A3 COLOUR MULTIFUNCTION PRINTER
WORKFORCE ENTERPRISE WF-C17590/C20590

PT. MANDIRI ARTHA SOLUSI
EMPOWERING BUSINESS FORWARD

A NEW FORCE IN ENTERPRISE PRINTING HAS ARRIVED.

LIGHTNING SPEED
100 PPM[1]

EPSON

Our massive investment in revolutionary technologies enables us to pay attention to every minute detail. PrecisionCore™, our next generation, high-density printhead, takes a great leap forward in enterprise printing. Epson WorkForce Enterprise printers have arrived, giving you exactly what you need: superior quality, excellent connectivity and print up to A3+, at lightning fast speed.

ISO Print Speed (Simplex/Duplex)[1]	High Yield Cartridge[2]	Duplex Printing	Ethernet	Wi-Fi Direct	Epson Connect	Open Platform Enabled
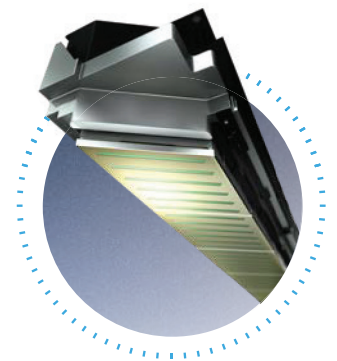
IT'S IN THE DETAILS.

With PrecisionCore linehead technology, Epson WorkForce Enterprise blazes through prints.

Productivity at Breakthrough Speed
Reinvent business printing with print speeds up to 100ppm[1] in both simplex and duplex; matching and even beating most laser printers.

Quality Without Compromise
PrecisionCore linehead with Nozzle Verification Technology delivers consistent high quality prints at ultra-high speed.

Minimum Environmental Impact
With up to 85% less power consumption[4] and carbon dioxide[5] generated than laser printers, do more for your business and even more for the environment.

PRECISIONCORE

DURABrite Pro INK

Ultra-Fast Printing

Enjoy consistently superb image quality at optimised printing speeds up to 100ppm[1] in both simplex and duplex; due to the WorkForce Enterprise's efficient "switchback" duplex paper path design.

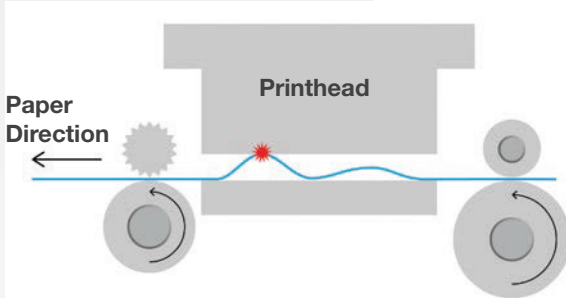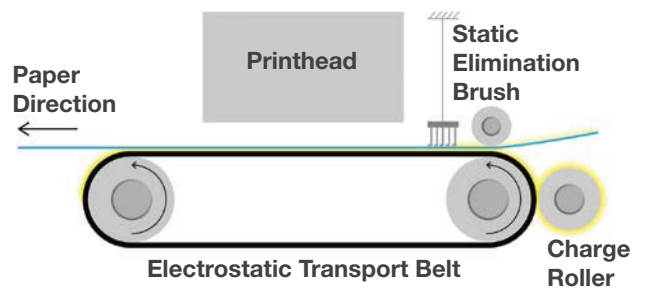**UP TO 100 PPM IN BOTH SIMPLEX AND DUPLEX**

SIMPLEX

DUPLEX

Switchback paper path design ensures ultra-fast throughput even in duplex printing.

Conventional Printer

Printhead

Paper Direction

WorkForce Enterprise

Printhead

Static Elimination Brush

Paper Direction

Electrostatic Transport Belt

Charge Roller

The WorkForce Enterprise uses an electrostatic transport belt that ensures the paper is completely flat, enabling the smoothest of gradients and consistently sharp images.

Ultra-Fast First Page Out Time

It only takes approximately 6.2 seconds (WF-C20590) to collect your first page. There is minimal warm-up time due to the WorkForce Enterprise's simple yet superior technology over laser printers.

Inkjet printer

Ejection

Print out

Simple, cool, contactless technology

Laser printer

Charging → Exposure → Development → First transfer → Second transfer → Fixing → Print out

Complex technology using heat and pressure

QUALITY WITHOUT COMPROMISE

Revolutionary Compact PrecisionCore Linehead Design

PRECISIONCORE

Prints up to A3+

43mm

Advanced built-in Nozzle Verification Technology monitors nozzle health and adjusts print quality automatically without interruption, even during printing.

Print up to 600 x 2400dpi, delivering crisp and sharp text and image reproduction.

DURABrite Pro INK

Newly-formulated DURABrite™ Pro Ink - Less bleed-through and improved fast-drying water-resistant pigment ink engineered for high-speed printing while maintaining vivid colour output.

Official Team Partner

EPSON
EXCEED YOUR VISION

///AMG PETRONAS MOTORSPORT

Friendly Operability

The WorkForce Enterprise makes it easy for large workgroups to print, copy, scan to email and more at ultra-fast speeds. When it comes to replacing the ink, there are no messy toner cartridges to deal with and no waiting for parts to cool.

Enjoy impressive scan speeds of up to 60ppm/110ipm in duplex. The dual CIS technology allows convenient duplex scanning in a single pass.

Easy front access door to the printer's ink cartridges makes replacement fast and hassle-free.

The intuitive 9" touchscreen panel with a user-friendly interface makes it simple to operate the printer.

Easy removal of jammed paper with easy-to-follow instructions from the printer.

Easy refill of paper with these cassette trays that can be opened smoothly and effortlessly.

COMPREHENSIVE CONNECTIVITY OPTIONS

Connectivity Features

Ethernet, Wi-Fi, Wi-Fi Direct, USB 3.0, NFC

Mobile and Remote Printing

- **Epson Connect**
  Epson Email Print, Epson Remote Print Driver, Epson iPrint, Epson Print and Scan, Epson Creative Print

- **Other Mobile Solutions**
  Google Cloud Print™, Mopria™ Print Service, Easy Photo Scan, Scan to Cloud

For more information, visit www.epson.com.sg/connect

MINIMUM ENVIRONMENTAL IMPACT

Make the Ecological Choice

Do more for your business while doing a little more for the environment. Make the change to Epson inkjet printers and see how you can inject higher productivity and lower harmful emissions in your day to day.

Use Less Power With Inkjet Printers

Epson Inkjet Printers Up to **85%** less power consumption[4] VS Laser Printers

Our inkjet printers **use less power** than your average laser printers so you not only save the environment, but you save on cost, too.

Enjoy more cost-savings when you use WorkForce Enterprise at TEC values of 0.9kWh (WF-C17590) and 1.3kWh (WF-C20590) per week, which are remarkably low as compared to laser printers.
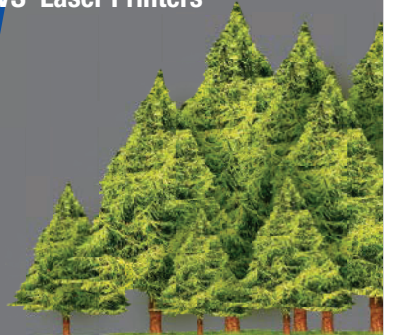
Lesser CO_2 Generated With Inkjet Printers

Epson Inkjet Printers Up to **85%** less CO_2 generated[5] VS Laser Printers

The amount of carbon dioxide emitted by laser printers would require up to 8 trees to absorb all that carbon dioxide while **Epson inkjet printers need only 1 tree.**

Lesser Replacement Parts Needed with Inkjet Printers

Epson Inkjet Printers Up to **59%** less replacement parts[6] VS Laser Printers

Cut down on the number of parts to be disposed of. Inkjet printers **require less parts than laser printers.**

AN OFFICE
SUPERPOWER

Ultra-High Paper Capacity and Finisher

WorkForce Enterprise is scalable with your business. You have the option to increase the maximum paper input to 5,350 sheets (80 g/m^2) with the High Capacity Tray and expand paper output capabilities to up to 4,000 sheets[7] (80g/m^2) with the Finisher Unit.

Bridge Unit

Up to 4,000 sheets[6] Output Tray

MP Tray (up to 150 sheets)

High Capacity Tray (up to 3,000 sheets)

Finisher with Stapler (up to 50 sheets) and Stacker Feature

EPSON

109cm

67cm

32cm

4 Paper Trays (up to 2,200 sheets)

Ultra-High Capacity Cartridges

Engineered for high-speed printing, the WorkForce Enterprise powers through without interruption with its high capacity cartridges which yield up to 50,000 pages[8] of high quality prints.

up to 100,000 pages

up to 50,000 pages (composite yield)

High yield waste ink box to support high volume printing

WIDE MEDIA HANDLING CAPABILITY

Diverse Paper Media Printing

With Epson's superior inkjet technology and smart design, the WorkForce Enterprise is able to support printing up to A3+ size on a wide range of media types of varying thickness (up to 350 g/m^2) and length (up to 1.2m), using the Multipurpose Tray.

Face down

Face up

Multipurpose tray

Paper cassette

Supports printing of special media of up to 350 g/m^2 and 1.2m in length
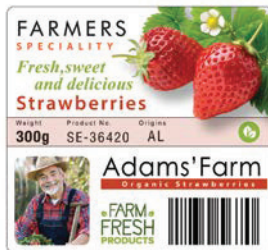
Textured Paper Certificate

Delivery Note / Invoice (60 g/m^2)

Coated Inkjet Paper

Sticker Label

Business Card
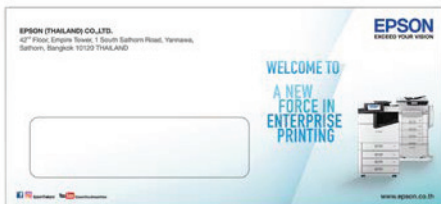
Envelope
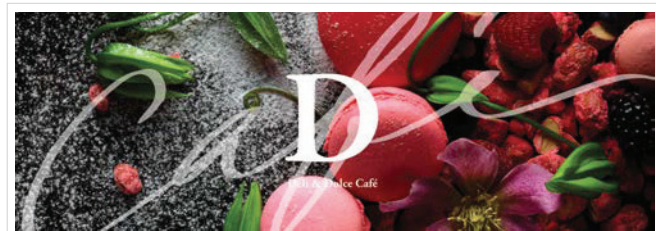
Promotional Banner (1.2m length)

Customisable Workflow Integration

Take advantage of remote management, customise your print options and enjoy seamless compatibility with a wide range of tools and software that can be integrated into your existing IT infrastructure to improve productivity and increase efficiency.

Fleet Management

Epson Device Admin

Free software that allows you to control, analyse and manage your printer fleet centrally from one intuitive interface, designed to increase productivity and reduce costs.

Integration with Third Party Solutions

Epson Open Platform

Gain complete control of your printing operations via a range of third-party solutions that enable you to adapt the WorkForce Enterprise to meet specific and changing business requirements with solutions that help you better manage your printing.

Print Management

Epson Print Admin

A server-based solution that creates a secured centralised printing, scanning and copying environment through user-authentication. Advanced reporting functions can help organisations reduce printing costs and run Managed Print Programmes.

Epson Print Admin Serverless

A built-in function to automatically distribute documents to users' email accounts and folders based on login IDs, allowing IT administrators to generate reports. These lead to better security, productivity and cost savings.

Document Management

Document Capture Pro*

Easily scan, view, edit, save and transfer scanned documents. The software optically recognises barcodes, characters and blank pages in scanned documents to separate them into different folders. It allows you to create up to 30 customised job settings, making multiple scan jobs a breeze.

* Document Capture Pro (Windows), Document Capture (Mac OS X).

Document Capture Pro Server

WorkForce Enterprise is compatible with Document Capture Pro Servers, making it easy to seamlessly and locally manage documents. Document Capture Pro integrates into document management and cloud storage systems, enabling you to capture, enhance, edit and distribute scanned documents effectively throughout your business.

ROBUST SECURITY MANAGEMENT FOR PEACE OF MIND

Avoid information leaks
Reduce risk of information leaks by limiting the access to functions for up to 10 user accounts.

Protect confidential documents
Send print jobs with PIN codes for release on the printer panel.

LDAP support
Integration with a company's existing directory service.

Secure device communications
Supports enterprise security protocols including IEEE 802.1x, IPsec and SSL/TLS for email access.

Limit access by unauthorised PCs
Restrict user access by filtering IP addresses and/or ports.

IPv6 support
Future-proof network compatibility and security.

SPECIFICATIONS
WORKFORCE ENTERPRISE WF-C17590/C20590

Model Number	WF-C17590	WF-C20590
Printing		
Printing Technology	PrecisionCore™ Linehead Inkjet Technology	
Nozzle Configuration	8,676 nozzles each colour (Black, Cyan, Magenta, Yellow)	
Maximum Resolution	600 x 2,400 dpi	
Default Black Resolution	600 x 1,200 dpi	
Minimum Ink Droplet Volume	4.4 pl	
Print Speed		
ISO 24734, A4, Simplex / Duplex	Approx. 75 ipm / 75 ipm (Black / Colour)	Approx. 100 ipm / 100 ipm (Black / Colour)
ISO 24734.2, A3, Simplex	Approx. 41.2 ipm / 41.2 ipm (Black / Colour)	Approx. 54.3 ipm / 54.3 ipm (Black / Colour)
ISO 24734.2, A3, Duplex	Approx. 25.4 ipm / 25.4 ipm (Black / Colour)	Approx. 36.3 ipm / 36.3 ipm (Black / Colour)
First Page Out Time	Approx. 7.0 sec / 7.0 sec (Black / Colour)	Approx. 6.2 sec / 6.2 sec (Black / Colour)
Printer Language	ESC/P-R, ESC/P-RJ, ESC/Page, ESC/Page-Colour, PostScript3	
Printer Control Language Emulations	PCL5c / PCL6 / PostScript3 / PDF(ver1.7)	
Recommended Monthly Print Volume[9]	20,000 - 100,000 pages per month	
Maximum Monthly Duty Cycle[10]	400,000 pages per month	
HDD Capacity	320GB (encrypted)	
Automatic 2-sided printing	Yes	
Copying		
Copy Speed		
ISO 29183, A4, Simplex (Flatbed)	Approx. 75 ipm / 75 ipm (Black / Colour)	Approx. 100 ipm / 100 ipm (Black / Colour)
ISO 24735, A4, Simplex (ADF 1:1)	Approx. 75 ipm / 75 ipm (Black / Colour)	Approx. 100 ipm / 100 ipm (Black / Colour)
ISO 24735, A4, Duplex (ADF 1:2 / 2:2)	Approx. 75 ipm / 75 ipm (Black / Colour)	Approx. 95 ipm / 95 ipm (Black / Colour)
Maximum Copies from Standalone	9,999 copies	
Max Copy Resolution	600 x 1,200 dpi	
Reduction/Enlargement	25 - 400%, Auto Fit Function	
Copy Paper Size (Flatbed)	A3, B4, Legal, 8.5" x 13", Letter, A4, B5, A5, B6, A6, 16K, 8K, Envelopes: #10, DL, C4, C5, C6	
Maximum Copy Size	A3	
Scanning		
Scanner Type	Flatbed colour image scanner	
Sensor Type	CIS	
Optical Resolution	600 x 1,200 dpi	
Maximum Scan Area	297.18 x 431.8 mm (11.7 x 17")	
Scanner Bit Depth		
Colour	30-bit input, 24-bit output	
Grayscale	10-bit input, 8-bit output	
Black & White	10-bit input, 1-bit output	
Scan Features	Scan to Memory Device, Scan to Network Folder/FTP, Scan to Email, Scan to Computer (Document Capture Pro), Scan to Computer (WSD)	
Scan Speed (Mono / Colour)		
Flatbed 200 dpi	A4: 3.7 sec, A3: 4.7 sec	
ADF 200 dpi	A4 (Simplex / Duplex): 60 ppm / 110 ipm	
(ISO 17991, Scan to Folder)	A3 (Simplex / Duplex): 30 ppm / -	
ADF Function		
Support Paper Weight	52-128 g/m²	
Paper Capacity	150 sheets (80 g/m²)	
Automatic 2-sided Scan / Copy / Fax	Yes	
Support Paper Size	A6 - A3	
Fax Function		
Type of Fax	Walk-up black-and-white and colour fax capability	
Receive Memory / Page Memory	6 MB, Page memory Up to 550 pages (ITU-T No.1 chart)	
Error Correction Mode	ITU Group3 fax with Error Correction Mode	
Fax Speed (Data transfer rate)	Up to 33.6kbps, Approx. 3sec/page	
Fax Resolution		
Black & White	Standard: 8pels/mm x 3.85lines/mm, Fine: 8pels/mm x 7.7lines/mm, Super Fine: 8pels/mm x 15.4lines/mm, Ultra Fine: 16pels/mm x 15.4lines/mm, Photo: 8pels/mm x 7.7lines/mm	
Colour	Fine: 200 x 200 dpi, Photo: 200 x 200 dpi	
Transmission Paper Size		
Flatbed	A5, B5, Letter, A4, Legal, B4, A3, 11 x 17"	
ADF	A5, Half Letter, B5, Letter, A4, Legal, B4, A3, 11 x 17"	
Receiving Paper Size	A5, Half Letter, B5, Letter, A4, Legal, B4, A3, 11 x 17"	
Speed Dial / Group Dial	Up to 2,000 numbers, 1,999 groups	
Fax Features	PC Fax (Transmission/Receive), Automatic redial, Address book, Delay Send, Transmit Reservation (50 cases), Broadcast Fax (Mono Only)	
Paper Handling		
Number of Paper Trays (Standards)	5 (Paper Cassettes: 4, MP Tray: 1)	
Paper Hold Capacity		
Input Capacity	Up to 2,350 sheets (80 g/m²) (Paper Cassettes 1 - 4: 550 x 4 + MP Tray: 150 sheets)	
Maximum Input Capacity	Up to 5,350 sheets (80 g/m²) (Paper Cassettes 1 - 4: 550 x 4 + MP Tray: 150 sheets + High Capacity Feeder Unit: 3,000 sheets)	
Output Capacity	Up to 700 sheets (80 g/m²) (Face Down Tray: 550 sheets, Face Up Tray: 150 sheets)	
Maximum Output Capacity	Up to 4,900 sheets (80 g/m²) (Face Down Tray: 550 sheets, Face Up Tray: 150 sheets, Finisher Tray: 4,000 sheets, Finisher Tray 2[11]: 200 sheets)	
Support Paper Size	A3+, A3, A4, B5, A5, A6, 5x7", 4x6", Legal, 8.5" x 13", Letter, Envelopes: #10, DL, C6, C5, C4	
Maximum Paper Size	Paper Cassettes 1 - 4: A3 MP Tray: A3+, 330 x 1200mm (12.95 x 47.24")	
Support Paper Weight	Paper Cassettes 1 - 4: 60 - 160 g/m² MP Tray: 60 - 350 g/m²	

**Dimensions & Weight
WF-C17590 / C20590**
Weight (including supplies): 186.1kg (410.3lb)

1,231mm
(48.5")
757mm
(29.8")
674mm
(26.5")

**WF-C17590 / C20590 with Optional Finisher
and High Capacity Tray**
Weight (including supplies): 318kg (701.1lb)

1,231mm
(48.5")
2,170mm
(85.4")
757mm
(29.8")

Model Number	WF-C17590	WF-C20590
Printer Interface		
USB	USB 3.0	
Network	Ethernet (1000BASE-T/100BASE-TX/10BASE-T), Wi-Fi (IEEE 802.11b/g/n), Wi-Fi Direct, NFC	
Network Protocol	TCP/IPv4, TCP/IPv6	
Network Printing Protocol	LPD, IPP, PORT9100, WSD	
Network Management Protocols	SNMP, HTTP, DHCP, BOOTP, APIPA, PING, DDNS, mDNS, SNTP, SLP, WSD, LLTD	
Security Features	Limit Access Function, PIN No. Certification, LDAP Address Book, IP Address Filtering, Panel Admin Mode	
USB Host Function		
Type of Direct Printing	Memory Devices	
USB Host	USB Host (Scan to memory device / Storage function)	
Direct Print Paper Size	A3+, A3, B4, Legal, Letter, A4, B5, A5, B6, A6, 16K, 8K, Envelopes: #10, DL, C4, C5, C6	
Mobile and Remote Printing		
Epson Connect	Epson iPrint, Epson Email Print, Remote Print Driver, Scan to Cloud	
Other Mobile Solutions	Google Cloud Print, Mopria Print Service	
Control Panel		
LCD Screen	9.0" / 22.7cm TFT Colour LCD	
Printer Software		
Operating System Compatibility	Windows XP / Vista / 7 / 8 / 8.1 / 10	
	Windows Server 2003 / 2008 / 2012 / 2016	
	Only printing and scanning functions are supported for Windows Server OS.	
	Mac OS X 10.6.x or later	
Electrical Specifications		
Rated Voltage	100-240V Universal	
Rated Frequency	50 - 60 Hz	
Power Consumption (Main Unit only)		
Operating	170W	180W
Standby	77W	
Sleep	1.4W	
Power off	0.4W	
Noise Level		
PC Printing / Plain Paper Default[12]	7.3 B(A), 57 dB(A)	7.5 B(A), 59 dB(A)

Consumables	Page Yield[8]	Order Code (WF-C17590)	Order Code (WF-C20590)
High Capacity Ink Cartridge (Black)	50,000 pages	C13T887100	C13T858100
High Capacity Ink Cartridge (Cyan)	50,000 pages Composite Yield	C13T887200	C13T858200
High Capacity Ink Cartridge (Magenta)		C13T887300	C13T858300
High Capacity Ink Cartridge (Yellow)		C13T887400	C13T858400
Waste Ink Box	-	C13T671300	
Staple Cartridge for Finisher (set of 3 x 5,000 staples each)	C13S210061		

Options	Order Code
Finisher with Bridge Unit	C12C933081 & C12C933261 (Purchased together)
High Capacity Tray	C12C933041
Paper Cassette Lock (set of 4)	C12C933231

Optional Finisher	
Output Capacity	Stacker Tray: Up to 4,000 sheets[7] (80g/m²)
	Tray 2 (for fax output only): up to 200 sheets (80 g/m²)
Finisher Functions	Shift Sorting, Staple
Staple Capability	Up to 50 sheets[13] (60 - 90 g/m²)
Supported Paper Size for Staple	A3, A4, B4, B5(LEF), Legal(SEF), Letter, 8K, 16K
Staple Functions	Automatic Staple for 3 positions, Manual Staple
Maximum Power Consumption	Less than 165W

Optional High Capacity Tray	
Input Capacity	Up to 3,000 sheets (80 g/m²)
Support Paper Weight	60 - 160 g/m²
Support Paper Size	A4, Letter
Maximum Power Consumption	Less than 21W

Information correct as at June 2019

Disclaimers:

[1] Up to 100ppm for WF-C20590. Black and colour print speeds are measured in accordance with ISO/IEC 24734. Actual print times will vary based on system configuration, software, and page complexity. For more information, visit www.epson.com.sg/printspeed.

[2] Up to 100,000 pages in black with 2 black ink cartridges.

[3] Energy used by the WorkForce Enterprise while copying is 180W (WF-C20590) and 170W (WF-17590), compared to an average of competitor A3 laser/LED MFPs capable of 55-65ppm showing "Energy Used While Copying" data available in BLI database (Feb 2017).

[4] Testing was commissioned by Epson to Keypoint Intelligence-Buyers Lab. Two comparison models were selected from color laser multi-function printers in the 65-70ppm class. Tests were conducted at the devices' default settings using Keypoint Intelligence-Buyers Lab standard energy consumption test methods. Calculations were based on a weekday workload of 2 x 4 hours printing + 16 hours in sleep/standby mode, and weekend energy use of 48 hours in sleep/standby mode. A total of 69 pages of workload test pattern .doc, .xls, .ppt, .html, and Outlook files were printed 6 times in each 4-hour printing period.

[5] Annual CO_2 output calculations were based on JEMAI-LCA Pro. Cedar tree CO_2 absorption calculations were based on Japan Forestry Agency standards of 8.8kg CO_2 per annum per tree.

[6] Testing was commissioned by Epson to Keypoint Intelligence-Buyers Lab. Two comparison models were selected from color laser multi-function printers in the 65-70ppm class. Calculations were based on the frequency and volume of consumables and replacement parts required to print 1 million pages (ISO/IEC 24712 test pattern) over a period of 5 years.

[7] For simplex printing only.

[8] Replacement cartridge yields are based on ISO/IEC 24711 tests in Default Mode printing continuously. Cartridge yields vary considerably for reasons including images printed, print settings, temperature and humidity. Yields may be lower when printing infrequently or predominantly with one ink colour. All ink colours are used for printing and printer maintenance, and all colours have to be installed for printing. For print quality, part of the ink from the included cartridges is used for printer start and a variable amount of ink remains in the cartridges after the "replace cartridge" signal. For more information, visit www.epson.com.sg/inkinfo.

[9] Epson recommends that the average number of printed pages per month not exceed the stated ranges for longer term print quality and reliability.

[10] The maximum number of printed pages per month is based on the performance capabilities of the printer, including ISO rated print speeds and paper handling capabilities.

[11] Finisher Tray 2 for Fax output only.

[12] Default mode in accordance with ISO7779 for MFPs.

[13] Up to 50 sheets for letter, A4 and B5 size. Up to 30 sheets for A3, B4, Legal and 8.5 x 13".

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