EXPERIENCE A NEW FORCE IN MONOCHROME PRINTING.

LIGHTNING SPEED

100

PPM[1]

Our massive investment in revolutionary technologies enables us to focus on the extensive demands of high volume printing. Our next-generation, high-density, PrecisionCore Heat-Free Technology printhead takes enterprise printing even further. This time in black-and-white. Expect a productivity boost at lightning speed, with environmentally friendly prints of up to A3+. After all, it is our attention to detail that will provide you with an overall positive printing experience.
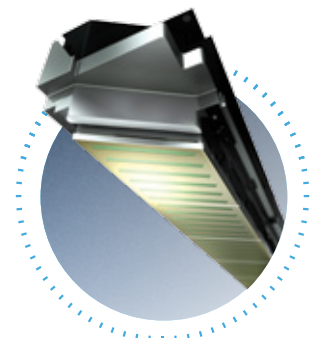
up to 100 ipm	black up to 120,000 pages			Direct		
ISO Print Speed (Simplex/ Duplex)[1]	High Yield Cartridge[2]	Duplex Printing	Ethernet	Wi-Fi Direct	Epson Connect	Open Platform Enabled

PRECISIONCORE
HEAT·FREE

DURABrite Pro INK

IT'S IN THE DETAILS.

With PrecisionCore Heat-Free Technology, Epson WorkForce Enterprise WF-M20590 promises printing in a flash.

Maximum Performance
Enjoy productivity at breakthrough speed at 100 ppm[1] in both simplex and duplex; matching and even surpassing most laser printers.

Minimum Environmental impact
With up to 85% less power consumption[3] and carbon dioxide[4] generated than laser printers, do more for your business and even more for the environment.

Built for Business
Empower your business through our advanced workflow solutions such as Epson Print Admin and Document Capture Pro.

MAXIMUM PERFORMANCE

PRECISIONCORE HEAT-FREE TECHNOLOGY

MicroTFP print chip

PRECISIONCORE
Heat-Free Technology

Our next-generation, PrecisionCore Heat-Free Technology inkjet printhead is driving Epson's inkjet innovation. It merges advanced key component technologies, state-of-the-art MEMS* fabrication and high-precision assembly processes honed over decades.

MicroTFP print chips are the core element of PrecisionCore Heat-Free Technology. They enable Epson printers to achieve higher precision and greater miniaturisation using Epson's advanced thin film piezo (TFP) technology. This radically improves the basic performance of this printhead module and makes application to a wider range of uses possible.

And with a new PrecisionCore Heat-Free Technology linehead that allows an impressive speed of 100 ppm[1], be prepared for a change of expectations about business printers for the better.

* MEMS (Micro Electro Mechanical Systems): Devices possessing mechanically driven elements, manufactured through the application of semiconductor processing technology.
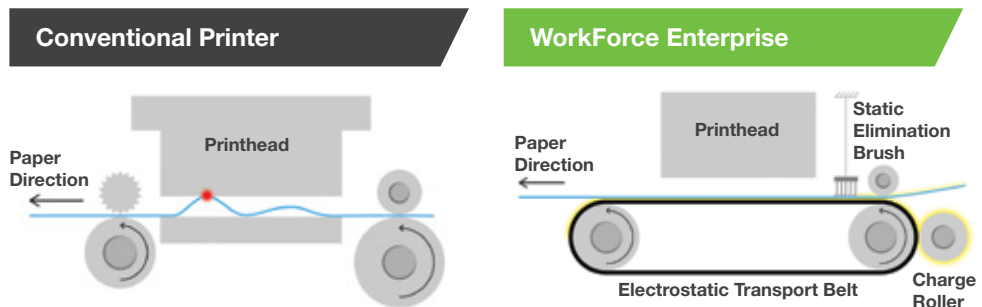
ULTRA-FAST PRINTING

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

Enjoy breakthrough high-speed printing of up to 100 ppm[1] in both simplex and duplex due to Workforce Enterprise's efficient "switchback" duplex paper path design.

SIMPLEX · DUPLEX

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

Conventional Printer — Paper Direction, Printhead

WorkForce Enterprise — Paper Direction, Printhead, Static Elimination Brush, Electrostatic Transport Belt, Charge Roller

The WorkForce Enterprise uses an electrostatic transport belt that ensures the paper is completely flat, even at high speeds for accurate and rapid paper feeding.

ULTRA-FAST FIRST PAGE OUT TIME

It only takes approximately 6.2 seconds to collect your first page. There is minimal warm-up time due to 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

ULTRA-HIGH PAPER CAPACITY

The WF-M20590 is scalable with your business. You have the option to increase the maximum paper input to 5,350 sheets (80g/m^2) with the High Capacity Tray.

MP Tray
(150 sheets)

4 Paper
Trays
(2,200 sheets)

67cm

ULTRA-HIGH CAPACITY CARTRIDGES

With up to 120,000 page yield, the WF-M20590 powers through without interruption to support your business high printing volume needs.

Consumables	Page Yield[2]	Order Code
High Capacity Ink Cartridge (Black)	60,000 pages	C13T04Q100
Waste Ink Box	-	C13T671300

Options		Order Code
High Capacity Tray		C12C933041
Paper Cassette Lock (set of 4)		C12C933231
Epson Print Admin		7110574
Epson Print Admin Serverless		7111310

Optional High Capacity Tray	
Input Capacity	Up to 3,000 sheets (80g/m^2)
Support Paper Weight	60 - 160 g/m^2
Support Paper Size	A4, Letter
Maximum Power Consumption	Less than 21W

MINIMUM ENVIRONMENTAL IMPACT

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

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

Epson Inkjet Printers Up to **85%** less power consumption[3] **VS** Laser Printers

Less CO_2 Generated With Inkjet 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.**

Epson Inkjet Printers Up to **85%** less CO_2 generated[4] **VS** Laser Printers

Less Replacement Parts Needed With Inkjet Printers

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

Epson Inkjet Printers Up to **59%** less replacement parts[7] **VS** Laser Printers

SUPERIOR PRODUCTIVITY

Automatic Duplex Printing and Scanning

The printer supports automatic duplex printing of up to 100 ipm for A4, reducing paper wastage. The one pass duplex ADF unit allows for quick, convenient scanning and copying of double-sided documents.

Diverse Media Handling

With Epson's superior inkjet technology and smart design, this WorkForce Enterprise model is able to support printing of 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.

USB Host Function

The WF-M20590 comes with a USB port for direct printing and scanning using USB flash memory devices.

LCD Screen

Experience easy set-up and PC-less operation with the 22.8 cm colour touch screen.

VERSATILE CONNECTIVITY

Network Connectivity and Standalone Capability

Equipped with Ethernet, Wi-Fi, Wi-Fi Direct and USB 3.0, the printer is perfect for office environments. What's more, Wi-Fi Direct acts as an access point, allowing up to four devices to connect directly to the printer at a time.

Epson Connect Enabled

Wirelessly print your documents from anywhere in the world with Epson Connect's wide range of features:

• **Epson iPrint** – Print from and scan directly to your smart device or online cloud storage services.

• **Epson Email Print** – Print to any Email Print-enabled Epson printer from any device or PC with email access.

• **Remote Print Driver** – Print to a compatible Epson printer anywhere in the world via the Internet using a PC with Remote Print driver or from mobile devices via the Epson iPrint app.

• **Scan to Cloud** – Share your scans through email or store them online in cloud storage services.

Other mobile solutions:
• **Google Cloud Print™**
• **Mopria™ Print Service**

ADVANCED WORKFLOW SOLUTIONS

Get the most out of your printers with an extensive range of software solutions.

Fleet Management
Epson Device Admin

A 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.

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 that creates a secure printing, scanning and copying environment through user-authentication. It automatically distributes documents to users' email accounts and folders based on their login IDs. It also allows IT administrators to generate reports, which leads 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), limited functionality for Mac version.

Document Capture Pro Server

Centralise scanning and manage a fleet of up to 100 scanners without the need to install drivers on individual computers. Create and assign up to 30 job settings right to the panel with a single web interface. Process and distribute documents securely and track them with reports.

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 for print and document management.

ROBUST SECURITY FEATURES

Secured Printing with PIN Release

Print confidential documents by setting a PIN to a print job for release on the printer panel.

IP Address Filter

Secure your documents by preventing unauthorised devices from connecting to the printer.

Panel Admin Mode

Set a password to access and change administrator settings for the printer. This prevents unauthorised users from changing the printer settings.

Limited Access Function

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

LDAP Address Book

Prevent information leaks by using the address book registered in the LDAP server to accurately select recipient's email addresses.

SPECIFICATIONS
WORKFORCE ENTERPRISE WF-M20590

Model Number	WF-M20590
Printing	
Printing Technology	PrecisionCore Heat-Free Technology
Nozzle Configuration	8,676 nozzles (Black)
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. 100 ipm
ISO 24734.2, A3, Simplex	Approx. 54.3 ipm
ISO 24734.2, A3, Duplex	Approx. 36.3 ipm
First Page Out Time	Approx. 6.2 sec
Printer Language	ESC/P-R, ESC/P-RJ, ESC/Page, ESC/Page-Colour, PostScript3
Printer Control Language Emulations	PCL5c / PCL6 / PostScript3 / PDF (ver 1.7)
Recommended Monthly Print Volume[8]	20,000 - 100,000 pages per month
Maximum Monthly Duty Cycle[9]	400,000 pages per month
HDD Capacity	320GB (encrypted)
Automatic 2-sided printing	Yes
Copying	
Copy Speed	
ISO 29183, A4, Simplex (Flatbed)	Approx. 100 ipm
ISO 24735, A4, Simplex (ADF 1:1)	Approx. 100 ipm
ISO 24735, A4, Duplex (ADF 1:2 / 2:2)	Approx. 95 ipm
Maximum Copies from Standalone	9,999 copies
Maximum Copy Resolution	600 x 1,200 dpi
Reduction / Enlargement	25 - 400%, Auto Fit Function
Copy Paper Size (Flatbed)	A3, B4, Legal, 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	10-bit input, 8-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 (Monochrome / Colour)	
Flatbed 200 dpi	A4: 3.7 sec, A3: 4.7 sec
ADF 200 dpi (ISO 17991, Scan to Folder)	A4 (Simplex / Duplex): 60 ppm / 110 ipm, 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	Yes
Support Paper Size	A6 - A3
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)
Support Paper Size	A3+, A3, A4, B5, A5, A6, 5x7", 4x6", Legal, Letter, Envelopes: #10, DL, C6, 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-M20590
Weight (including supplies): 186.1kg (410.3lb)

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

#Workforce printers will not support photo glossy paper

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	22.8 cm (9.0") TFT Colour LCD

Printer Software

Operating System Compatibility	Windows XP / Vista / 7 / 8 / 8.1 / 10
	Windows Server 2003 / 2008 / 2012 / 2016 / 2019
	Only printing and scanning functions are supported for Windows Server OS. Bundled applications are not supported.
	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	180W
Standby	77W
Sleep	1.4W
Power off	0.4W

Noise Level

PC Printing / Plain Paper Default[10]	7.5 B(A), 59 dB(A)

Information correct at time of printing
Printed September 2019

Disclaimers:

[1] Up to 100 ppm for WF-M20590. 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] 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 is used for printing and printer maintenance, and 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

[3] Testing was commissioned by Epson to Keypoint Intelligence-Buyers Lab. Two comparison models were selected from colour laser multifunction printers in the 65-70 ppm 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.

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

[5] For simplex printing only.

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

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

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

[9] 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.

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

EPSON

EXCEED YOUR VISION

Dealer's Stamp