Plug-in							
Network capabilities	Standard: Built-in Gigabit 10/1	00/1000T Ethernet						
	Optional: Wireless networking	Optional: Wireless networking <sup>33</sup> and NFC touch-to-print <sup>34</sup>						
Network protocols	IPv4/IPv6: Apple Bonjour Compatible (Mac OS 10.2.4 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; Other: NetWare NDS, Bindery, NDPS, HP ePrint; <sup>35</sup> Google Cloud Print™ 2.0							
Security management	SNMPv3, SSL/TLS, WPA2-Enterprise, 802.1X authentication (EAP-PEAP, EAP-TLS), IPP over TLS, IPsec/Firewall with Certificate, Pre-Shared Key Authentication, and Kerberos Authentication; Support for HP Web Jetadmin 10; <sup>12</sup> IPsec Configuration using IPsec Plug-in							
Printer management	Printer Administrator Resource Kit for HP Universal Print Driver (UPD) Active Directory Administrator Template, Add Print Model to Comments, AutoUpgradeUPD, Driver Configuration Utility, Driver Deployment Utility, HP Managed Printing Administration, PRNCON.EXE, HPPRLOG, Migrate-Server-Tools, UpdateNow, Remove Plug and Play Drivers); <sup>17</sup> HP Web Jetadmin <sup>12</sup> software; Resource Kit for HP Web Jetadmin (HP SNMP Proxy Agent, HP WS Pro Proxy Agent); HP JetAdvantage Security Manager <sup>13</sup>							
Compatible operating systems <sup>36</sup>	Windows 8/8.1 all 32- and 64-	32- and 64-bit editions (excludin bit editions (excluding RT OS for Vindows XP® SP3 32-bit editions	Tablets), Windows Vista® all 32-					
	Mac OS: 10.12 Sierra, OS X 10.10 Yosemite, OS X 10.11 El Capitan							
	Mobile OS: Android™							
	Linux OS (In-OS HPLIP): Linux Boss (3.0, 5.0) <u>http://hplipopensource.com/hplip-web/index.html</u> , Linux Debian (6.0.x, 7.x), Linux Fedora (17, 18, 19, 20), Linux Mint (13, 14, 15, 16, 17), Linux SUSE (12.2, 12.3, 13.1), Linux Ubuntu (10.04, 11.10, 12.04, 12.10 13.04, 13.10, 14.04, 14.10)							
	Other OS: UNIX®							
Compatible network operating systems	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 5.0 (for Windows Server 2012 and 2012 R2 Terminal Services, 64-bit), Citrix XenDesktop 5.6 (for Windows Server 2008 R2 Terminal Services, 32- and 64-bit), Citrix XenDesktop 5.6/7.0/7.5 (for Windows Server 2012 and 2012 R2 Terminal Services, 32- and 64-bit), Citrix XenDesktop 5.6/7.0/7.5 (for Windows Server 2012 and 2012 R2 Terminal Services, 32- and 64-bit), Citrix XenDesktop 5.6/7.0/7.5 (for Windows Server 2012 and 2012 R2 Terminal Services, 54-bit), Citrix XenDesktop 5.6 (for Windows Server 5.6/7.0/7.5 (for Windows Server 2012 and 2012 R2 Terminal Services, 52- and 64-bit), Citrix XenDesktop 5.6/7.0/7.5 (for Windows Server 2012 and 2012 R2 Terminal Services, 64-bit), 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 <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		n (see above); 200 MB available h nection or Wireless connection; C						
System requirements, Macintosh	A compatible operating systen apple.com)	n (see above); Internet; 1 GB avail	lable hard disk space; USB; OS ha	ardware requirements (see				
Dimensions (width x depth x height)	570 x 735 x 827 mm (22.4 x 28.9 x 32.6 in)	585 x 775.9 x 927.5 mm (23 x 30.5 x 36.5 in)	585 x 785 x 932.2 mm (23 x 30.3 x 36.7 in)					
Weight	89.55 kg (176.92 lb)		131.6 kg (290.2 lb)					
What's in the box		P; TCU; Drums; Assy-Colour WG I cumentation; Support flyers; DOE		ds; Assembly-CD WW;				
Warranty		varranty and support options vary t HP award-winning service and s		egal requirements. Go to				
Software included				HP Connected, HP Device Experience (DXP), HP PCL 6 Printer Driver, HP Software Installer/Uninstaller, Mac OS Welcome Screen (directs users to <u>123.HP.com</u> or OS App Source for printer software), Online user manuals				

# Environmental and power specifications

	HP Color LaserJet Managed MFP E77800 series – dn models	HP Color LaserJet Managed MFP E77800 series – Flow z models	HP Color LaserJet Managed MFP E87600 series – dn models	HP Color LaserJet Managed MFP E87600 series – Flow z models		
Environmental ranges						
Temperatures Relative Humidity	, ,	ge: 15 to 30° C (59 to 86° F); Ope ge: 20 to 80% RH; Operating rang	rating range: 15 to 30º C (59 to 8 ge: 20 to 80% RH	6º F)		
Acoustic pressure emissions <sup>37,38</sup>	E77822dn: Ready mode: inaudible Active print: 48 dB(A) <sup>39</sup> Active copy: 51 dB(A) Active scan: 47/54 dB(A) (45/88 ipm) E77825dn:	E77822z: Ready mode: inaudible Active print: 49 dB(A) <sup>39</sup> Active copy: 52 dB(A) Active scan: 49/60 dB(A) (48/124 ipm) E77825z:	E87640dn: Ready mode: inaudible Active print: 49 dB(A) <sup>42</sup> Active copy: 54 dB(A) Active scan: 60 dB(A) @ 124 ipm E87650dn:	E87640z: Ready mode: inaudible Active print: 49 dB(A) <sup>42</sup> Active copy: 54 dB(A) Active scan: 60 dB(A) @ 124 ipm E87650z:		
	Ready mode: inaudible Active print: 48 dB(A) <sup>40</sup> Active copy: 51 dB(A) Active scan: 47/54 dB(A) (45/88 ipm) E77830dn: Ready mode: inaudible Active print: 51 dB(A) <sup>41</sup> Active copy: 52 dB(A) Active scan: 47/54 dB(A) (45/88 ipm)	Ready mode: inaudible Active print: 49 dB(A) <sup>40</sup> Active copy: 52 dB(A) Active scan: 49/60 dB(A) (48/124 ipm) E778302: Ready mode: inaudible Active print: 51 dB(A) <sup>41</sup> Active copy: 53 dB(A) Active scan: 49/60 dB(A) (48/124 ipm)	Ready mode: inaudible Active print: 50 dB(A) <sup>43</sup> Active copy: 54 dB(A) Active scan: 60 dB(A) @ 124 ipm E87660dn: Ready mode: inaudible Active print: 49 dB(A) <sup>44</sup> Active copy: 54 dB(A) Active scan: 60 dB(A) @ 124 ipm	Ready mode: inaudible Active print: 50 dB(A) <sup>43</sup> Active copy: 54 dB(A) Active scan: 60 dB(A) @ 124 ipm E87660z: Ready mode: inaudible Active print: 49 dB(A) <sup>44</sup> Active copy: 54 dB(A) Active scan: 60 dB(A) @ 124 ipm		
Acoustic power emissions <sup>37,38,45</sup>	E77822dn: Ready mode: inaudible Active print: 6.3 B(A) <sup>39</sup> Active copy: 6.6 B(A) Active scan: 6.2/6.9 B(A) (45/88 ipm)	E77822z: Ready mode: inaudible Active print: 6.4 B(A) <sup>39</sup> Active copy: 6.7 B(A) Active scan: 6.4/7.5 B(A) (48/124 ipm)	E87640dn: Ready mode: inaudible Active print: 6.5 B(A) <sup>42</sup> Active copy: 6.9 B(A) Active scan: 7.5 B(A) @ 124 ipm	E87640z: Ready mode: inaudible Active print: 6.5 B(A) <sup>42</sup> Active copy: 6.9 B(A) Active scan: 7.5 B(A) @ 124 ipm		
	E77825dn: Ready mode: inaudible Active print: 6.4 B(A) <sup>40</sup> Active copy: 6.6 B(A) Active scan: 6.2/6.9 B(A) (45/88 ipm)	E77825z: Ready mode: inaudible Active print: 6.5 B(A) <sup>40</sup> Active copy: 6.7 B(A) Active scan: 6.4/7.5 B(A) (48/124 ipm)	E87650dn: Ready mode: inaudible Active print: 6.6 B(A) <sup>43</sup> Active copy: 7.0 B(A) Active scan: 7.5 B(A) @ 124 ipm	E87650z: Ready mode: inaudible Active print: 6.6 B(A) <sup>43</sup> Active copy: 7.0 B(A) Active scan: 7.5 B(A) @ 124 ipm		
	E77830dn: Ready mode: inaudible Active print: 6.6 B(A) <sup>41</sup> Active copy: 6.8 B(A) Active scan: 6.2/6.9 B(A) (45/88 ipm)	E77830z: Ready mode: inaudible Active print: 6.7 B(A) <sup>41</sup> Active copy: 6.8 B(A) Active scan: 6.4/7.5 B(A) (48/124 ipm)	E87660dn: Ready mode: inaudible Active print: 6.7 B(A) <sup>44</sup> Active copy: 7.0 B(A) Active scan: 7.5 B(A) @ 124 ipm	E87660z: Ready mode: inaudible Active print: 6.7 B(A) <sup>44</sup> Active copy: 7.0 B(A) Active scan: 7.5 B(A) @ 124 ipm		
Power specifications <sup>46</sup>						
Power supply	Built-in; Input voltage: 110 to	220 VAC (+/- 10%), 50/60 Hz (+/	– 3 Hz)			
Power consumption	E77822dn/z: Printing/copying Sleep: 12 watts; Auto-Off: 0.5		E87640dn/z: Printing/copying: 854 watts; Ready: 65 wat Sleep: 12 watts; Auto-Off: 0.5 watts; Manual Off: 0.1 wat			
	E77825dn/z: Printing/copying Sleep: 12 watts: Auto-Off: 0.5		E87650dn/z: Printing/copying	E87650dn/z: Printing/copying: 951 watts; Ready: 65 watts; Sleep: 12 watts; Auto-Off: 0.5 watts; Manual Off: 0.1 watts		
	E77830dn/z: Printing/copying Sleep: 11 watts; Auto-Off: 0.5	: 804 watts; Ready: 48 watts;	E87660dn/z: Printing/copying: 1121 watts; Ready: 65 watts Sleep: 12 watts; Auto-Off: 0.5 watts; Manual Off: 0.1 watts			
Typical Electricity Consumption (TEC)	E77822dn/z: 1.487 kWh/week (Blue Angel) 1.531 kWh/week (ENERGY STAR®)		E87640dn/z: 2.702 kWh/week (Blue Angel) 2.683 kWh/week (ENERGY STAR)			
	E77825dn/z: 1.735 kWh/week (Blue Angel) 1.765 kWh/week (ENERGY ST/	AR)	E87650dn/z: 3.283 kWh/week (Blue Angel) 3.318 kWh/week (ENERGY STAR)			
	E77830dn/z: 2.299 kWh/week (Blue Angel) 2.241 kWh/week (ENERGY ST/	AR)	E87660dn/z: 3.974 kWh/week (Blue Angel) 3.860 kWh/week (ENERGY STAR)			
Environmental specifications	Blue Angel compliant, ENERG	' STAR certified, CECP, EPEAT® Si	lver <sup>47</sup>			
Safety and regulatory compliance	EN 60825-1:2014 / IEC 60825 62471-1:2006; Low Voltage E UC CoC (US/Canada); CAN/CSA	5-1:2014 (Class 1 Laser Product) Directive 2014/35/EU with CE Mai C22.2 No. 60950-1-07 2nd Ed. 2 for deviations pursuant to Laser	50-1:2006 +A11:2009 +A1:2010 ; EN 62479:2010 / IEC 62479:20 rk (Europe); GS Certificate (Germa 2011-12; Compliance with Laser notice No. 50, Dated June 24, 200	0; EN 62471-1:2008 /IEC ny, Europe); UL/cUL Listed and safety standards 21 CFR		
Electromagnetic emission standard		N 55024: 2010, EMC Directive 20	ational) - Class A, EN 55032:2012 )14/30/EU, FCC 47 CFR Part 15 Cl			

# Ordering information

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Product	HP Color LaserJet Managed MFP E77822dn HP Color LaserJet Managed Flow MFP E77822z HP Color LaserJet Managed MFP E77825dn HP Color LaserJet Managed Flow MFP E77825z HP Color LaserJet Managed MFP E77830dn HP Color LaserJet Managed Flow MFP E77830z HP Color LaserJet Managed Flow MFP E87640dn HP Color LaserJet Managed Flow MFP E87640z HP Color LaserJet Managed Flow MFP E87650dn HP Color LaserJet Managed Flow MFP E87650z HP Color LaserJet Managed Flow MFP E87660z HP Color LaserJet Managed Flow MFP E87660z	28200A 28201A 28202A 28203A 28204A 28205A 28212A 28213A 28214A 28215A 28215A 28216A 28217A
Supplies <sup>48</sup>	E77822/E77825/E77830: HP Black Managed LaserJet Toner Cartridge (~34,000 pages) <sup>49,50</sup> HP Cyan Managed LaserJet Toner Cartridge (~32,000 pages) <sup>49,50</sup> HP Yellow Managed LaserJet Toner Cartridge (~32,000 pages) <sup>49,50</sup> HP Magenta Managed LaserJet Toner Cartridge (~32,000 pages) <sup>49,50</sup> HP Fuser Assembly 110V (~250,000 pages) HP Fuser Assembly 220V (~250,000 pages) HP Image Transfer Belt Assembly (~400,000 pages) HP Image Transfer Blade (~150,000 pages) HP Toner Collection Unit (~33,700 pages) HP Toner Collection Unit (~33,700 pages) HP Flow ADF Pick Roller Kit (~200,000 pages) HP Flow ADF Separation Roller Kit (~100,000 pages) HP ADF Roller Kit (~200,000 pages) HP ADF Roller Kit (~200,000 pages) HP ADF Roller Kit (~200,000 pages) HP ADF Separation Roller Kit (~100,000 pages) HP ADF Separation Roller Kit (~100,000 pages) HP ADF Separation Roller Kit (~200,000 pages) HP Magenta Developer Unit (~300,000 pages) HP Magenta Developer Unit (~300,000 pages) HP Black Managed LaserJet Toner Cartridge (~54,500 pages) <sup>49,50</sup> HP Black Managed LaserJet Toner Cartridge (~52,000 pages) <sup>49,50</sup> HP Vellow Managed LaserJet Toner Cartridge (~52,000 pages) <sup>49,50</sup> HP Magenta Managed LaserJet Toner Cartridge (~52,000 pages) <sup>49,50</sup> HP Fuser Assembly 110V (~360,000 pages) HP Fuser Assembly 110V (~360,000 pages) HP Fuser Assembly 110V (~360,000 pages) HP Image Transfer Belt Assembly (~430,000 pages) HP Image Transfer Belt Assembly (~430,000 pages) HP Image Transfer Belt Assembly (~430,000 pages)	W9040MC         W9041MC         W9042MC         W9043MC         Z7Y77A         Z9M03A         Z7Y79A         Z7Y79A         Z7Y81A         W9048MC         Z9M04A         Z8W50A         Z8W51A         Z7Y64A         Z7Y65A         Z7Y83A         W9044MC         Z9M02A         Z7Y82A         Z7Y91A         Z7Y70A         W9050MC         W9051MC         W9053MC         Z7Y76A         Z7Y76A         Z7Y78A         Z7Y78A         Z7Y78A         Z7Y78A         Z7Y78A
	HP Toner Collection Unit (~71,000 pages) HP Transfer Roller Assembly (~360,000 pages) HP Flow ADF Pick Roller Kit (~200,000 pages) HP Flow ADF Separation Roller Kit (~100,000 pages) HP MP Roller Kit (~200,000 pages) HP Trays 2-x Roller Kit (~360,000 pages) HP Black Imaging Drum (~160,000 pages) HP Cyan Developer Unit (~300,000 pages) HP Magenta Developer Unit (~300,000 pages) HP Yellow Developer Unit (~300,000 pages) HP Black Developer Unit (~300,000 pages)	W9058MC Z7Y90A Z8W50A Z8W51A Z7Y88A Z9M01A W9054MC W9055MC Z7Y69A Z7Y72A Z7Y73A Z7Y68A
	Workgroup and Department devices: HP LaserJet Inner finisher and Booklet finisher staples (5,000 staples) HP LaserJet Stapler/stacker finisher staples (5,000 staples)	Y1G13A Y1G14A
Accessories	<b>E77822/E77825/E77830 (Workgroup):</b> HP LaserJet Workgroup Cabinet <sup>22</sup> HP LaserJet Dual Cassette Workgroup Feeder (Trays 1 and 2: 520 sheets each) <sup>22</sup> HP LaserJet Workgroup 2,000-sheet High-capacity Tray <sup>22</sup> HP LaserJet Workgroup Job Separator (Up to 125 sheets) <sup>22</sup> HP LaserJet Second Exit Accessory <sup>25</sup>	Y1G17A Y1F97A Y1F99A Y1G15A Y1G23A
	<b>E87640/E87650/E87660 (Department):</b> HP LaserJet Department Cabinet <sup>24</sup> HP LaserJet Dual Cassette Department Feeder (Trays 1 and 2: 520 sheets each) <sup>24</sup> HP LaserJet Department 2,000-sheet High-capacity Tray <sup>24</sup> HP LaserJet Department 3,000-sheet High-capacity Tray <sup>26</sup> HP LaserJet Department Job Separator (Up to 125 sheets) <sup>24</sup>	Y1G16A Y1F98A Y1G21A Y1G20A Y1G01A

Accessories (continued)	Workgroup and Department devices: HP LaserJet Paper Tray Heaters Accessory: US (110V) <sup>51</sup> HP LaserJet Paper Tray Heaters Accessory: EU (220V) <sup>52</sup> HP LaserJet Inner Finisher <sup>25</sup> HP LaserJet Inner Finisher Hole Punch 2/3 Accessory (NA, LA, and AP regions) <sup>53</sup> HP LaserJet Inner Finisher Hole Punch 2/4 Accessory (EMEA and AP regions) <sup>53</sup> HP LaserJet Inner Finisher Swedish Punch Accessory (Sweden (SE)) <sup>53</sup> HP LaserJet Stapler/Stacker Finisher <sup>25</sup> HP LaserJet Stapler/Stacker Finisher Hole Punch 2/3 Accessory (NA, LA, and AP regions) <sup>54</sup> HP LaserJet Booklet or Stapler/stacker Finisher Hole Punch 2/4 Accessory (EMEA and AP regions) <sup>54</sup> HP LaserJet Booklet or Stapler/stacker Finisher Hole Punch 2/4 Accessory (Sweden (SE)) <sup>54</sup>	Y1G22A#BGJ Y1G22A#B19 Y1G00A Y1G02A Y1G03A Y1G04A Y1G07A Y1G18A Y1G10A Y1G11A Y1G12A
Accessories (optional)	Workgroup and Department devices: HP High-Performance Secure Hard Disk, 500 GB <sup>29</sup> HP Internal USB Ports HP LaserJet MFP Analog 500 Fax Accessory HP Jetdirect 2900nw Print Server <sup>33</sup> HP Jetdirect 3000w NFC/Wireless Accessory <sup>34</sup> HP Foreign Interface Harness HP USB Universal Card Reader	B5L29A B5L28A CC487A J8031A J8030A B5L31A X3D03A
Solutions	HP Web Jetadmin: <u>hp.com/qo/wja</u> HP Universal Print Driver: <u>hp.com/qo/upd</u> HP JetAdvantage Security Manager: <u>hp.com/qo/securitymanaqer</u> HP JetAdvantage On Demand Cloud Solutions: <u>hp.com/qo/ietadvantaqeondemand</u> HP LaserJet Fonts, Barcodes, and IPDS Emulation available at <u>hp.com/qo/laserjetfonts</u> To learn more about available infrastructure, management, and workflow solutions, visit <u>hp.com/qo/ solutions</u>	printing

# Appendix A: Security features





The HP Color LaserJet Managed MFP E77800 series and the HP Color LaserJet Managed MFP E87600 series are designed to work with security solutions to help reduce risk, improve compliance, and protect your network from end to end. Protect your device, data, and documents with built-in and optional security features.<sup>9</sup>

#### Protect your device

As capabilities expand and devices become more integrated into your work, device security becomes increasingly important. These features help protect the E77800 and E87600 series:

- Embedded protection: Multi-level, built-in features help protect your MFP against complex security threats from boot up to shut down. For details, see <u>hp.com/go/PrintersThatProtect</u>.
  - HP Sure Start helps the device BIOS to boot up properly every time with unaltered genuine HP code and without corruption. If an anomaly is detected, the device can repair itself by rebooting.
  - Whitelisting helps the device firmware to load properly with genuine HP code—without corruption—every time.
  - Run-time intrusion detection guards against malware by continually monitoring activity to detect and stop attacks. If an anomaly is detected, the device automatically reboots.
  - HP Connector Inspector stops malware from "calling home" to malicious servers, stealing data, and compromising your network. It evaluates outgoing network connections to determine what's normal, stop suspicious requests, and automatically trigger a self-healing reboot.
- Encrypted storage with secure erase: These MFPs come with built-in encryption to protect data. When stored data is no longer needed, use built-in device capabilities to securely overwrite data and safely remove sensitive information. HP offers multiple mechanisms to erase stored data, including functionality that is designed to conform to U.S. National Institute of Science and Technology (NIST) Special Publication 800-88.
- **Ports and protocols:** FTP and Telnet are closed by default to help prevent unsecure protocols from being used. Unused physical ports (such as host USB ports or network ports) can be disabled to prevent unauthorised use.
- Administrator access control for device: You can set administrator passwords so only IT staff or other authorised personnel can set up and configure device settings.
- **Common Criteria Certification:** HP Enterprise devices are certified as compliant with internationally recognised security standards, such as Common Criteria Certification (CCC) and FIPS 140.

#### Protect your data

Your MFP harbours sensitive information—make sure it's not at risk.

- Network protection: 802.1x or IPsec encrypted network standards can help protect data travelling over the network between the device and management tools such as HP Web Jetadmin<sup>12</sup> or the Embedded Web Server.
- Encrypt data in transit:
  - Protect print jobs travelling to the device with encryption such as Internet Print Protocol over TLS (IPPS). Or, Secure Encrypted Print with HP Universal Print Driver<sup>17</sup> provides true symmetric AES256 print job encryption and decryption from the client to the page based on a user-defined password using FIPS 140 validated cryptographic libraries from Microsoft.
  - Use CipherSuite Encryption Strength to select encryption strength to prevent the use of legacy or insecure protocols for data in transit.
  - Scanned PDFs and emails can be encrypted using built-in FIPS 140 validated cryptographic libraries from Microsoft.
  - HP offers a rich portfolio of HP JetAdvantage Workflow Solutions that provide advanced capture and route capabilities with enterprise level security. For more information, visit <u>hp.com/go/documentmanagement</u>.



#### Resources

HP JetAdvantage Security Solutions:

- Web site: <u>hp.com/qo/printsecurity</u>
- Solution brief: <u>http://h20195.www2.hp.com/V2/GetPDF.asp</u> x/4AA3-1295EEW.pdf
- Video: http://hp.brightcovegallery.com/products/det ail/video/4270905124001/

HP JetAdvantage Security Manager:13

- Web site: <u>hp.com/go/securitymanager</u>
- Brochure: <u>http://h20195.www2.hp.com/V2/GetPDF.asp</u> x/4AA3-9275EEW.pdf
- Video:

http://hp.brightcovegallery.com/products/det ail/video/4270837770001/

#### • Encrypt data at rest:

- The HP High-Performance Secure Hard Disk provides full 256-bit AES hardware encryption to protect sensitive business information, such as print jobs or passwords.
- The optional HP Trusted Platform Module (TPM) helps strengthen protection of encrypted credentials and data by automatically sealing device encryption keys to the TPM. It provides secure device identity by generating and protecting certificate private keys.<sup>11</sup>
- **Firewall:** Prevent malware and viruses from entering your network by limiting printer access to computing devices in network.
- Authentication and authorisation: Manage user access using native features or optional solutions.
  - With native user authentication, you can require users to sign in with PIN/PIC, LDAP, or Windows/Kerberos authentication. You can also integrate these with Active Directory.
  - With optional authentication solutions like HP Access Control, you can enable advanced authentication using proximity cards or NFC-enabled mobile devices. To learn more, visit <u>hp.com/qo/hpac</u>.<sup>55</sup> The Hardware Integration Pocket enables integration of select card readers.<sup>10</sup>
- Role-based access controls: Restrict access to management utilities, avoid unwanted device configurations, and help reduce costs and security risks through printer feature restrictions.
  - With HP FutureSmart 4, you have more control than ever before over device security and permission settings. IT administrators can decide who can interact with certain device capabilities.
  - Optional HP Access Control Rights Management allows you to give different capabilities to different users, or even entire departments, depending on their needs. For example, you can limit who can fax, scan to email, or scan to fax.
- Mobile printing: Optional wireless networking<sup>33</sup> and optional NFC touch-to-print<sup>34</sup> allow mobile users to connect to the MFP without accessing the company network. HP also offers server-based mobile print solutions that provide secure pull printing, as well as advanced management and reporting capabilities. For more information about HP Access Control, please visit <u>hp.com/qo/businessmobileprinting</u>.
- CA and Device Identity Certificates: This MFP supports identity certificates signed by a corporate certificate authority, which provides verification of identity and authenticity. This device also supports CA certificates for validation of identity certificates. Certificates can enable secure end-to-end communications with the device when used with features like IPsec, Secure-IPP, HP ePrint,<sup>35</sup> and more. Additional certificates can be stored for validating S/MIME email servers and 802.1x authentication. Save time by using HP JetAdvantage Security Manager to automatically install and renew certificates.<sup>13</sup>



#### Safeguard your physical documents

HP offers several solutions to help keep documents from falling into the wrong hands and to help prevent fraud.

- **PIN/Pull printing:** Have documents held and released only to the person who printed them. Pull printing solutions help protect sensitive data by requiring authentication at the device, and give users the flexibility of pulling the documents from any device that is enabled with the solution.
  - Built-in PIN printing: When users send confidential print jobs, they assign a PIN which they
    must enter at the device to release the job.
  - HP JetAdvantage Secure Print: With this affordable solution designed for SMB, jobs can be stored in the cloud or on the user's desktop. It's easy to set up and use, allows users to release jobs from a mobile device, and supports multi-vendor devices. For more information, visit <u>hp.com/qo/JetAdvantageSecurePrint</u>.<sup>56</sup>
  - HP JetAdvantage Private Print: With HP's cloud-based solution, you get the advantages of pull printing, without the complexity—at no additional charge. It is simple to set up and does not require a server, installation, or maintenance. To learn more, visit <u>hp.com/go/JetAdvantagePrivatePrint</u>.<sup>57</sup>
  - HP Access Control Secure Pull Printing: This optional robust server-based solution offers multiple forms of authentication including badge release, as well as enterprise level security, management, and scalability. To learn more, visit <u>hp.com/go/hpac</u>.

### Easily manage security across the fleet

#### HP JetAdvantage Security Manager

Easily set security configuration policies and automatically validate settings for every HP device in your fleet. Optional HP JetAdvantage Security Manager offers an effective, policy-based approach.<sup>13</sup>

- Automate many tedious tasks so you can free up time for your IT staff and protect the data and documents that matter most to your business.
- Streamline the process to securely deploy and monitor devices by applying a single security policy across the fleet.
- Easily create a print security policy for your environment by leveraging the HP Security Manager Base Policy template.
- Secure new HP devices as soon as they are added to your network, or after a reboot, with HP Instant-on Security. The software automatically configures settings to comply with your corporate security policy.
- Improve the security of your infrastructure and device communications by deploying unique identity certificates and monitoring to ensure they remain valid. With HP Security Manager's efficient fleet management of certificates, the administrative overhead to install certificates across your fleet is now less than manually installing on a single device.
- Actively maintain and verify compliance with your defined security policies by using HP Security Manager automated monitoring and risk-based reporting.



To learn more about HP JetAdvantage Security Manager, please visit <u>hp.com/go/securitymanager</u>.

#### Works with SIEM tools

Get instant notification of potential security issues so immediate action can be taken to prevent potential attacks. Event data from HP Enterprise devices can be sent to SIEM tools such as ArcSight, Splunk, or SIEMonster for real-time monitoring. IT security can easily view printer endpoints as part of the broader IT ecosystem to detect and resolve printer security alerts.



#### HP security best practices

Since 2005, HP has published security best practice checklists for networked environments common to enterprises and small to medium businesses. For more information on HP security solutions and checklists, please visit <u>hp.com/qo/printsecurity</u>.

# Appendix B: Fleet management features

#### Simple one-to-one device management

The MFP can also be managed using the HP Embedded Web Server. Use a web browser to monitor status, configure network parameters, or access device features.

#### Control colour access

Use HP Web Jetadmin<sup>12</sup> to assign colour access by application. If you want to assign colour access by user or time of day, use the optional HP Access Control solution.<sup>55</sup> People who truly need to leverage the power of colour—such as your sales team and marketing department can, while others automatically default to black-and-white output. You can also disallow colour output completely until it's needed for special projects, using HP Web Jetadmin, HP Universal Print Driver, or HP Access Control.

#### Resources

HP Web Jetadmin:

- Web site: <u>hp.com/go/wja</u>
- Solution brief:
- http://h20195.www2.hp.com/V2/GetPDF.asp x/4AA5-2718ENW.pdf
- Video: <u>http://hp.brightcovegallery.com/solutions/det</u> <u>ail/video/4271055504001/</u>

HP Universal Print Driver:

- Web site: <u>hp.com/qo/upd</u>
- Solution brief:
- http://h20195.www2.hp.com/V2/GetPDF.asp x/4AA2-4781EEW

# Efficiently manage from a central location

The HP Color LaserJet Managed MFP E77800 series and the HP Color LaserJet Managed MFP E87600 series are supported by HP Web Jetadmin,<sup>12</sup> an HP JetAdvantage Management Solution. This single solution allows you to efficiently manage a wide variety of networked and PC-connected devices, including printers, multifunction products, and scanners. Remotely install, configure, troubleshoot, safeguard, and manage your devices—ultimately increasing business productivity by helping you save time, control costs, protect your assets, and provide a better return on your investment. Easily integrate new HP LaserJet Pro and Enterprise devices without having to upgrade HP Web Jetadmin. A universal plug-in lets you support most features of new devices and apply corporate policies in one step—helping to save time and simplify device management.<sup>12</sup>

HP Web Jetadmin enables you to:

- Gain a clear picture of how many and what kinds of devices you have.
- Get visibility into your supplies usage, so you can make smarter purchasing decisions, reduce spending, and even track and allocate printing costs to individual departments or users.
- Simplify, and, in many cases, automate routine tasks. For example, you can apply fleet-wide policies to automatically configure new devices with the right printing and security settings when they're added to your network.
- Give your help desk staff the tools they need—such as automatic alerts—to resolve problems quickly, and often proactively, before a call is even received.
- Verify that your devices are up-to-date with the latest firmware and are properly configured (especially important for organisations that need to meet regulatory requirements).
- Use robust tracking and reporting tools to help you make better decisions about how your devices are deployed across your organisation, so you can make the most of your IT investments.
- Take advantage of additional options, like the HP Database Connectivity Module, which works together with Web Jetadmin to help you establish and achieve environmental goals.
- Get the ultimate in investment protection with HP Web Jetadmin Premium Support. This expanded service option gives your staff access to HP's dedicated software support engineers, who provide advice, usage recommendations, problem diagnosis, and more.

HP Web Jetadmin can benefit IT-managed print environments of all sizes, from large enterprises managing thousands of devices to small businesses with just a handful. For more information—or to download this software tool at no additional charge—visit <u>hp.com/qo/wia</u>.

# Make it easy for all to print with one common driver

The HP Universal Print Driver (UPD) enables both mobile Microsoft device users and traditional desktop users to access the full features of nearly every HP device in your managed printing environment without the need for assistance.<sup>17</sup>

Eliminate the clutter on your computer by replacing multiple print drivers with one versatile solution. Empower IT by dramatically reducing the number of drivers they have to manage and by giving them the tools they need to improve efficiency. With the HP UPD, your IT team can easily adjust device settings to help reduce printing costs, improve security, and help meet environmental goals. For example, it's simple to push two-sided printing or quicker sleep times across the fleet. Plus, the valuable tools in the HP UPD Printer Administrator's Resource Kit help you save time and money by streamlining IT tasks, implementing printing policies, and monitoring usage across the enterprise. You can also use the HP UPD in tandem with HP Web Jetadmin to create fleet-wide managed printer lists, reports, and more.

You can download this valuable fleet driver solution and the tools in the Printer Administrator's Resource Kit for no additional charge. For more information about how the HP Universal Print Driver can help you protect your imaging and printing investment, simplify management, and boost productivity, visit <u>hp.com/qo/upd</u>.

# Appendix C: Control panel features

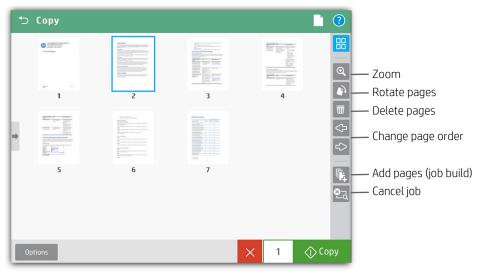
### Upgrade to a modern interface

The HP Color LaserJet Managed MFP E77800 series and the HP Color LaserJet Managed MFP E87600 series are powered by HP FutureSmart 4.0 firmware. Its modern, tablet-like interface keeps things simple and intuitive across your fleet of Enterprise devices. A scalable control panel interface improves future extensibility and allows for customisation, along with a robust set of new apps and usability features. You can even customise 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 (three apps for products without fax). Additional apps are easily accessed by swiping right to left, like with a smartphone or tablet.



### Edit jobs right at the MFP

The control panel features an enhanced image preview—now for both copies and scans. Right from the device's 20.3 cm (8.0-inch) colour 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. The Flow MFP models can also create PDF OCR and PDF/A OCR files.



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



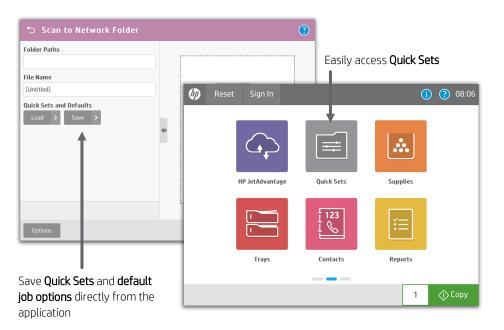
The new user interface enables **swipe, rotate**, and **drag-and-drop** capabilities

# Use Quick Sets to launch automated workflows

The MFP's digital sending capability allows users to route documents to a variety of destinations like email recipients, network folders, fax, FTP, a USB device, or Microsoft SharePoint.

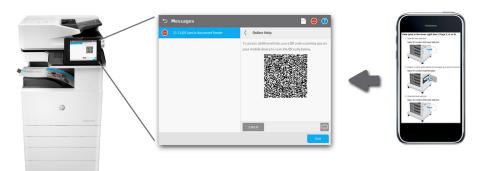
Quick Sets automate all of the steps of a complicated workflow and provide easy access to the configurations you use most, such as page size, resolution, and file format. You can also specify security settings, such as encrypted PDFs to be delivered through encrypted and signed emails.

Help users find what they need by moving individual Quick Sets to any screen or folder using the home screen customisation 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 Color LaserJet Managed MFP E77800 series and the HP Color LaserJet Managed MFP E87600 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.<sup>58</sup> 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.<sup>59</sup> You can also find these links in the HP Embedded Web Server event log.



<sup>1</sup> Based on HP review of 2017 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: <u>hp.com/go/PrintersThatProtect</u>. For more information, visit: <u>hp.com/go/printersecurityclaims</u>.

<sup>2</sup> Fewer service parts claim based on BLI analysis of leading in-class A3 MFPs as of August 2016; 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% colour ratio); market share as reported by IDC as of Q2 2016. <sup>3</sup> Compared to previous generations of laser printers.

<sup>4</sup> Programme availability varies. For more information, visit hp.com/recycle.

<sup>5</sup> Measured using ISO/IEC 24734, excludes first set of test documents. For more information, see <u>hp.com/qo/printerclaims</u>. Exact speed varies depending on the system configuration, software application, driver, and document complexity.

<sup>6</sup> Scan speeds measured from ADF. Actual processing speeds may vary depending on scan resolution, network conditions, computer performance, and application software.

<sup>7</sup> Requires an Internet connection to the printer. Services may require registration. App availability varies by country, language, and agreements. For details, see <u>hpconnected.com</u>.

<sup>8</sup> Selection of optional paper-handling accessories required to reach maximum input capacity.

<sup>9</sup> Some features require additional purchase. A FutureSmart service pack update may be required to activate security features. Learn more at <u>hp.com/go/printsecurity</u>.

<sup>10</sup> Solutions deployed through the Hardware Integration Pocket (HIP) may require additional purchase.

<sup>11</sup> Use of the optional HP Trusted Platform Module accessory may require a firmware upgrade.

<sup>12</sup> HP Web Jetadmin is available for download at no additional charge at <u>hp.com/qo/wja</u>.

<sup>13</sup> HP JetAdvantage Security Manager must be purchased separately. For details, see <u>hp.com/qo/securitymanaqer</u>.

<sup>14</sup> Based on an HP assessment of print manufacturers SaaS offerings as of September 1, 2016, no other print manufacturer offers a single cloud portal for user and app management.

<sup>15</sup> Requires Internet access. Supported browsers include Microsoft Internet Explorer<sup>®</sup> 9-11, Google Chrome<sup>™</sup> 9 and newer, Mozilla<sup>®</sup> Firefox<sup>®</sup> 4 and newer, and Safari<sup>®</sup> 5 and newer. Compatible with select HP LaserJet, PageWide, OfficeJet Pro, and Digital Sender Flow devices that can connect to the Internet. Some apps support multi-vendor environments. May require a firmware upgrade. Learn more at <u>hp.com/go/jetadvantageondemand</u>.

<sup>16</sup> Colour-access-control capabilities vary from device to device.

<sup>17</sup> The HP Universal Print Driver is available for download at no additional charge at <u>hp.com/go/upd</u>.

<sup>18</sup> The pull-out keyboard, HP EveryPage, and embedded OCR are only available on the Flow models.

<sup>19</sup> The E77800 series Flow models and all of the E87600 series models include a 250-sheet ADF. The E77800 series dn models include a 100-sheet ADF. The ADF on all devices can scan documents up to A3 (11 x 17 inches).

<sup>20</sup> An administrator must enable the easy-access USB port before use.

<sup>21</sup> One finisher accessory is recommended for the HP Color LaserJet Managed MFP E77800 series: HP LaserJet Inner Finisher (Y1G00A), or HP LaserJet Workgroup Job Separator (Y1G15A), or HP LaserJet Booklet Finisher (Y1G07A), or HP LaserJet Stapler/stacker Finisher (Y1G18A). Only one can be added at a time. <sup>22</sup> One input accessory is required for the NA and LA regions—and highly recommended for the EMEA and AP regions—for the HP Color LaserJet Managed MFP

E77800 series: HP LaserJet Workgroup Cabinet (Y1G17A), or HP LaserJet Dual Cassette Workgroup Feeder (Y1F97A), or HP LaserJet Workgroup 2,000-sheet High-capacity Tray (Y1F99A). Only one can be added at a time.

<sup>23</sup> One finisher accessory is recommended for the HP Color LaserJet Managed MFP E87600 series: HP LaserJet Inner Finisher (Y1G00A), or HP LaserJet Department Job Separator (Y1G01A), or HP LaserJet Booklet Finisher (Y1G07A), or HP LaserJet Stapler/stacker Finisher (Y1G18A). Only one can be added at a time.

<sup>24</sup> One input accessory is required for the NA and LA regions—and highly recommended for the EMEA and AP regions—for the HP Color LaserJet Managed MFP E87600 series: HP LaserJet Department Cabinet (Y1G16A), or HP LaserJet Dual Cassette Department Feeder (Y1F98A), or HP LaserJet Department 2,000-sheet High-capacity Tray (Y1G21A). Only one of these input accessories can be added at a time. However, selection of the HP LaserJet Department 3,000-sheet High-capacity Tray (Y1G20A) requires selection of either the HP LaserJet Dual Cassette Department Feeder (Y1F98A) or the HP LaserJet Department 2,000-sheet High-capacity Tray (Y1G20A) requires selection of either the HP LaserJet Dual Cassette Department Feeder (Y1F98A) or the HP LaserJet Department 2,000-sheet High-capacity Tray (Y1G21A).

<sup>25</sup> Selection of the HP LaserJet Inner Finisher (Y1G00A), the HP LaserJet Booklet Finisher (Y1G07A), or the HP LaserJet Stapler/stacker Finisher (Y1G18A) for the HP Color LaserJet Managed MFP E77822, E77825, or E77830, also requires selection of the HP LaserJet Second Exit (Y1G23A).

<sup>26</sup> Selection of the HP LaserJet Department 3,000-sheet High-capacity Tray (Y1G20A) for the HP Color LaserJet Managed MFP E87600 series requires selection of the HP LaserJet Dual Cassette Department Feeder (Y1F98A) or the HP LaserJet Department 2,000-sheet High-capacity Tray (Y1G21A).

<sup>27</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>28</sup> The E72500 series dn models include a 16 GB encrypted eMMC (located on formatter board for stored jobs and solutions) and one 320 GB Standard (located on engine main board for copy/scan functions), embedded HP High-Performance Secure Hard Disk. After key system and software resources are uploaded to the device, there is approximately 5 GB remaining for print job storage purposes. By upgrading to the optional 500 GB HDD, you will have ~489 GB remaining for print job storage purposes after resources are loaded.

<sup>29</sup> Optional HP High-Performance Secure Hard Disk, 500 GB (B5L29A) (FIPS 140-2 validated hard disk) can be added to an E77800 series dn model by first removing the 16 GB eMMC and installing it in that position (requires selection of dn engine: Z8Z00A, Z8Z02A, or Z8Z04A). It can also be added to an E77800 series z model or any E87600 series model by removing one of the 320 GB HDDs and installing it in that position (requires selection of one of the following engines: Z8Z01A, Z8Z03A, Z8Z05A, Z8Z12A, Z8Z13A, Z8Z14A, Z8Z15A, Z8Z16A, or Z8Z17A).

<sup>30</sup> Recommended Monthly Page Volume (RMPV): 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>31</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>32</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>33</sup> All models can add wireless networking with selection of the optional HP Jetdirect 2900nw Print Server (J8031A). If selected, you cannot also select the HP Jetdirect 3000w NFC/Wireless Accessory (J8030A). Wireless performance is dependent on physical environment and distance from access point, and may be limited during active VPN connections.

<sup>34</sup> Touch-to-print capability is optional for all models and can be added by selecting the optional HP Jetdirect 3000w NFC/Wireless Direct Accessory (J8030A). If selected, you cannot also select the HP Jetdirect 2900nw Print Server (J8031A). Mobile device must support Near Field Communication (NFC)-enabled printing. For more information, see <u>hp.com/qo/businessmobileprinting</u>.

<sup>35</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 <u>hp.com/qo/mobileprinting</u>.

<sup>36</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 <u>123.hp.com</u>, 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.

<sup>37</sup> Copy acoustic pressure and power emissions are based on copying colour simplex from ADF, using A4 paper.

<sup>38</sup> Scan acoustic pressure and power emissions are based on scanning colour simplex from ADF, using A4 paper.

<sup>39</sup> Printing colour, simplex using A4 paper at 22 ppm.

<sup>40</sup> Printing colour, simplex using A4 paper at 25 ppm.

<sup>41</sup> Printing colour, simplex using A4 paper at 30 ppm.

<sup>42</sup> Printing colour, simplex using A4 paper at 40 ppm.

<sup>43</sup> Printing colour, simplex using A4 paper at 50 ppm.

<sup>44</sup> Printing colour, simplex using A4 paper at 60 ppm.

<sup>45</sup> Acoustic values are subject to change. For current information see <u>hp.com/support</u>.

<sup>46</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.

<sup>47</sup> EPEAT<sup>®</sup> registered where applicable. EPEAT registration varies by country. See <u>epeat.net</u> for registration status by country.

<sup>48</sup> Stated yield is based on 5% coverage and may vary based on coverage and media type used, media size, short edge feed on A3 devices, and job size.
<sup>49</sup> Automatically add to configuration; initial toner not included with engine.

<sup>50</sup> Average black declared yields based on ISO/IEC 19752 and continuous printing. Average colour composite (C/M/Y) declared yields based on ISO/IEC 19798 and continuous printing. Actual yields vary considerably based on images printed and other factors. For details see <u>hp.com/go/learnaboutsupplies</u>.

<sup>51</sup> Use for all 110V countries. For the HP Color LaserJet Managed MFP E77800 series: you may choose one accessory tray heater and one additional tray heater if one of the following is selected: HP LaserJet Dual Cassette Workgroup Feeder (Y1F97A) or HP LaserJet Workgroup 2,000-sheet High-capacity Tray (Y1F99A). For the HP Color LaserJet Managed MFP E87600 series: you may choose one accessory tray heater if one of the following is selected: HP LaserJet Dual Cassette Department Feeder (Y1F98A) or HP LaserJet Department 2,000-sheet High-capacity Tray (Y1G21A).

<sup>52</sup> Use for all 220V countries. For the HP Color LaserJet Managed MFP E77800 series: you may choose one accessory tray heater and one additional tray heater if one of the following is selected: HP LaserJet Dual Cassette Workgroup Feeder (Y1F97A) or HP LaserJet Workgroup 2,000-sheet High-capacity Tray (Y1F99A). For the HP Color LaserJet Managed MFP E87600 series: you may choose one accessory tray heater if one of the following is selected: HP LaserJet Dual Cassette Department Feeder (Y1F98A) or HP LaserJet Department 2,000-sheet High-capacity Tray (Y1G21A).

<sup>53</sup> Requires HP Laser Jet Inner Finisher (Y1G00A); choose only one hole-punch accessory.

<sup>54</sup> Requires HP LaserJet Booklet Finisher (Y1G07A) or HP LaserJet Stapler/stacker Finisher (Y1G18A); choose only one hole-punch accessory.

<sup>55</sup> HP Access Control is a scalable and customisable suite of solutions available for purchase. To learn more, visit <u>hp.com/qo/hpac</u>.

<sup>56</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 <u>hp.com/go/JetAdvantageSecurePrint</u>.

<sup>57</sup> Available only in North America and select European countries. Card reader is available for separate purchase for selected HP printers and MFPs with touchscreens. Learn more at <u>hp.com/go/JetAdvantagePrivatePrint</u>.

<sup>58</sup> Availability dependent on firmware or software updates or upgrades.

<sup>59</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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