

SPECIFICATIONS

Type	Desktop
Printing/copying process	Indirect electrostatic photographic method
Original scanning method	CCD line sensor
Paper output capacity (80gsm, A4)	Standard: 550 Sheets (Inner exit tray) Optional: 900 Sheets (MJ1022 finisher) 2000 Sheets (MJ1023/1024 finisher) 150 sheets (inner exit tray)
Standard paper supply	2 x 550 sheet cassettes, 100 sheets (Bypass)
Optional paper supply	Paper Feed Pedestal (PFP) 1 x 550 sheets 1 x 550 additional sheet cassette for PFP or 2,500 sheets Large Capacity Feeder
Max paper capacity	3,700 sheets
Supported paper weights	Standard 64gsm-105gsm (drawers and duplex) 64gsm-209gsm (bypass)
Auto Duplex Unit (standard)	Continuous (64-105gsm)
Paper size	Standard: A3-A5R (Drawer), A3-A6R, (Bypass) Optional: A3-A5R (Paper Feed Pedestal and optional cassette) A4 (Large Capacity Feeder)
Warm up time	Approx 40 sec
Power consumption	Max. 1.7kW (220 - 240V)
Dimensions (WxDxH) & Weight	W660 x D742-758 x H739 (mm), 113kg
Counter	Electrical - 9 Kinds
Network/Device Management	Top Access, TopAccessDocMon, Address Book Viewer, Service Notification General Machine Notification via Email, Web Jadmin Plug-in ³

e-BRIDGE

Processor	Freescalar 7447/ 600MHz (Shared for all imaging functions)
Memory	256MB Main Memory std (Expandable to 512MB*2) 128MB Page Memory std (Expandable to 256MB*1)
Hard Disk Drive	80GB+ Shared

Copy Functions (Standard)

Original Size	A3-A5R
Resolution	Scanning 600 x 600 dpi Printing 600 x 600 dpi (B/W 2400 x 600 dpi with smoothing)
Gradation	256 steps
Copy speed	B/W 28/35/45cpm (A4), Colour 11cpm (For all 3 models)
First copy out time	B/W 6.8 sec, Colour 16.2 sec
Multiple copying	1 to 999 copies
Zoom	25-400%
Control panel (Adjustable)	LCD touch screen key pad with QWERTY keyboard
Colour Mode	B/W (default), Full Colour, Auto Colour Selection, Twin Colour
Copy mode	B/W: Text, Text/Photo (Default), Photo, Image smoothing Full Colour: Text, Text/Photo, Photo, Printed Image, Map Interrupt, Zoom Indicator, Dual Page, Edge Erase, Image Shift, Trimming/Masking, Department Codes (1000), 10,000 User Codes, Job Memory (Templates), Auto Cassette Change, Cover/Insert Sheet, Negative/Positive Copy, Mirror
Major features	Electronic Sort, Alternation, Magazine Sort, 2 in 1, 4 in 1, 8 in 1 Duplex, Rotation Copy, Colour Image Adjustment, Document Storage (e-FILING)

Electronic Filing Functions (Standard)

Number of Boxes	Public Box:1, User Box: 200
Number of Folders	100 folders per Box
Number of Documents	400 documents per Box/Folder
Number of Pages	200 pages per document
Capacity of HDD	10GB
Input to Box	Copy to Box, Print to Box, Received Fax/Fax to Box, Scan to Box
Box NW Access Applications	TWAIN Driver, File Downloader, e-BRIDGE Viewer

e-BRIDGE Enabled Print Function (Standard)

Printing speed	B/W 28/35/45ppm (A4) Colour 11ppm (For all 3 models)
Print resolution	B/W 2400 x 600 dpi (with smoothing) Colour 600 x 600 dpi (1200 x 600 dpi with expansion memory*1)
Printer drivers	Windows98/Me/2000/XP/2003 Server (only 32Bit), Windows NT4.0, Macintosh 9.X, X ver 10.1/10.2/10.3 Unix (HP-UX 10.20/11.X, Sun Solaris 2.6,2.7,7.8,8,IBM AIX, Linux)
Interface	Parallel (IEEE 1284) Optional, 10/100 BaseTX, USB (Full Speed)
Network OS	Windows/NT, Netware
Network protocols	TCP/IP, IPX/SPX, Ether Talk, NetBIOS over TCP/IP
PDL	PCL6, PCL5c, PostScript 3 (Emulation)
Major features	Proof Print, Private Print, Scheduled Print, Booklet, Cover/Insert, Front/Back Cover Insertion, Page Insertion, Save to Box (e-Filing), Watermark

e-BRIDGE Enabled Scan Function (Standard)

Scanning Speed	B/W 50spm (A4 150 to 400dpi), 45spm (A4 600dpi), Gray scale 45spm (A4 100-600dpi*1) Colour 40spm (A4 100-300dpi), 20spm (A4 400 to 600dpi*1)
Scanning Mode	B/W, Grayscale, Colour, Auto Colour Selection
Scanning Resolution	B/W: 600, 400, 300, 200, 150 dpi, Gray scale: 600*1, 400, 300, 200, 150, 100 dpi Colour/ACS: 600*1, 400*1, 300, 200, 150, 100dpi, *Optional Memory Required
File Format	B/W: TIFF-MMR, PDF-MMR, Gray Scale/Colour: JPEG, TIFF-JPEG, PDF-JPEG Auto Colour Selection: TIFF-MMR(B/W), TIFF-JPEG(Colour), PDF
Compatibility	TWAIN (e-FILING)
Major features	2-sided Scan, Image Rotation, Mixed Size Paper Scanning, Scan to Email, Scan to File (SMB,FTP), Scan to e-Filing, Template Function - 12,060

e-BRIDGE Enabled Internet Fax Function (Standard)

Connectivity supported	T.37 (Simple Mode)
TX Resolution	200dpi
Format of send attachment	Tiff-S
Scanning original document size	A3-A5R - Note Image will be reduced to A4 size and transmitted when original is A3 or B4
Major features	On ramp gateway (through mailbox), off ramp gateway, telephone book (1,000 destinations)

*1 - Requires Optional GC-1181
*2 - Requires Optional GC-1230
*3 - Due for later release

OPTIONS

RADF (Reverse Automatic Document Feeder) MR-3018	
Original feed speed	45 Originals / min (A4)
Stack capacity	100 sheets (A3-A5R) face-up
Original size and weight	A3-A5R, 50-209gsm (single sided), 50-160gsm (double sided)
Dimensions (WxDxH) & weight	600mm x 523mm x 135mm 12.5 kg
Platen Cover KA-3511PC	
For operation without RADF	
Paper Feed Pedestal KD-1011	
Paper supply	550-sheet cassette
Paper size and weight	A5-R-A3 (64-105gsm)
Dimensions (WxDxH) & weight	530 mm x 577 mm x 320 mm, 21.5 kg
Drawer Module MY-1021	
Paper supply	550-sheet cassette
Paper size and weight	A5-R-A3 (60-105gsm)
Dimensions (WxDxH) & weight	526mm x 569mm x 107mm, 3.8 kg
Large Capacity Feeder KD-1012A4	
Paper supply	2500 sheets
Paper size and weight	A4, (64-105gsm)
Dimensions (WxDxH) & weight	530 mm x 577mm x 307.5 mm, 27 kg
Desk MH-1700	
For use in place of KD-1011 or KD-1012A4	
Work Tray KK-3511	
Convenient working area	
Bridge Kit KN-3520	
Required for installation of the MJ-1022, MJ1023 and MJ1024 Finishers	
Finisher (Hanging Type) MJ-1022 (For Use With 281C and 351C Only)	
Trays	2
Paper size and weight	A5R-A3 (50-209gsm)
Staple type	Single position
Staple capacity	30 sheets (A4, A4-R, B5/80gsm) 20 sheets (B4/80gsm) 15 sheets (A3, FOLIO/80gsm)
Tray capacity and paper weight	Non-sort/Sort/Group: Top Bin - 200 sheets (A4-A5R), 140 sheets (B4), 100 sheets (A3), 80gsm, Bottom Bin - 700 sheets (A4-A5R), 490 sheets (B4), 350 sheets (A3), 80gsm. Staple sort: Top Bin - 30 sets or 170 sheets (A4), 30 sets or 110 sheets (B4), 30 sets or 80 sheets (A3), 80gsm, Bottom Bin - 50 sets or 600 sheets (A4), 50 sets or 400 sheets (B4), 50 sets or 300 sheets (A3), 80gsm
Dimensions (WxDxH) & weight	451mm x 539mm x 590mm 17kg
Multiposition Stapler MJ-1023	
Trays	2
Tray Capacity	Non-sort/Sort/Group: Top Bin - 1000 sheets (A5R-A4), 500 sheets (A4R-A3), 80gsm, Bottom Bin - 1,000 sheets (A5R-A4R), 500 sheets (A4-A3), 80gsm. Staple sort: Top Bin and Bottom Bin - 30 sets 147mm or 1000 sheets (A4), 30 sets 74mm or 500 sheets (A4-A3), 80gsm
Dimensions (WxDxH) & weight	536mm x 657mm x 1,086mm, Approx 39kg
Staple capacity	50 sheets (A4, 80gsm)
Staple type	Multiposition 5 Types
Saddle-Stitch Finisher MJ-1024	
Trays	2
Tray Capacity	Non-sort/Sort/Group: Top Bin - 1000 sheets (A5R-A4), 500 sheets (A4-A3), 80gsm, Bottom Bin - 1,000 sheets (A5R-A4R), 500 sheets (A4-A3), 80gsm. Staple sort: Top Bin and Bottom Bin - 30 sets 147mm or 1000 sheets (A4), 30 sets 74mm or 500 sheets (A4-A3), 80gsm
Dimensions (WxDxH) & weight	536mm x 657mm x 1,086mm, Approx 39kg
Staple capacity	50 sheets (A4, 80gsm)
Staple type	Multiposition 5 Types
Saddle Stitch	Staple Capacity 15 sheets (80gsm)
Paper Size	A3, B4, A4-R (60-80gsm)
Folding	Centre folding
Stack Capacity	11-15 sheets; 10 sets, 6-10 sheets: 20 sets, less than 6 sheets: 25 sets
Hole Punch Unit MJ-6004E/F	
2/4 Holes - Units available for the MJ-1023 and MJ-1024 Finishers Only	
Dimensions (WxDxH) & weight	112mm x 617mm x 318mm 9kg
Fax Board GD-1200EU	
Useable circuits	Public switched telephone network (PSTN)
Communication mode	Super G3, G3
Number of lines	1 line, (2nd line optional)
Modem speed	Max 33.6 kbps
Data compression	JBIG, MMR, MR, MH
Transmission speed	Approx 3 seconds per page
Scanning mode	Text, Photo/Text, Photo: B/W ONLY
Grey Scale	256 levels (error diffusion)
Major features	Telephone book (1,000 destinations), Broadcasting, Automatic redialing, Group dialing (200 groups, 400 destinations per group), Chain Dialling, Delayed Transmission, Recovery Transmission, Polling, Mailbox (F-Code), Batch transmission, Network Fax Driver
Fax Board GD-1160EU-N	
2nd Line Fax	
Expansion Memory GC-1181	
Optional Page Memory for Scan and Colour Print Resolution (128MB)	
Expansion Memory GC-1230	
Optional Memory for Processor (256MB)	
Wireless LAN Module GN-1040	
Requires GN-3010	
Bluetooth Module GN-2010	
Requires GN-3010	
Antenna GN-3010	
1 Required for each Wireless LAN and Bluetooth Modules	
Scrambler Board GP-1040	
Encrypt Data on Hard Disk	
PCI Slot GO-1060	
Prerequisite for installation of the scrambler board	
Data Overwrite Kit GP-1060	
Overwrites dynamic data on the HDD	
Parallel Interface Kit GF-1140	
Optional Interface for Parallel Printing (PCI Required - GO-1060)	

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your
possibilities

e-STUDIO 281c
e-STUDIO 351c
e-STUDIO 451c

Colour Enhanced Black & White Productivity
All the office systems you'll ever need in one Toshiba

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The Case for Colour

The use of colour in everyday business documents has expanded dramatically over the past couple of years. That just follows on from general trends. Who can imagine life without a colour PC monitor? Most mobile phone screens are colour, and does anyone really own a Black & White television any more?

There's no doubt that colour – or the appropriate use of colour – really does make a difference to a business. Colour automatically draws the eye towards certain highlighted information. Colour improves impact, appearance and perceived professionalism. Colour improves communication, especially for charts, diagrams and PowerPoint presentations.

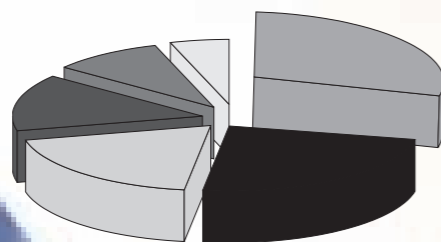
Research conducted recently by a US University gave some hard facts about the impact of colour.

Compared with the same mono information, the use of colour meant:

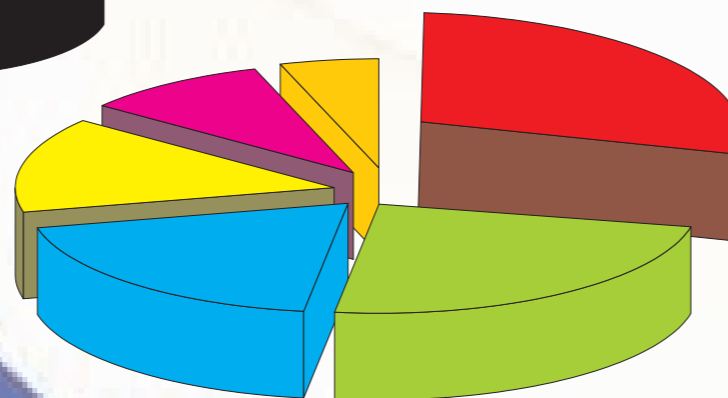
- **Attention increased by 16%**
- **Company logos/names recognition/recall increased by 80%**
- **Learning/Recall increased by 78%**
- **Understanding/Clarity increased by 73%**

It's clear that for internal and external audiences in business, education, training and virtually any other sector you can think of, colour vastly improves communication!

Colour is convincing!
Colour inspires and motivates!
Colour makes an impact!
Colour sells!



Colour Enhanced . . .



The Colour Conundrum

Desirable though colour may be, most general business users have been forced to restrict colour to in-house studios or centralised print rooms. The real colour conundrum is how to meet the growing demand from 'general business users' for more colour in their everyday documents in the most cost-effective way possible. As more people start demanding colour output, you need a machine with the processing power, print speed, low cost per colour page and some means of controlling colour access to make everyday colour viable.

Inkjet printers fail on several counts. They may be relatively cheap to buy, but are slow, have highly restricted finishing capabilities, usually can't handle anything other than A4 and require very expensive consumables. Colour laser printers come close, but still have high running costs, limited processing power and usually don't offer the range of paper handling or finishing options that you would expect of any mid-volume MFD device.

Many organisations have therefore been reluctant to bring colour into the general office environment as capital and running costs for existing technologies are very high. Colour use, although highly beneficial, has often been restricted to senior management or specific departments. Sometimes colour production is outsourced to copy shops – a very expensive option!

Controllable Colour Without Compromise

What's needed is a truly "universal" Multifunctional Device (MFD) with the ability to output both Black & White and colour copies/prints on the same unit. An authentic Black & White MFD system, offering all the speed, functionality, network capability, high productivity, high image quality, high reliability with the additional benefit of colour as required.

After all, convincing though the case for colour may be, the majority of documents output in any business (as much as 70%) are still largely Black & White. Accommodating the general demand for colour in your business does not mean you should compromise performance and productivity for your routine office print needs.

You need a device that will maintain a low Mono cost per page and still offer you the functionality, productivity and security you'd expect of any business-critical networked MFD device together with the ability to control colour usage and cost over your network or at the machine.

You need the e-STUDIO281c/351c/451c

Now general office users can output in colour as required while maintaining the "look and feel" productivity and functionality of a mid/high volume Black & White MFD. These are not graphics colour devices and consequently users are not expected to pay "graphics standard" prices.

The machines do provide a business workgroup resource that will deliver the colour quality expected in typical business documents while maintaining the speed, productivity and cost effectiveness you demand in any Mono MFD.

They remain genuine Black & White MFD systems, designed from the 'ground up' to be colour capable, fully connectable, cost-effective and above all controllable!

e-STUDIO281c/351c/451c

The Multi-Talented Solution

These devices really are all the office systems you'll ever need in one Toshiba. Incorporating copy, print, scan, fax and colour in one compact unit, these Toshiba systems maintain low Black & White running costs by using a 4-pass colour system.

Mono output is completely separate from the colour process, with the machine employing CMY only as and when required.

Toshiba's Next Generation e-BRIDGE "all-in-one" Controller technology means that the full range of functionality is built into the machine from the moment you open the box. No need to upgrade, add boards or wait for a field visit, you are enabled from the word GO!

e-BRIDGE allows significant increases in productivity for processing concurrent copy, print, scan and fax jobs and it's e-BRIDGE that enables both enhanced control and security as well as the ability to seamlessly integrate a number of software and solutions products that will enhance productivity and make your Toshiba even better value for money.

Communication and Convenience

Fast Black & White Output:

The e-STUDIO281c/351c/451c offers all the functionality of leading-edge Toshiba MFD technology. At 28, 35 and 45 ppm respectively, you'll notice their power and performance immediately.

Colour at 11 ppm: At a cost per page only very slightly above that for a Mono copy, but substantially cheaper than conventional alternatives, crisp colour copies are delivered at a speed that will satisfy, but also help you control usage.

Fast Warm Up: You'll get on-line quicker with Toshiba thanks to patented IH Fusing technology that delivers a print-ready system in only 40 seconds – one of the fastest warm-up times of any colour or Black & White system available!

Duplex as Standard: Continuous automatic duplexing means you can save costs by making double sided copies at the rated engine speed – no slowing down, no decrease in productivity.

Paper Handling: To match high productivity you need high paper capacity. From A5R to A3+, the e-STUDIO281c/351c/451c boast a total of 3,700 sheets online with the addition of an LCF unit.

Network Scanning: These Colour-Capable e-BRIDGE systems provide full colour scanning at speeds of up to 40 spm.

User Friendly: Operation is made simple with a fully adjustable 1/2 VGA LCD control panel that fully complies with the requirements of the 1995 DDA. It's tiltable for easy viewing by any operator and features large, easy to read icons as well as a genuinely usable full QWERTY keyboard for entering information such as email addresses. The incorporation of over 12,000 template functions for copy, scan and fax also makes life easier for any operator.



Capability and Control

The e-STUDIO281c/351c/451c are truly capable universal office MFDs. Next generation e-BRIDGE controller technology means you have a battery of features and functions that will enhance performance and security built right into the device.

A high capacity 80GB HDD offers impressive document storage capacity as standard. And expandable image and process memory means you will never compromise performance on copy, scan or network colour printing.

Optional Wireless LAN compatibility further extends the usability of these devices, supporting IEEE802.11b (WiFi) and Bluetooth standards.

Finishing options available throughout the range convert your e-STUDIO into a genuine document production centre. Multi-position stapler units, saddle stitch units and hole punch units as well as RADF units will ensure that throughput is maintained to match the engine speed and give you the ability to produce complete, professional, documents and booklets in Black & White, or full colour, or a mixture of both in one simple operation.

However, all this power and productivity, as well as the ability to output in full colour, is manageable and under your complete control thanks to a host of e-BRIDGE enabled functions and features. You can have total confidence incorporating these devices into your IT infrastructure – **connectivity with complete control.**

Private print and controlled print functions are easily enabled and you can access and assign 1,000 departmental codes or 10,000 individual user codes to either track usage or bar access to certain features, such as colour for example. You can if you wish establish limits to the number of colour copies/prints made by any given department or individual user.

You can be assured you remain in command of your vital data thanks to a battery of security measures and features built in as standard. Access and usage can be controlled via the control panel or Top Access utility.

Managing the balance between access and safety of data is achieved through a range of security management functions, including case-sensitive alphanumeric password selection and 10-digit admin passwords. Even higher security is assured through HDD encryption enabled by Toshiba's data compression technology. Scrambler Board and HDD overwrite capabilities are also available as options, enabling you to secure and protect your data held on the device

Even without the ability to output in colour, these systems would be remarkably impressive!

Designed to optimise productivity and performance in a networked environment, the e-STUDIO281c/351c/451c are more than capable office systems that will add value to your business.

You need not compromise on any feature or function you'd expect from a business-critical mid-volume MFD device and you gain colour into the bargain!

e-BRIDGE

The power, performance and versatility of the e-STUDIO281c/351c/451c depend upon the revolutionary Next Generation e-BRIDGE controller technology. e-BRIDGE enables the sheer capability of these devices, allowing for effective solutions for IT and machine security. e-BRIDGE also means you can extend the reach and performance of your Toshiba system by adding a variety of software and solutions packages, seamlessly and easily.

The e-BRIDGE system also incorporates a number of standard software features designed to add even more value and utility to your e-STUDIO MFD. With the same user interface and functionality as other e-BRIDGE models, it is a simple learn once operate all for real ease of use!

e-FILING

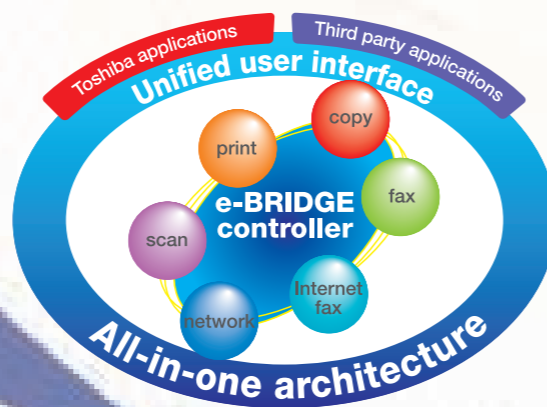
A remarkable image management and editing package that allows documents of any kind to be stored on the internal hard disk drive and retrieved as required from the MFD control panel or via a network interface and included utilities. Platform and application independent, documents from different sources such as copied, printed or scanned data, can also be "cut and pasted" to create entirely new documents. All this can also be managed from a simple to use Web browser front end.

The e-FILING function can have up to 200 private user boxes, and one public box. Each box can store up to 100 folders, with each folder containing as much as 80,000 pages. Each of the 200 user boxes offers password protection and all data can be easily accessed via a client PC or the control panel. Thumbnail displays allow stored data to be easily retrieved, edited or combined. Colour or mono documents can be stored in the e-FILING system and into e-FILING boxes or folders using copy, print and scan. These functions can be integrated, so that documents can be stored as well as copied, scanned to a network folder or sent to a number of email addresses. With the optional fax unit installed, received faxes can also be placed in an e-FILING box along with Internet fax documents.

Completed jobs can be output to any PC on a network through the use of the TWAIN Driver or the File Downloader utility supplied as standard with the e-STUDIO281c/351c/451c. A standard back up utility can also ensure that files stored on the e-FILING system can be backed and restored for peace of mind.

File Downloader

This TWAIN compliant application facilitates TWAIN scanning as standard within e-BRIDGE and allows the user to retrieve e-FILING documents in PDF, TIFF or JPEG formats. It will search and connect with other e-BRIDGE enabled systems on your network and allows you to schedule downloads of entire folders or boxes if using e-FILING as a document archiving or back-up storage system, storing and archiving documents on the HDD.



TopAccess™

This highly affective software allows a user or administrator to view both job and device status remotely via a Web browser with no need for additional software. Administrators can dynamically view and control the machine, build, configuration and error indications.

TopAccess also supports the creation and editing of templates to customise scanning to individual requirements and allows convenient management of the address book online.

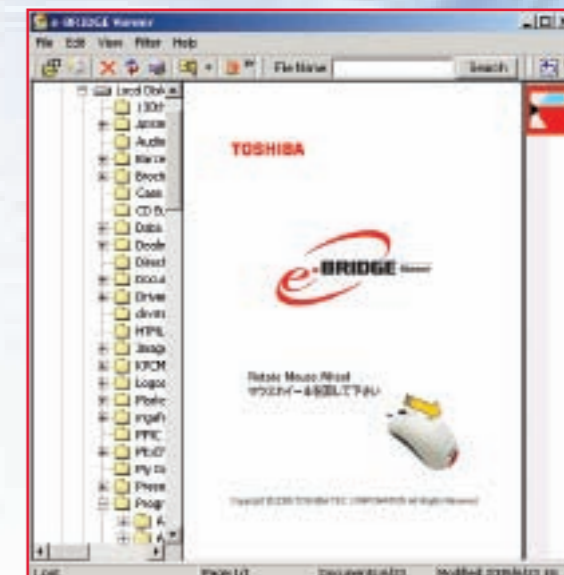
It also enables control of product-specific functions and device management features including templates, access code system, job status and print logs. More importantly the network administrator has total control of the device through a 10-digit password protected access for greater security. Network configuration, maintenance and machine settings are all under the surveillance and control of the administrator and can be altered in real time, offering genuine connectivity with complete control for your IT department.

e-BRIDGE VIEWER

As the name implies, this powerful software package allows the user a window on e-BRIDGE functionality at any time. It will find and display as full colour thumbnails scanned e-FILING documents and PC documents files without entering the full application. It's easy too, requiring no lengthy training. e-FILING documents can be auto downloaded as PDF's to a local PC disk drive and then included as full colour thumbnail images.

Like a pile of documents in your in tray, e-BRIDGE VIEWER will organise documents so that the most recent is first, or you can organise by most recently modified or most frequently requested.

It integrates with email so that e-FILING documents can be quickly found and sent as attachments. You can even add Post-It note style memos to any retrieved or identified document.



e-BRIDGE VIEWER also incorporates a fax alert function that notifies the user of incoming faxes, just as they would get on their email systems, if the fax functionality is enabled on any e-BRIDGE device.

eCOPY

Expand Your Capabilities

e-BRIDGE also enables you to seamlessly integrate a variety of solutions packages that will extend the reach and utility of your e-STUDIO281c/351c/451c even further.

eCOPY is a remarkable "middleware/firmware" product that connects a colour or black & white e-STUDIO MFD to your company's email and other networked applications providing a low cost, easy to use and instantaneous solution for the distribution and management of scanned documents. Thanks to eCOPY, all paper-based information can be integrated into your applications and document management system and shared in a simple, two-step operation.

It's the simplicity and compatibility of e-BRIDGE enabled devices that has facilitated the rapid implementation of eCOPY on Toshiba e-STUDIO281c/351c/451c.

With eCOPY and e-BRIDGE, information that existed only on paper (and tended to remain locked on paper) is no longer isolated from the information sharing made possible by network scanning on e-STUDIO MFDs and network Database/Web infrastructures.

