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## **fi-5900C High Speed A3 Duplex Colour Production Scanner**

- 100 ppm / 200 ipm at 300 dpi in colour and mono
- 3 ultrasonic sensors capable of zoning
- Mixed document scanning (size, quality, content, colour characteristics)
- Optical resolution of up to 600 dpi (from 50 dpi and selectable in 1 dpi increments)
- Four alternative use interfaces (2 x SCSI / 2 x USB 2.0)
- Fully equipped with Kofax VRS 4.0 Plus hardware module
- Superior paper handling capabilities for maximum operator support
- Optional Pre-Imprinter (front side) and optional Post-Imprinter (back side)

Bundled with

**Adobe Acrobat 7.0 Standard**  
for Microsoft Windows 2000 / XP

**FUJITSU**

THE POSSIBILITIES ARE INFINITE

## The fi-5900C – built for volume scanning



ENERGY STAR® compliant



Bundled with Adobe Acrobat 7.0 Standard



In defining and developing the fi-5900C, Fujitsu has focused its expertise to deliver a truly unique, next-generation production level device that can withstand any comparison in terms of productivity, versatility, reliability, ease of use and ROI maximisation. This device sets out to do what a production scanner should do first and foremost: process paper efficiently, smoothly and quickly, whilst at the same time minimising the pre- and post-processing task for the operator.

The fi-5900C scans a wider range of paper qualities with much higher reliability, and whilst continuously feeding paper batches scanned images are processed and enhanced on the fly. The fi-5900C provides selectable processing options through TWAIN or ISIS driver settings and by utilising its on-board Kofax VRS 4.0 Plus interface module. The combination of scanning speed, ergonomic design and paper handling functionalities, plus the vast range of built in image processing and enhancement possibilities, minimises total operating time required to scan a predefined document volume.

### Scanning Speed and Quality

New high speed CCD technology and latest image processing circuitry increase the overall processing speed. Even at resolutions of 300 dpi, 100 pages per minute or 200 images per minute can be continuously captured in colour or monochrome mode. At the same time, custom made CCD cameras enable brighter, more crisp and secure image capture of even oversized or extremely skewed documents, without losing information on the paper documents' outer margins.

### Multi-zoning reliability

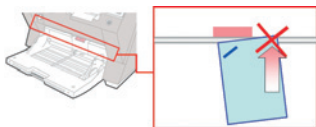
Ultrasonic sensors greatly increase the reliability of double feed detection, especially when processing mixed document types. The fi-5900C makes use of a combination of three individual ultrasonic sensors. These can be set to detect or ignore specified document zones, so attached labels are generally not misinterpreted. The sensitivity characteristics of the fi-5900C ultrasonic sensors enable correct identification of even extremely thick materials that often force comparable products into idling.



### Superior paper processing and continuous document protection

The fi-5900C combines paper transport characteristics that ensure safe and smooth processing. This starts when placing a document batch onto the scanner's feeder tray, which allows for any desired horizontal position by sliding the side guides accordingly.

The device then easily picks the document without having to apply special care to the first sheet. Physical stress is minimised to the extent that if sticky or stapled documents are included within the batch, the scanner's sensors identify an overskew incident and interrupt the scanning process to prevent the document from being harmed or destroyed.



Inside the scanner's chassis, multiple sensors monitor the alignment of a paper sheet, its speed and transport criteria. Any registration of abnormal paper behaviour will interrupt the transport process before the sheet would pass the scanning zone, thus protecting the high quality CCD modules from possible damage.

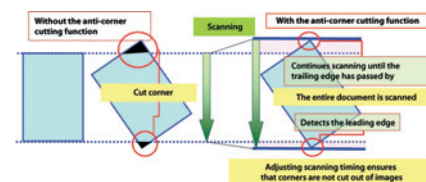
Documents that have passed the sensor zone are then captured within a long, 100% straight scanning zone featuring high speed CCD modules with ultra bright lamps. The images that are produced by these modules are crisper, sharper and show significantly less colour slippage.



When exiting the scanner body, documents are stacked on an active tray that lowers itself as the batch increases. Sheet by sheet is neatly stacked so the operator can quickly proceed with post processing after the batch has been completely captured.

### Complete corner capture

The fi-5900C features multiple sensors that recognise the leading and trailing edges of documents and monitor the paper's path through the scanner. They ensure that paper is scanned until the trailing edge has passed the scanning zone. This is additionally supported by the broader width of the custom made high speed CCD modules.



### VRS 4.0 Plus included

The fi-5900C is fully equipped with a Kofax VRS 4.0 Plus hardware module that can be used for adding advanced image enhancement operations to the scanning process. These can even be combined to receive digital document images that show high visual quality and require little or no additional manual interference. Some of the most advanced options include:

## 3 ultrasonic sensors capable of zoning

- Intelligent content orientation recognition and auto-rotation
- Auto colour detection: Without the need for separation sheets or patch codes VRS 4.0 Plus will automatically identify the colour characteristics of the original document and store each individual page accordingly. This increases processing speed and minimises storage requirements.
- Blank page detection: VRS 4.0 Plus reliably detects blank pages and deletes them, yet ensuring that pages containing even minimum content are captured and stored.
- Background saturation making it appear smoother and saving storage space required

Applying VRS 4.0 Plus advanced image enhancement functions to the scanning process might impact the actual scanning speed compared to the rated speed. This is due to processing time needed and does not indicate abnormal product behaviour.

### Paper handling features

- 100% straight paper path within capture zone
- Extremely low jam rate due to combination of paper path characteristics and torque control mechanism. This ensures smooth paper handling and low physical stress, protecting documents from destruction

## Very high speed up to 100 ppm / 200 ppm at 300 dpi in colour and mono

- Scans mixed batches of paper documents (quality, size, paper weight, can vary significantly)
- Comfortable feeding of different volume batches by adapting the hopper height to three optional positions
- Left, right or centre position alignment of document batches according to individual operator needs or document specifics
- Continuous manual feeding mode using the regular hopper
- Multifeed detection using three different operator definable methods:
  - Multi-Zoning Ultrasonic sensors that can be specified to monitor or ignore defined document segments
  - Paper length detection
  - Combined mode activating ultrasonic and paper length detection

### Image quality features

- Scan in monochrome, grayscale or colour
- Optical resolution of up to 600 dpi
- Scan at the same rated speed when using optical 300 dpi setting in all colour modes
- Multi-stream mode available for simultaneously creating two images in different colour modes
- Supports drop out colour definition of any available colour
- Automatic de-skew
- Automatic colour detection
- Anti-Corner cutting enabled by overskew control

### Image processing features

- Auto-Binarisation
- Continuous, almost uninterrupted scanning operation, since the fi-5900C recalibrates on the fly without operator intervention
- Enables blank page detection and automatic discarding
- Custom made CCD modules that capture document information within a horizontal range of 317mm. This results in de-skewing documents from 6° to 24° depending on their format.
- Wide range of image file formats including TIFF, BMP, JPEG and PDF

### ROI features

The fi-5900C has one of the lowest operating costs associated with it, with the cost for consumables per page averaging below €0.0003

- Highly competitive device price
- Long durability consumables: 600,000 sheets for PAD Assembly, Pick Roller, Separation Roller and Brake Roller
- All consumables operator exchangeable
- Automatic operator notification of consumable change cycle
- 100,000 sheets per day duty cycle
- Small footprint (reduced by up to 35% to comparable products) significantly decreasing space required
- Optional Pre- and A3+ size Post-Imprinter

#### Example of actual utilisation time

8 hours A4 portrait: 50,000  
8 hours A4 landscape: 70,000  
12 hours A4 landscape: 100,000

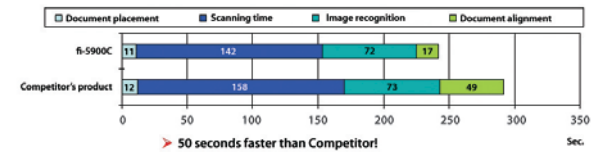
→ fi-5900C is suitable for two-shift utilisation

- Field tested high day-to-day productivity
- The fi-5900C operates to scan more documents in a defined period of time than even higher rated competitor's products

### Scanned documents

(8 hours, including 1 hour rest) Scanned documents: A5, landscape, NCR. Scanning conditions: Colour, 200 dpi, A3 settings, duplex ADF, auto-size detection, using scanner's memory, JPEG (4)

<b>fi-5900C</b>	<b>42,000 sheets</b>
Higher rated competitor's model	31,000 sheets



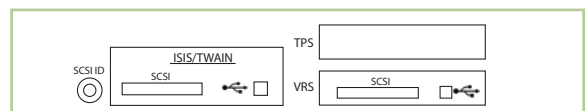
The actual time needed to scan a single batch of 400 documents in the same field test has proved to be significantly lower, when using the fi-5900C.

### Operator centric features

- Extended language support to 8 major languages for driver, manuals and panel
- Active stacking tray for neat batches and operator support; prevents paper sheets from curling
- Low noise operation rated below 55 dB
- Easy cleaning access to all consumable and paper path areas
- When not in use, closing the hopper module minimises dust settling at night from penetrating the interior of the scanner
- Storage box on top of the scanner for providing set of consumables at hand when needed

### Connectivity features

- Choice of interface module connections
- Standard module for ISIS/TWAIN operation with UW-SCSI and USB 2.0 interfaces that support Auto-Binarisation.
- Fully equipped Kofax VRS 4.0 Plus hardware module with UW-SCSI and USB 2.0 interfaces
- Third Party Interface





## fi-5900C Specifications

<b>Product name</b>	fi-5900C	
<b>Scanner type</b>	ADF and manual feed	
<b>Scanning modes</b>	Simplex / duplex, colour, grayscale, monochrome	
<b>Imaging sensor type</b>	Colour CCD x 2	
<b>Light source</b>	White cold cathode discharge lamp	
<b>Scanning range</b>	Maximum: A3: 297 x 420 mm Minimum: A8 (portrait): 53 x 74 mm	
<b>Paper weight (thickness)</b>	31 to 209 g/m <sup>2</sup> (52 to 157 g/m <sup>2</sup> for B4 sheets or larger)	
<b>Scanning speed (A4 portrait)</b>	Colour/Grayscale/Mono Simplex: 100 ppm / Duplex: 200 ipm (200 / 300 dpi)	
<b>Paper chute capacity</b>	500 sheets (A4: 80 g/m <sup>2</sup> )	
<b>Background colours</b>	Black or white (switchable)	
<b>Optical resolution</b>	600 dpi (maximum)	
<b>Output resolution</b>	Colour/Grayscale/Mono 50 to 600 dpi (can adjust by 1 dpi increments)	
<b>Output format</b>	Colour: 24 bit, Grayscale: 8 bit, Monochrome: 1 bit	
<b>AD converter</b>	1024 levels (10 bit)	
<b>Interface</b>	1 x TWAIN / ISIS module with Ultra wide SCSI and USB 2.0 / USB 1.1 1 x Kofax VRS 4.0 Plus module with Ultra wide SCSI and USB 2.0 / USB 1.1 1 x Third Party module slot	
<b>Connector shape</b>	SCSI: Shield type 68-pin (pin type), USB: B type	
<b>Output mode (half-tone)</b>	Dither / error diffusion	
<b>Voltage or voltage range</b>	AC 100 to 240V, +10% / -10%	
<b>Power consumption</b>	Operating: 250 W or less (Sleep mode: less than 12 W)	
<b>Operational environment</b>	Temperature: 15° to 35°C / Relative humidity: 20 to 80% (Non-condensing)	
<b>Dimensions (W x D x H)</b>	540 x 540 x 500 mm	
<b>Weight</b>	50 kg	
<b>Bundled software</b>	TWAIN, ISIS™, ScandAll 21, Kofax VRS 4.0 Plus, Adobe® Acrobat® 7.0 Standard, Software Operation Panel, Visual Error Recovery Guide, Image Processing Software (trial version), QuickScan (demo version)	
<b>Environmental compatibility</b>	ENERGY STAR® and RoHS	
<b>Others</b>	Multi-feed detection	3 ultrasonic multi-feed detection sensors
	Long paper scanning	up to 863 mm
	Paper counter	Equipped



ENERGY STAR® compliant

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## fi-5900C Options

Item name	Model number	Remarks
Pre imprinter	PA03450-D700	prints on the front of documents
Post imprinter	PA03450-D710	prints on the back of documents

## fi-5900C Consumables

Item name	Model number	Remarks
Pad assembly	PA03450-K014	Lifetime: Every 600,000 sheets or one year
Pick roller assembly	PA03450-K011	Lifetime: Every 600,000 sheets or one year
Brake roller	PA03450-K013	Lifetime: Every 600,000 sheets or one year
Separator roller	PA03450-K012	Lifetime: Every 600,000 sheets or one year
Printer cartridge	CA00050-0262	Lifetime: 4,000,000 printed characters. fi-590PRF / fi-590PRB print heads

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