HP Smart Tank 581 All-in-One Printer (4A8D4A)



Overview

Enjoy everyday reliability with the HP quality you expect and savings that are anything but expected[1]

Enjoy everyday reliability with the HP Smart Tank 581 All-in-One Printer that delivers HP quality you expect and savings that are anything but expected [1]

Smart tank value

Up to 6,000 pages of black or colour ink keeps you printing at a fraction of the cost[2,1]

Conveniently intuitive

Easy mobile-guided setup [5]

Ready when you are

Stay connected and keep printing with self-healing Wi-Fi

Features

Mobile-guided, seamless setup[5]	Smart buttons
Low-on-ink sensors	Self-healing Wi-Fi®[4]
HP Smart Advance[5]	HP Auto On/Auto-Off technology[3]

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[1] HP ink bottles compared to HP ink cartridges. Cost per page based on expected black and composite (cyan/magenta/yellow) page yield results based on HP methodology and continuous printing of ISO/IEC 24712 test pages. Not based on ISO/IEC 24711 test process. Actual yield varies based on content of printed pages and other factors. Some ink from included bottles is used to start up the printer. For more information about fill and yield, see hp.com/go/learnaboutsupplies

[2] Based upon 200 pages per month of HP Smart Tank customers' usage. Actual yield varies considerably based on content of printed pages and other factors. Average based on ISO/IEC 24711 or HP testing methodology and continuous printing. Some ink from included bottles is used to start up the printer. For details, see: www.hp.com/go/learnaboutsupplies

[5] Requires the HP app download. For details on local printing requirements see www.hp.com/go/mobileprinting. Certain features/software are available in English language only and differ between desktop and mobile applications. Subscription may be required; subscription may not be available in all countries. For details, see: www.HPSmart.com. Internet access required and must be purchased separately. HP account required for full functionality. List of supported operating systems available in app stores. Fax capabilities are for sending a fax only.

Specifications

Print quality black (best)	Up to 1200 x 1200 rendered dpi
Print quality color (best)	Up to 4800 x 1200 optimized dpi color (when printing from a computer and 1200 input dpi)
Print speed black (ISO, A4)	Up to 12 ppm
Print Speed Color (ISO)	Up to 5 ppm
Print speed	Print speed up to 12 ppm (black) and 5 ppm (color)
Bottom margin (A4)	3 mm
Left margin (A4)	3 mm
Right margin (A4)	3 mm
Top margin (A4)	3 mm
Functions	Print, copy, scan
Duplex printing	Manual (driver support provided)
Duty cycle (monthly, A4)	Up to 3,000 pages
Duty cycle (monthly, letter)	Up to 3,000 pages
Energy savings feature technology	HP Auto-Off Technology
Replacement cartridges	North America: HP GT53 90-ml Black Original Ink Bottle 1VV22AA; HP GT53XL 135-ml Black Original Ink Bottle 1VV21AA; HP GT52 Cyan Original Ink Bottle M0H54AA; HP GT52 Magenta Original Ink Bottle M0H55AA; HP GT52 Yellow Original Ink Bottle M0H56AA; Europe Middle East and Africa: HP GT53XL 135-ml Black Original Ink Bottle 1VV21AE; HP GT52 Cyan Original Ink Bottle M0H54AE; HP GT52 Magenta Original Ink Bottle M0H55AE; HP GT52 Yellow Original Ink Bottle M0H56AE; Asia Pacific: HP GT53 90-ml Black Original Ink Bottle 1VV22AA; HP GT53XL 135-ml Black Original Ink Bottle 1VV21AA; HP GT52 Cyan Original Ink Bottle M0H54AA; HP GT52 Magenta Original Ink Bottle M0H55AA; HP GT52 Yellow Original Ink Bottle M0H56AA; Latin America: HP GT53 90-ml Black Original Ink Bottle 1VV22AL; HP GT52 Cyan Original Ink Bottle M0H54AL; HP GT52 Magenta Original Ink Bottle M0H55AL; HP GT52 Yellow Original Ink Bottle M0H56AL; HP GT52 3-pack Cyan/Magenta/Yellow Original Ink Bottles X4E44AL. For more information about fill and yield, see http://www.hp.com/go/learnaboutsupplies .
Connectivity, standard	1 Hi-Speed USB 2.0 (device); 1 Wi-Fi 802.11b/g/n; 1 Wi-Fi Direct
Network capabilities	Yes (via WiFi)
Wireless capability	Yes, built-in Wi-Fi 2.4G, Wi-Fi Direct
Mobile printing capability	HP app; Apple AirPrint; Mopria Print Service; HP Print Service Plugin (Android printing); Wi-Fi® Direct Printing
Software included	HP Printer Software

Compatible Operating Systems	Windows 11; Windows 10; macOS 10.15 Catalina; macOS 11 Big Sur; macOS 12 Monterey; macOS 13 Ventura; macOS 14 Sonoma; Chrome OS *(Microsoft Windows 11, 10; macOS v10.15 Catalina, macOS v11 Big Sur, macOS v12 Monterey; macOS v13 Ventura; macOS v14 Sonoma; Android; iOS)*
Sustainability specifications	45% post-consumer recycled plastic; EPEAT® registered
Energy star certified	No
Ecolabels	Conforms to ecolabel energy efficiency limits
Digital sending standard features	Scan to file (from software); HP Smart Tasks
Scan speed (normal, A4)	Up to 200 ppi/19 secs (color), up to 200 ppi/10 secs (mono)
Scan file format	JPG; PDF; PNG; TIFF; HEIF
Scan input modes	Copy; HP Software; EWS
Scan technology	Contact Image Sensor (CIS)
Scanner type	Flatbed only
Display	33 segments + 1.2-inch iCON LCD Display
Dimensions (W x D x H)	434.66 x 361.53 x 157.26 mm
Dimensions (W x D x H)	17.11 x 14.23 x 6.19 in
Weight	5.03 kg
Weight	11.09 lb
Power consumption	0.109 watts (manual-Off), 3.023 watts (ready), 1.096 watt (sleep)[2]
Power supply type	Internal built in
What's in the box	HP Smart Tank 581 All-in-One Printer; HP GT53XL 135-ml Black Original Ink Bottle (1VV24A); HP GT52 50-ml Cyan Original Ink Bottle (6ZE03A); HP GT52 50-ml Magenta Original Ink Bottle (6ZE04A); HP GT52 50-ml Yellow Original Ink Bottle (6ZE05A); HP Black Original Printhead (M0H50A); HP Tri-Color Original Printhead (6ZA18AE); Setup Guide; Reference Guide; Ink Caution flyer; Regulatory flyer; Warranty flyer; Power Cord; For more information about fill and yield, see https://www.hp.com/go/learnaboutsupplies
Manufacturer Warranty	One-year or 30,000 pages limited hardware warranty, whichever is earlier from the date of purchase. User replaceable parts have separate warranty periods.

Additional specifications

Accessories	None
Acoustic power emissions (active, printing)	6.4 B(A)
Acoustic pressure emissions	50.5 dBA (Mono) ; 43.7 dBA (Colour)
Additional information about HP	https://www.hp.com
Additional information about HP in the countries	https://www.hp.com/uk
Automatic paper sensor	No
Bit depth	24-bit
Borderless printing	Yes (up to 8.5 x 11 in, 210 x 297 mm)
Cable included	No, please purchase USB cable separately.
Cartons per layer	12
Color copy capability	Yes
Color or black	Color
Color scanning	Yes
Connection type	Wireless
Control panel	Power On/Off, Cancel, Resume, Color Copy, Black copy, ID copy, WI-FI and Info button
Copier settings	Number of Copies, Resize, Quality, Lighter/Darker, Papersize, Papertype, ID Copy, Enhancement
Copies, maximum	Up to 99 copies
Copy reduce / enlarge settings	Via HP app
Copy resolution (black graphics)	Up to 600 dpi
Copy resolution (black text)	Up to 600 dpi
Copy resolution (color text and graphics)	Up to 600 x 600 dpi
Copy speed black (ISO)	Up to 10 cpm
Copy speed color (ISO)	Up to 2 cpm
Count of layers in pallet	5
Datasheet photo 1	\Publication photos/LEBI_WL_581 wyh.jpg
Datasheet photo 4	Publication logos/Easy_setup wyh.jpg
Datasheet photo 5	Publication logos/Auto_on-off wyh.jpg
Dimensions with trays up (W x D x H)	434.66 x 361.53 x 157.26 mm
Duty cycle note	Duty cycle is the maximum number of pages that can be printed in a month, but this page volume is not recommended on an ongoing basis.

Electromagnetic compatibility	EN 55032:2015+A11:2020 Class B; EN 55024:2010 +A1:2015; EN 55035:2017+A11:2020; EN IEC 61000-3-2:2019; EN 61000-3-2:2014; EN 61000-3-3:2013 +A1:2019; EN 301 489-1 V2.2.3; EN 301 489-17 V3.2.4
End of Life CO2e (kg)	2.333
Energy Usage CO2e (kg)	8.931
Enhanced scanning resolution	Up to 1200 dpi
Envelope Feeder	No
File Format Supported	JPG; PDF
Finished output handling	Sheetfed
First page out black (A4, ready)	As fast as 14 sec
First page out color (A4, ready)	As fast as 21 sec
First page out footnote	For details see: http://www.hp.com/go/printerclaims
Fonts and typefaces	None
Geographic availability	EM
Hazard Text 3	Contains Benzisothiazolinone. May produce an allergic reaction. Incorporates biocides: Benzisothiazolinone.
Hazard product identifier 1	HP 6ZA17A, 1VV24A
Hazard product identifier 2	HP 6ZA18A, HP 31 / 1VU26A, 1VU27A, 1VU28A
Hazard text 1	Contains Benzisothiazolinone and Mixture of Chloromethylisothiazolinone and Methylisothiazolinone. May produce an allergic reaction. Incorporates biocides: Benzisothiazolinone and Mixture of Chloromethylisothiazolinone and Methylisothiazolinone.
Hazard text 2	DANGER- Contains 5,5-Dimethylimidazolidine-2,4-dione, reaction products with oxirane. Can cause very long-lasting and diffuse contamination of water resources. Contains Benzisothiazolinone. May produce an allergic reaction. Incorporates biocides: Benzisothiazolinone.
Image scaling or enlargement range	25 to 150%
Ink Safety Information	Avoid direct contact with liquid ink
Ink Safety Instructions	Always follow the information on the product label.
Ink types	Pigment-based (black); Dye-based (color)
Input capacity	Up to 100 sheets
Levels of grayscale	256
Mac compatible	Yes
Maximum Input Capacity (envelopes)	Up to 10 envelopes
Maximum Memory	64MB
Maximum dimensions (W x D x H)	17.11 x 22.86 x 10.21 in
Maximum dimensions (W x D x H)	434.66 x 580.65 x 259.37 mm
Maximum input capacity (10x15cm photos)	Up to 30 sheets

Maximum input capacity (4x6 photo)	Up to 30 sheets
Maximum input capacity (cards)	Up to 30 cards
Maximum input capacity (photo paper)	Up to 30 sheets
Maximum input capacity (sheets)	Up to 100 sheets
Maximum output capacity (cards)	Up to 30 cards
Maximum output capacity (envelopes)	Up to 10 envelopes
Maximum output capacity (photo paper)	Up to 30 sheets
Maximum output capacity (sheets)	Up to 30 sheets
Maximum print area	216 x 355 mm
Media sizes supported	A4; B5; A6; DL envelope, legal
Media sizes supported	Letter; legal; 4 x 6 in; 5 x 7 in; 8 x 10 in; No. 10 envelopes
Media sizes supported, key	10 x 15 cm; A4; Envelopes
Media sizes supported, key	4 x 6 in; Letter; Legal; Envelopes
Media sizes, custom	88.9 x 127 to 215.9 x 355.6 mm
Media sizes, custom	3.5 x 5 in to 8.5 x 14 in
Media types	Plain paper, Matte Brochure Papers, Glossy Brochure Papers, Photo papers and Envelopes
Media weight, recommended	75 g/m²
Media weight, recommended	20 lb
Media weight, supported	Plain paper: 60 to 90 g/m²; Envelopes: 75 to 90 g/m²; Cards: up to 200 g/m²; Photo paper: up to 300 g/m²
Media weight, supported	Plain paper: 16 to 24 lb; Envelopes: 20 to 24 lb; Cards: up to 110 lb; Photo paper: up to 80 lb
Memory	64 MB Integrated DDR1
Memory Slots	No
Minimum System Requirements	Windows 11, Windows 10, 1 GHz processor, 2 GB SSD, Internet
Minimum System Requirements for Macintosh	macOS Tahoe 26, macOS Sequoia 15, macOS Sonoma 14, 2 GB SSD, Internet
Model number	581
Non-Operating Humidity Range	5 to 90% RH (non-condensing)
Number of users	1-3 Users
Operating humidity range	15 to 80% RH (non-condensing)
Operating temperature range	5 to 40°C
Operating temperature range	41 to 104°F

Orderable supplies	North America: HP GT53 90-ml Black Original Ink Bottle 1VV22AA; HP GT53XL 135-ml Black Original Ink Bottle 1VV21AA; HP GT52 Cyan Original Ink Bottle M0H54AA; HP GT52 Magenta Original Ink Bottle M0H55AA; HP GT52 Yellow Original Ink Bottle M0H56AA; Europe Middle East and Africa: HP GT53XL 135-ml Black Original Ink Bottle 1VV21AE; HP GT52 Cyan Original Ink Bottle M0H54AE; HP GT52 Magenta Original Ink Bottle M0H55AE; HP GT52 Yellow Original Ink Bottle M0H56AE; Asia Pacific: HP GT53 90-ml Black Original Ink Bottle 1VV22AA; HP GT53XL 135-ml Black Original Ink Bottle 1VV21AA; HP GT52 Cyan Original Ink Bottle M0H54AA; HP GT52 Magenta Original Ink Bottle M0H55AA; HP GT52 Yellow Original Ink Bottle M0H56AA; Latin America: HP GT53 90-ml Black Original Ink Bottle 1VV22AL; HP GT52 Cyan Original Ink Bottle M0H54AL; HP GT52 Magenta Original Ink Bottle M0H55AL; HP GT52 Yellow Original Ink Bottle M0H56AL; HP GT52 3-pack Cyan/Magenta/Yellow Original Ink Bottles X4E44AL. For more information about fill and yield, see http://www.hp.com/go/learnaboutsupplies .
Output capacity	Up to 30 sheets
Output file format	JPEG
Package dimensions (W x D x H)	495 x 198 x 478 mm
Package dimensions (W x D x H)	19.49 x 7.8 x 18.82 in
Package weight	7.2 kg to 7.6 kg depending on number of bottle/s included
Package weight	15.89 lb to 16.73 lb depending on number of bottle/s included
Page Yield in Draft Mode	(671)~8,000 pages Black, ~9,200 pages Color,(730)~16,000 pages Black, ~9,200 pages Color,(AC8)~16,000 pages Black, ~9,200 pages Color, (ACJ)~15,300 pages Black, ~9,200 pages Color,(AKH)~16,000 pages Black, ~9,200 pages Color,(AKY)~16,000 pages Black, ~9,200 pages Color, (BEW)~8,000 pages Black, ~9,200 pages Color,(BHG)~8,000 pages Black, ~9,200 pages Color[12]
Page Yield in Draft Mode Footnote	Draft page yields are approximate and were measured using “Draft” print-quality settings in the Windows/Mac driver, based on HP Methodology from the simulation of continuous printing of ISO/IEC 24712 pages. Actual page yield varies significantly depending on content printed, ink levels maintained in all four reservoirs, and other factors. For more information about fill and yield, see https://hp.com/go/learnaboutsupplies .
Page yield (set-up/inbox cartridges)	~6000 pages black, ~8,000 pages cyan, magenta, yellow composite yield
Pallet dimensions	47.99 x 40 x 94.09 in
Pallet dimensions (W x D x H)	1200 x 1000 x 2390 mm
Pallet weight	432 kg to 455 kg depending on number of bottle/s included
Pallet weight	950 lb to 1002 lb depending on number of bottle/s included
Paper handling input, standard	100-sheet input tray
Paper handling output, standard	30-sheet output tray
Paper trays, maximum	1
Paper trays, standard	1
Photo (product photo, jpg, 70x100)	Printers and Multifunction/CD028B_70x100.jpg
Photo proofsheets supported	No

PictBridge description	No
PictBridge supported	No
Plug and play	Auto Wireless Connect
Power	Input voltage 100 to 240 VAC (+/- 10%), 50/60 Hz (+/- 3 Hz). High voltage: Input voltage 200 to 240 VAC (+/- 10%), 50/60 Hz (+/- 3Hz)
Print Cartridge/Bottle, Color(s)	Black; Cyan; Magenta; Yellow
Print Cartridges/Bottle, Number	4 (1 each black bottle, set of 3 color bottles)
Print Speed (Draft, A4 Memo) Footnote Number	[7]
Print Speed Black (Draft, A4 Memo)	Up to 30 ppm
Print Speed Color (Draft, A4 Memo)	Up to 24 ppm
Print Technology	Ink
Print colors	Yes
Print colors maximum	4
Print head nozzles	704 (Black), 588 (Tri-color)
Print heads	2 (1 each black, tri-color)
Print languages	HP PCL 3 GUI; HP PCLm (HP Apps/UPD); URF (AirPrint)
Print speed black (ISO)	Up to 12 ppm
Print speed black (draft, A4)	Up to 22 ppm
Print speed color (ISO)	Up to 5 ppm
Print speed color (draft, A4)	Up to 16 ppm
Print speed color (normal, 10x15 photo)	As fast as 76 sec
Print speed color (normal, 4x6 photo)	As fast as 76 sec
Print technology	HP Thermal Inkjet
Printer Management	No
Printer drivers included	HP PCL 3 GUI
Processor speed	980 MHz
Product color	Medium Basalt Body, Light Basalt Accent
Product logos	Hi-speed USB certified; Mopria-certified; Wi-Fi certified; IPP Everywhere; AirPrint; App Store; Works with Android; Get it on google play; Get it from Microsoft; PAP 20; Fragile; Keep out of Rain; This side up
Product long name specifications	HP Smart Tank 581 All-in-One Printer, Color Printer for Home, Print, copy, scan, Wireless; High-volume printer tank; Print from phone or tablet; Scan to PDF
Product name (back)	Smart Tank 581 Wireless All-in-One
Product name (front)	Smart Tank 581 Wireless All-in-One

Product name (primary)	Smart Tank 581 Wireless All-in-One
Product name (secondary)	Smart Tank 581 Wireless All-in-One
Product short name specifications	HP Smart Tank 581 Wireless All-in-One Color Printer, Copier, Scanner
Production CO2e (kg)	36.757
Quantity per pallet	60
Recommended Macintosh system requirements	Apple® macOS v10.15 Catalina, macOS v11 Big Sur, macOS v12 Monterey; 2 GB HD; Internet required
Recommended monthly page volume	400 to 800
Recommended monthly page volume note	HP recommends the number of pages printed not exceed the recommended monthly page volume for optimum device performance.
Recommended operating humidity range	20 to 80% RH
Recommended operating temperature range	15 to 30°C
Recommended operating temperature range	59 to 86°F
Replacement cartridges footnote	Black and composite color average per bottle (cyan/magenta/yellow) results based on HP methodology from the simulation of continuous printing of ISO/IEC 24712 test pages. Not based on ISO/IEC 24711 test process. An additional black ink bottle is required to print 8,000 color test pages. Actual yield varies based on content of printed pages and other factors. Some ink from included bottles is used to start up the printer. For more information about fill and yield, see http://www.hp.com/go/learnaboutsupplies .
Safety	IEC 60950-1 & IEC62368-1 compliant; EU RED and EN 60950-1 & EN 62368-1 compliant; Singapore Safety; China CCC; Taiwan BSMI
Scan resolution, hardware	Up to 1200 x 1200 dpi
Scan resolution, optical	Up to 1200 dpi
Scan size, maximum	216 x 297 mm
Scan size, maximum	8.5 x 11.69 in
Scanning options (ADF)	Not Applicable
Security management	No
Segment (filter)	Home
Send to email capability	No
Service & support options	Protect your investment—HP Total Care offers a variety of extended warranties and services, go to http://www.hp.com/support
Standard input capacity (cards)	Up to 30 cards
Standard input capacity (envelopes)	Up to 10
Standard input capacity (legal)	Up to 100 sheets
Standard media sizes (duplex)	A4; B5

Standard media sizes (duplex, imperial)	Letter; Executive
Standard output capacity (cards)	Up to 30 cards
Standard output capacity (envelopes)	Up to 10 envelopes
Standard output capacity (legal)	Up to 30 sheets
Storage altitude	4572 m
Storage altitude	15,000 ft
Storage device and direct print support	Wireless Direct Printing
Storage temperature range	-40 to 60°C
Storage temperature range	-40 to 140°F
Sub-brand name	Smart Tank
System requirements, recommended	Microsoft® Windows® 11, 10; Internet connection, Microsoft® Internet Explorer or Edge.
Target user and print volume	For teams up to 3 users; Prints up to 800 pages/month
Technology logo 2	Publication logos/logo_android.jpg
Technology logo 3	Publication logos/Epeat silver.jpg
Technology logo 4	Publication logos/IF_DesignAward_2023_logo.jpg
Technology logo 5	Publication logos/Red Dot 2023_logo.jpg
Technology logo 6	AHID/38dec1d59a27468459a4292596927607e6c055b3
Technology logo 7	AHID/619a3448a77fd810ffc2ecd1be2266a1ade2bab4
Telecom compliance (fax capability)	EN 300 328 V2.2.2; EN 301 893 V2.1.1; EN 300 440 V2.1.1
Top key features	Wireless; High-volume printer tank; Print from phone or tablet; Scan to PDF
Total CO2e (kg)	49.94 *(A product carbon footprint is defined as the total amount of greenhouse gases emitted directly and indirectly by a product over its lifetime. Greenhouse gas emissions are reported as global warming potential for 100-year time horizon (GWP-100) in units of CO2 equivalence. Calculations are done in accordance with ISO 14040 & ISO 14044. Individual values may not sum to total due to rounding.)*
Transportation CO2e (kg)	1.919
Twain version	Version 2.4
UNSPSC code	43212104
UPC number	(671) 196548866960; (730) 198701840824; (BEW) 196548867004; (BHG) 196548867011
Vertical alignment accuracy	+/- 0.02 mm
Vertical alignment accuracy	+/- 0.0008 in
Video action printing supported	No

Wireless technologies	802.11b/g/n

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[2] 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.

[12]Draft page yields are approximate and were measured using “Draft” print-quality settings in the Windows/Mac driver, based on HP Methodology from the simulation of continuous printing of ISO/IEC 24712 pages. Actual page yield varies significantly depending on content printed, ink levels maintained in all four reservoirs, and other factors. For more information about fill and yield, see https://hp.com/go/learnaboutsupplies .

Services

HP Care Pack Services

★ : Recommended

Imaging and Printing Consumer Care Pack Services

HP 3 Year Return to Depot for SmartTank Printer - M SVC	UA5C2E

Ink/Toner/Paper/Printer Supplies

Ink Supplies

★ : Recommended

HP Inkjet Printer Cartridges and Ink Supplies

HP 6ZA17AE Black Printhead	6ZA17AE
HP 6ZA18AE Tri-color Printhead	6ZA18AE

HP Ink Bottles

HP GT52 Cyan Original Ink Bottle	M0H54AE
HP GT52 Magenta Original Ink Bottle	M0H55AE
HP GT52 Yellow Original Ink Bottle	M0H56AE
HP GT53XL 135-ml Black Original Ink Bottle	1VV21AE

HP Photo Papers

HP Photo Papers for inkjet

HP Matte Photo Paper 180 g/m2 10 x 15 cm (101 x 152 mm) 25 sheets	7HF70A

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