KONICA MINOLTA

magicolor
5650/5670EN

sales guide

DO BUSINESS_BETTER

magicolor 5670EN

magicolor 5650EN

The essentials of imaging

Contents

1. Introduction

Overview

The magicolor 5650EN and 5670EN will complement the magicolor 4650 in the range of departmental network printers. Both models have PS/PCL capability, with the main difference between the two being print speed and processing power.

As one of the very few models on the market with a 2-bin staple finisher option, the magicolor 5650EN and magicolor 5670EN is even more attractive to the demanding office user.

Print Method	Electrophotographic Laser
Processor	5650EN 733MHz; 5670EN 867MHz
Print Speed	5650EN 30 ppm mono & colour; 5670EN 35ppm mono and colour.
Resolution	PhotoART 9600 (600 x 600 x 4-bit contone)
Duty Cycle	up to 120,000 prints per month
Memory	256MB standard; 1024 MB max
Interfaces	Gigabit Ethernet (10/100/1000BaseTX), USB 2.0, IEEE 1284 compatible Parallel Port, PictBridge 1.0.
Media Sizes	A4, A5, A6, B5, B5 (ISO), B6, letter, executive, photo size, legal, 16K, Kai16, Kai32, J-Postcard, executive, Government letter/legal, folio, double postcard, statement, SP folio, foolscap, custom (92-216mm x 148-1,200mm)
Media Weight	Up to 90gsm (all paper feeds) & up to 210gsm via manual feed tray
Media Input	**Standard** - 500 sheet lower feeder tray - 100 sheet manual feed tray **Optional** - 2 x 500 sheet lower paper feeder
Media Output	**Standard** - 250 sheets (face down) **Optional** - 600 sheet 2-bin staple finisher with sorting function
Print Media Types	Plain paper, thick paper, recycled paper, transparency, letterhead, envelope (C5, monarch, DL), labels, glossy paper and banner paper (216 x 1,200 mm)
Operating System Compatibility	**Windows®:** 2000/XP/XP64/VISTA / Server 2003 **Macintosh®:** OS X 10.2,3,4, 5. **Linux**: Red Hat v9.0, SuSe v8.2 **Netware:** Netware 4,5,6
Language Compatibility	Postscript 3 (3015), XPS*, PCL 6 (XL 3.0), PCL 5e/c
Warranty	1 year on-site warranty

* The optional hard disk kit enables secure printing, proof-then-print, print and host, job storing and XPS emulation in addition to all extra functions with CF card.
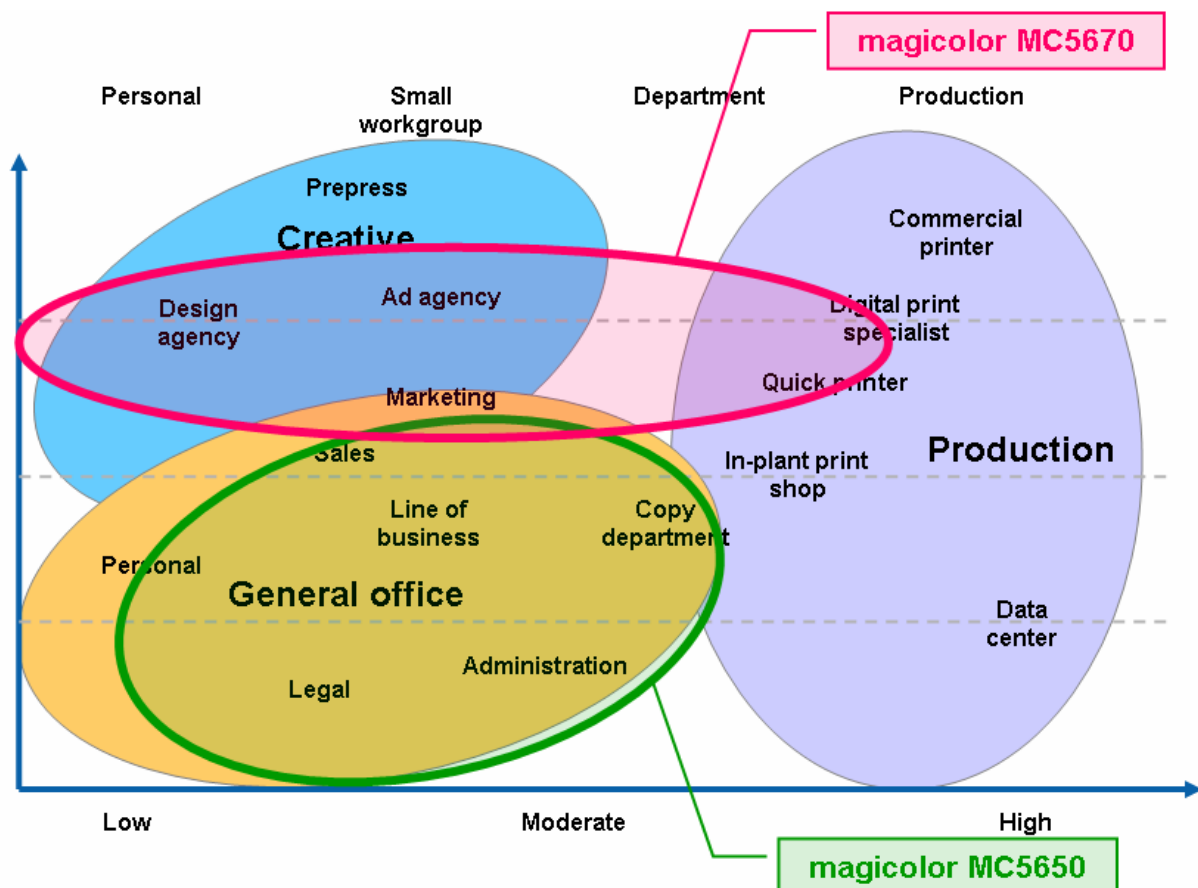
2. Target Market

Positioning Overview

The difference in specification between the magicolor 5650EN and magicolor 5670EN means these printers serve different markets. Both printers will blossom in any type of office, but the magicolor 5670EN with its higher print speed and increased processing power will also find its way into advertising and design agencies, and other heavy-duty environments where high-quality and fast output is essential

The magicolor 5650EN may be a very suitable alternative to the casual user interested in general colour printing with high quality.

Target Markets

3. Key Selling Features

Fast prints in an instant

With a first page out in 16 seconds and subsequent colour and black and white prints following at 30 ppm on the magicolor 5650EN and 35 ppm on the magicolor 5670EN, the magicolor 5650EN/5670EN easily manages the busiest document traffic.

Equipped with new office standards

Among the first in the industry to support Vista-native XPS, the magicolor 5650EN/5670EN is completely equipped for today's business landscape.

Duplex, staple and deliver

Attach an optional duplex unit to either the magicolor 5650/5670EN for two-sided prints and help reduce the impact on the environment by using 50% less paper. By adding an optional finisher you can sort, offset stack and staple your documents ready for you to distribute amongst your business clients, partners and customers.

Broad media support

The magicolor 5650EN/5670EN uses an array of paper sizes, from postcard to banners (216 x 1200 mm). And it supports a variety of stocks including thick stock up to 210 gsm.

Advanced print duties

The printer's powerful optional 40 GB hard disk initiates advanced features including fonts and forms storage, secure printing, job collation and direct print. Alternatively, an optional compact flash card* can be added to access many of these advanced functions.

*Compact flash cards available only from 3rd-party vendors.

High-yield supplies—less downtime

Toner that yields 6,000 or 12,000 prints (CMY and K) puts an end to frequent replacement and user intervention. Select Economy Print and reduce toner usage on drafts and reference materials.

Quality and consistency

9600 x 600 dpi-equivalent resolution creates documents with brilliant, natural colour and realistic reproduction. Enhanced Automatic Image Density Control (eAIDC) further enhances prints by automatically calibrating the printer for flawless accuracy on all jobs—long or short.

Dual ASIC Chip

The new dual ASIC chip supports 3-object segmentation and Dual Image Processing. Documents may contain text, graphics and images, but effectively each requires its own printer settings to guarantee optimal results. Object Segmentation analyses each document to be printed and determines which parts contain text, graphics and images- and changes the printer's settings accordingly.

4. Emperon

Emperon Printer Architecture

The magicolor 5650/5670EN is based on the same printer architecture found in the magicolor 46xx series, magicolor 55xx series, magicolor 7450 and magicolor 8650DN, Emperon. Emperon is a combination of hardware and software technologies that, ultimately, results in a positive printing experience for every user.

Emperon provides:

- Superior performance from the time data is received off the network to the printed page.
- Unsurpassed compatibility with the most popular printing languages, operating systems, and network environments.
- Excellent colour quality with PhotoART 9600 (600 x 600 x 4-bit) resolution.
- Easy printer management for both general users and system administrators.
- Seamless integration of document output management with a consistent user interface and functionalities across all Konica Minolta next-generation products.

When combined with a demanding environment, this Emperon-driven engine delivers greater efficiency in document processing with little network impact.

5. Simitri HD Polymerised Toner

Compared to conventional toner, Konica Minolta's Simitri™ HD polymerised toner produces clearer prints and enhanced contours. Its unique particles are fine and uniform in size, giving outstanding quality that rivals offset printing.

Finer text, better halftones, consistent reproduction, in colour and B/W

At Konica Minolta, we give top priority to constantly improving the quality of our output, and continue developing toners which can keep up with the most advanced digital technology. Simitri HD, our next-generation Polymerized Toner, is manufactured using our unique polymerization method and will become the benchmark standard of high quality outputs in this new digital age. The first step in our polymerisation method is to synthesize resin particles about hundred nanometres (about one billionth of a meter) in diameter via emulsion polymerisation. Next, we chemically coagulate and fuse them in precise ratios, with additives for colouring, etc.

This unique process enables us to manufacture toners which produce extremely small coloured particles of a uniform diameter and shape. This allows an output very close to the quality of offset printing. Using this process, we can also add resin particles to provide a variety of additional properties. Adding wax-based ingredients, for example provides oil-less fixing to enable photo-quality colour printing.

Economic and Environmental Benefits of Simitri Toner

The polymerised toner is also much friendlier to our environment. It requires less energy in its manufacturing process than do conventional toners made by the traditional method of kneading and pulverizing. The amount of CO_2, NOx and SOx emissions, which contribute to global warming and acid rain, are cut by at least 40%.

Ongoing Research and Development

Konica Minolta invested US$422 million in research and development in 2004, so research into improved toner technology is ongoing with considerable resources devoted to continuous development. Investment in toner development demonstrates Konica Minolta's commitment to technical innovation at every level of product development including consumable items such as toner. Already two new plants are in full production and a third will be on-line shortly, bringing total production to in excess of 3000 tons per annum. With this continuous focus on developing the best toner technology we are confident to say Konica Minolta's next generation Simitri HD Toner is truly a product for the 21st century.

Simitri HD Toner – A Further Improvement on Our Original Simitri Toner

6. Contone

To generate photo-quality output with great detail and character in fine lines and half-tones, the magicolor 5650/5670EN offers 600 dpi (High Quality) resolution, also called 600 x 600 x 4 –bit contone quality.

Through a process called pulse width modulation, the magicolor 5650/5670EN also achieves very high levels of grayscale (colour levels or shades). It produces four bits or 16 levels of gray per dot for sharper prints or gradients. This is quite impressive when you compare to most printers which produce one bit or two levels per dot.

THE PROCESS	
On a 600 x 600 dpi printer, a laser beam can be on or off. 2 options, 600 times per inch. Subsequently, a printed dot can have only one size.	●
By using Pulse Width Modulation, the "on" time of the laser beam, can be controlled.	
On a 600 x 600 x 4-bit printer, a laser beam can be "on" or "off" in up to 2^4 = 16 options, 600 times per inch. Subsequently, a printed dot can have 15 different sizes.	● ● ● ● ● ● ● ● ● ● · ·

THE RESULT	
Traditional 600 x 600 dpi needs many (i.e. 16) normal size pixels to "mix" one colour i.e. "light green"	PERCEIVED BY THE HUMAN EYE AS LIGHT GREEN
With contone, the same "light green" can be achieved with one single dot, by printing a small cyan dot on top of a larger yellow dot.	
This leaves the other 15 dots for more details.	
A traditional 600 x 600 dpi would need all 16 dots to "mix" the light green. Contone can produce the same light green in one dot, leaving the other 15 for smoother gradients.	

7. Configuration

Large capacity staple finisher
(Optional)

Automatic duplexer
(Optional)

100-sheet MPT
(Standard)

500-sheet A4 cassette
(Standard)

500-sheet lower feeder

8. Competition

	magicolor 5650EN	magicolor 5670EN	HP CLJ4700n	HP CLJ4005n	Lexmark 780n	Xerox Phaser 6360DN
Print Speed (mono)	30	35	30	30	33	40
Print Speed (colour)	30	35	30	25	29	40
Print Resolution	PhotoART 9600 (600 x 600 x 4 bit contone)	PhotoART 9600 (600 x 600 x 4 bit contone)	HP ImageREt 3600	HP ImageREt 3600	1200 x 1200 dpi, 4800 Colour Quality (2,400 x 600 dpi	2400 x 600 dpi
Processor	733 MHz	867 MHz	533MHz	533MHz	800/133 MHz	1 GHz
Automatic Duplexing	Optional	Optional	Optional	Optional	Optional	Standard
Paper input	**Standard** 500 sheet lower feeder; 100 sheet multi-purpose tray **Optional** 2 x 500 sheet lower feeder units	**Standard** 500 sheet lower feeder; 100 sheet multi-purpose tray **Optional** 2 x 500 sheet lower feeder units	**Standard** 500 sheet drawer; 100 sheet multi-purpose tray **Optional** 500 sheet lower drawer	**Standard** 500 sheet drawer; 100 sheet multi-purpose tray **Optional** 500 sheet lower drawer	**Standard** 500 sheet drawer; 100 sheet multi-purpose tray **Optional** 500 sheet lower drawer	**Standard** 550 sheet drawer; 150 sheet multi-purpose tray **Optional** 500 sheet lower drawer 1100 sheet High capacity feeder unit (2 x 550 sheet drawers)
Paper Output	**Standard** 250 sheet face down paper tray **Optional** 600 sheet 2-bin staple finisher	**Standard** 250 sheet face down paper tray **Optional** 600 sheet 2-bin staple finisher	**Standard** 500 sheets face down	**Standard** 500 sheet face down in bin **Optional** 700 sheet finisher (stapler / stacker with job offset)	**Standard** 250 sheets	**Standard** 250 sheets
Memory	256 MB (standard); 1,024MB (max)	256 MB (standard); 1,024MB (max)	160MB (standard); 512 MB (max); 32 MB Flash Memory	128MB (standard); 512 MB (max)	256 MB (standard); 768 MB (max)	256 MB (standard); 1,024MB (max)
Interfaces	Gigabit Ethernet, USB 2.0, IEEE 1284 Compatible Parallel Port, PictBridge 1.0	Gigabit Ethernet, USB 2.0, IEEE 1284 Compatible Parallel Port, PictBridge 1.0	Parallel; USB 2.0; Embedded Jetdirect wired fast Ethernet; 2 x open EIO slots; 2 x flash memory card slots; foreign interface for third party paper handling solutions; accessory port for third party solution	USB 2.0; Jet Direct fast Ethernet	front panel direct USB; rear USB 2.0; 10/100BaseTX Ethernet; internal card slot	USB 2.0; 10/100BaseTX Ethernet

Emulations	PS3, PCL 6 (XL 3.0), PCL 5e/c, XPS (Version 1.0)², PDF, JPG,TIFF	PS3, PCL 6 (XL 3.0), PCL 5e/c, XPS (Version 1.0)², PDF, JPG,TIFF	PCL6; PCL5c; HP Postscript Level 3 emulation; direct PDF printing v 1.4	PCL6; PCL5c; HP Postscript Level 3 emulation; direct PDF printing v 1.4	PCL5c; PCL6; PPDS; Postscript 3 emulation; xHTML; PDF v 1.5; Direct Image	PCL5c; Postscript 3
Monthly Duty Cycle	120,000	120 000	80,000	100,000	120,000	100,000
First page out (mono)	16 sec or less	16 sec or less	from 10 secs	from 10 secs	11 secs	9 secs
Dimensions (W x D x H)	420 x 526 x 420 mm	420 x 526 x 420 mm	521 x 598 x 582 mm	521 x 598 x 582 mm	604.5 x 470 x 528 mm	429 x 580 x 513 mm

9. Part Numbers

Printer and Options

ITEM	PART NUMBER
magicolor 5650EN	A0EA041
magicolor 5650D (Standard with Duplex)	A0EA141
magicolor 5650DT (Standard with Duplex and Lower feeder unit)	A0EA241
magicolor 5650DTS (Standard with Duplex, Lower feeder unit, Finisher and HDD)	A0EA341
magicolor 5670EN	A0EA042
magicolor 5670D (Standard with duplex)	A0EA142
magicolor 5670DT (Standard with Duplex and Lower feeder unit)	A0EA242
magicolor 5670DTS (Standard with duplex, Lower feeder unit, Finisher and HDD)	A0EA342
magicolor 5500/5600 series – 1 year warranty uplift	2605500-600
magicolor 5500/5600 series – 2 year warranty uplift	2605500-700

Consumables

ITEM	YIELD (5%)	PART NUMBER
mc5500/5600 Black Toner Cartridge	6,000	A06V192
mc5500/5600 Yellow Toner Cartridge	6,000	A06V292
mc5500/5600 Magenta Toner Cartridge	6,000	A06V392
mc5500/5600 Cyan Toner Cartridge	6,000	A06V492
mc5500/5600 Black Toner Cartridge	12,000	A06V193
mc5500/5600 Yellow Toner Cartridge	12,000	A06V293
mc5500/5600 Magenta Toner Cartridge	12,000	A06V393
mc5500/5600 Cyan Toner Cartridge	12,000	A06V493
mc5500/5600 Toner Value Pack CMY	6,000	A06VJ92
mc5500/5600 Toner Value Pack CMY	12,000	A06VJ93
mc4600/5500/5600 Black Print Unit	30,000	A03100K
mc4600/5500/5600 Yellow Print Unit	30,000	A03105K
mc4600/5500/5600 Magenta Print Unit	30,000	A0310AK
mc4600/5500/5600 Cyan Print Unit	30,000	A0310GK
mc4600/5500/5600 Cyan Print Unit Value Pack CMY	30,000	A0310NK
mc5500/5600 Waste Toner Pack 2WTB per box	2 x 36,000	A06X0Y3
Staples for mc5500 / 5600 /mc8600 Finisher	15,000	14YK

10. Online Support

Website

Visit www.printer-konicaminolta.com for the latest news, updates and drivers for the magicolor 4695MF, and information about other laser printers within the Konica Minolta line up.

11. Information

SALES

Australia
Tel: +61 2 9878 5333
Fax: +61 2 8873 6653
Sales Free Call: 1800 265 687
sales@bpa.konicaminolta.com.au

New Zealand
Tel: +64 9 475 5299
Fax: +61 9 476 7824
Sales Free Call: 0800 490 061
Justine.Twemlow@bt.konicaminolta.com.au

TECHNICAL SUPPORT (FREE CALL)

Australia: 1800 456 999
New Zealand: 0800 443 687