

SHARP®

Sharp IT Reference Guide



The Comprehensive Solution to
Better Manage Your Assets

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IT Managers: Helping You Simplify Your Life

As an Information Technology professional, you are no doubt faced with a unique set of challenges that pull you in many different and often conflicting directions. For example, you are forced to do more with less — supporting disparate assets throughout the sprawling enterprise with maximum interoperability and minimal resources. Internal policies and government regulations impose strict requirements on protecting the confidentiality of your information. You also aspire to reduce the impact of your operations on the environment through reduced energy consumption and recycling.

At Sharp, we understand your goals and the issues that impede your ability to focus on strategic organizational objectives. From developing award-winning multi-function peripherals (MFPs) that deliver impressive document workflows to facilitating the administration of devices wherever you are, Sharp technology empowers productivity beyond compare. Our innovative Sharp OSA platform expands the reach of your MFPs further into the organization and business processes and is supported by one of the largest developer networks in the industry. Sharp's security expertise is also among the most respected, having pioneered the first and most comprehensive solution for MFPs. And to help preserve the natural beauty of our environment, we have made a strong corporate-wide commitment to minimize the impact of Sharp products upon our planet.



Sharp's Commitment to Innovation

Since 1912, Sharp has been an innovator in electronics and office technology. From the Ever-Sharp pencil introduced in 1915 to a leader in the development of Liquid Crystal Displays and modern document technologies, Sharp's vision of quality and reliability is embodied in each and every product we deliver.

Our award-winning MFPs are no exception, and they provide sophisticated features and unparalleled reliability to dramatically improve document workflows and business processes throughout your entire organization. From copying, printing, scanning and faxing, to securely interacting with other network resources and business applications, Sharp MFPs can help boost productivity and minimize costs.

Throughout the years, Sharp has continued to redefine the role and importance of MFPs in business. As a result, we have been honored with top industry recognition through a list of prestigious awards. A prime example is the Sharp OSA platform, which provides advanced customization capabilities for MFPs to meet the unique needs of your business and has received accolades for delivering superior usability. Yet another Sharp-first is our Scan²™ technology that enables single-pass, double-sided scanning for increased efficiency and enhanced system reliability. Sharp's MFPs also offer the most comprehensive security features available, making them ideal for any environment in which confidentiality cannot be compromised.

The Recognized Technology Leader



- Sharp's MFPs awarded BLI's "Most Outstanding Line of the Year"



- Sharp's MFPs awarded BERTL's "Best Digital Imaging Product Line"



- Sharp OSA technology awarded BERTL's "Best Development Platform"



- Sharp awarded as "Most Secure MFP Range" by BERTL six years running (2004-2009)



- First to employ Scan² technology for faster productivity



- Developed My Sharp™, a 24/7 dedicated customer-training website customized for each user's configuration

Sharp's Dedication to Sales and Support

◆ Nationwide Coverage

Your relationship with Sharp doesn't end after you purchase an MFP. To ensure the highest level of satisfaction and support, Sharp stands behind every product through its nationwide network of professionals that are eager to work with you and address your specific needs. With both local representation and national reach, Sharp Business Systems and the Sharp network of over 400 independent authorized dealers provide the highest level of service and support to customers throughout the country.



We take pride in supporting the relationships forged by our direct sales team and local authorized dealers, which make it easier and faster to launch products that will continually add value and help enhance productivity. The extensive network of authorized dealers also enables us to support large corporate installations with offices throughout a region or spanning the country. This combination of responsive local management and nationwide support delivers outstanding experience for customers.

◆ Online Support and Training with My Sharp

When your users have questions or need training, the My Sharp website is available 24/7 to provide them with the answers they need to be more productive. The My Sharp website features helpful demonstrations about using the scan, copy, print and fax capabilities found on your specific Sharp products, as well as using related software solutions and ordering replacement supplies.

The My Sharp dedicated customer training website is not only customized to your Sharp product, it provides information specific to your exact configuration to help you maximize your investment. And as your business needs evolve, the My Sharp website provides the flexibility to grow with you into the future.



► [My Sharp Website](#)

Environmentally Friendly

◆ Respectful of Nature and Your Budgets

In 2004, Sharp established standards for developing Super Green Products with the goal of minimizing any environmental impact. We are continually implementing and improving product technologies, designs and programs aimed at environmental conservation — from the manufacturing and packing materials used, to their transportation, use and safe disposal at the end of their product life. In fact, all of our production facilities worldwide are ISO 14001-certified and all Sharp document systems belong to the ENERGY STAR® program, and RoHS program.



◆ Environmentally Advanced Technologies

Through unprecedented research and development efforts, we have succeeded in reducing the power consumption of our document solution products. Our new, state-of-the-art toner cartridges are one-fifth the size of conventional toner cartridges, requiring fewer packaging materials and significantly less power consumption. Our proprietary organic photoconductive drum unit also has an extended life of up to one million pages.

Furthermore, the newest generation of document systems (e.g., MX-2600/3100, MX-C311/C401, MX-4101/4100/5001 and MX-M283/M363/M453/M503) utilize Sharp's second generation micro-fine toner technology, which offers a lower consumption rate than conventional toners. Power consumption is among the lowest in the industry and supports two different energy saving modes to reduce or shut off power after a set interval.

◆ Sharp's Environmental Leadership

Testament to our commitment to the environment, in 2007, Sharp received the Excellence in Partnership Green Contractor Award as well as the Evergreen Award from the U.S. Government's General Services Administration and the Coalition for Government Procurement. The Green Contractor Award is awarded to the contractor who has made the best overall commitment to the environment by either offering environmentally friendly products and services, or adhering to environmentally sound manufacturing and/or operating procedures. The Evergreen Award recognizes environmentally responsible business partners and their efforts in recycling, waste reduction and affirmative procurement practices.



◆ Toner Recycling Program

As part of our commitment to preserving the environment and helping reduce landfill waste, we provide a Toner Recycling Program with a pre-paid UPS™ shipping label for all Sharp copier and MFP toner cartridges. In addition, to help facilitate bulk shipments, conserve resources and reduce energy use, Sharp provides a toner cartridge shipping carton for up to 10 used cartridges.

Extensive Interoperability for Your Platforms and Applications

At Sharp, we understand that IT managers need to ensure MFP compatibility across complex networks of computers and devices that run diverse operating systems. Of equal importance is support for your existing infrastructure of popular business applications and server platforms. Sharp MFPs are among the most compatible in the industry across a broad spectrum of environments, further helping to leverage your investment in technology without worry. From defining output settings to specifying finishing options, users will be able to print documents that look as good as those produced by a commercial printer. Additionally, many newer Sharp MFPs also feature Direct USB printing support to quickly output documents from USB memory devices such as a ThumbDrive® or ClipDrive™.

◆ Supported Page Description Languages

Most Sharp MFPs support the PCL® page description language as standard. For environments that require genuine Adobe® PostScript® 3™ printing, or direct XPS printing and scanning on newer models, Sharp MFPs also offer optional kits that provide support for these industry standards.

◆ Microsoft® Windows® Support

Sharp provides drivers that are compatible with desktop computers that are running Windows 98/Me/XP, Windows NT®, Windows Server® 2000, 2003, 2008, and Windows Vista® operating systems. Additionally, many of Sharp's drivers have passed Microsoft's Windows Hardware Quality Labs (WHQL) testing for maximum compatibility and reliability.

◆ Linux®, Mac® and UNIX® Support

Desktop computers running Linux, Mac and UNIX operating systems can also access the functionality of Sharp MFPs. To access these features, simply install the correct PPD (Postscript® Printer Description) or PCL support file to deliver fast, flexible printing. For maximum compatibility and functionality for UNIX and Linux environments, print drivers from Codehost™ are also available.

◆ Citrix® MetaFrame® and Terminal Services Support

Users who access applications or servers via Citrix's MetaFrame and Terminal Services can output high-quality documents on a number of Sharp MFPs with compatible print drivers.

◆ SAP® Support

The Sharp SAP device types enable SAP and mySAP.com™ users to easily access the professional output capabilities of their Sharp MFPs, such as paper tray selections, output tray selections, orientation and duplexing options directly from SAP. When used in conjunction with the TypeHaus BarCodeJet™ Universal Barcode Printing Device, users can quickly print barcodes directly from SAP to a Sharp MFP for enhanced efficiency and user satisfaction.

◆ AS/400 Support

Sharp MFPs can support printing from an AS/400 through LPR printing over TCP/IP using native AS/400 commands with a Sharp Network Interface Card, via Direct Port 9100 printing, or through advanced printing methods including IPDS (Intelligent Print Data Stream) from third-party servers.

◆ HP Output Server Support

◆ Sharp's MFPs are HP Output Server-certified, enabling IT managers to centrally control and manage print jobs, destinations and queues, as well as easily create user and group privileges and preferences. With the ability to monitor print jobs on Sharp MFPs from the same consoles as other key IT resources, administrators can be alerted to potential problems and respond before productivity is impacted, minimizing costly downtime.

◆ Healthcare and Medical Provider Support

Sharp works closely with leading healthcare services companies to help deliver the next generation of electronic medical records systems that are dedicated to improving patient relations and minimizing costs. Customers can seamlessly integrate their Sharp printers and MFPs on the network, including workgroup and color MFPs from 23 ppm to 70 ppm, with leading solutions such as Cerner® Millennium®, McKesson STAR™ Suite and Meditech Magic™. With confidentiality and regulatory compliance in mind, Sharp offers comprehensive document and device security that is critical to today's healthcare environments.



Please refer to the Sharp Print and IT Compatibility Chart on Page 28 for detailed support by Sharp MFP model.

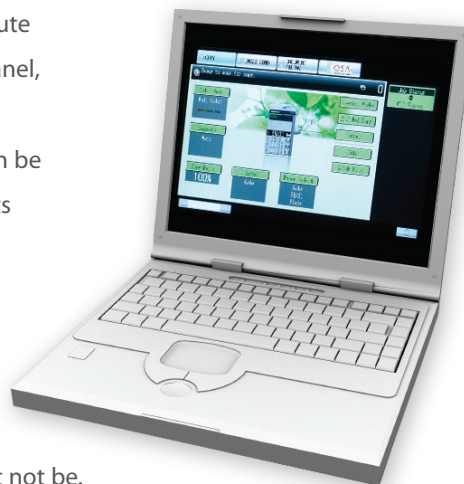
Intelligent Management of Your Sharp MFPs

◆ Maximize Your Productivity

The Sharp Advanced Device Management Suite delivers unparalleled control over the administration of your MFPs through intelligent tools that help accelerate routine tasks and enable remote assistance and maintenance. When complemented by the Sharp iDVM™ Architecture, the suite can also be integrated with your Sharp-authorized Service Provider for remote diagnostics from their location to help streamline your operation, increase uptime and reduce service calls, as well as provide automated click counts and consumables usage for more accurate costs.

◆ Sharp Suite: MFP Administration Has Never Been Easier

The Sharp Suite contains a robust set of utilities to automatically distribute print drivers, view and control the LCD display through Remote Front Panel, and view click counts and alerts — all from the convenience of a user's desktop computer. Administrators have access to a host of tools that can be used across the network to configure settings, manage security accounts and privileges, remotely view and operate the device's front panel, specify e-mail notifications, clone settings across multiple devices, and even update firmware.

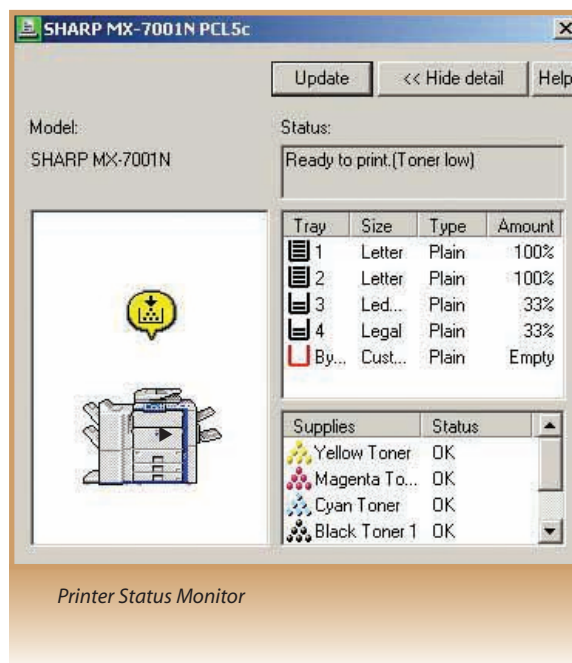


When users require assistance with the functions and features of a Sharp MFP, help is close at hand even though your support staff might not be.

The Remote Front Panel feature also greatly reduces support time and costs by allowing personnel to view the full contents of and directly operate the MFP's LCD control panel from anywhere on the network.

Sharp Printer Status Monitor

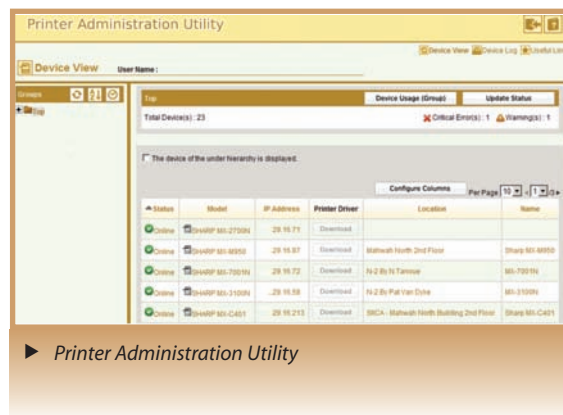
The Sharp Printer Status Monitor is an easy-to-use utility that provides users with real-time information on each MFP on their desktop. Prior to sending a job, users can review the device's status, paper supply and toner levels. Information on the progress and completion of each user's print job, as well as preventative maintenance warnings, also increase productivity and uptime.



Printer Status Monitor

Sharp Printer Administration Utility

The Sharp Printer Administration Utility is a network tool to facilitate the centralized management of Sharp MFPs, as well as other SNMP-compliant printers. From the console, administrators can view detailed information on each device, such as network connectivity, consumable levels and impression counts. New features include the Remote Front Panel feature that enables support staff to view and control the LCD panel from anywhere on the network, as well as the ability to review service logs and update firmware. For more intuitive views and to expedite troubleshooting, devices can be grouped together in the utility by model, department, location, network status, IP address or more. Rapid deployment of MFPs can also be accomplished by distributing print drivers to network clients and cloning the settings of a reference device to other similar models all at the click of a button.



► Printer Administration Utility

Sharp Remote Front Panel

The Remote Front Panel feature provides support staff with the ability to not only view exactly what a user sees on the LCD control panel, but control it from anywhere on the network as well. From the Remote Front Panel screen, support staff can change settings, show the user how to perform a function, or diagnose and often rectify problems without deploying a technician to the device. Administrators can also provide MFP access to service providers from their dealership across the Internet, resulting in dramatically reduced downtime and service expenses.



► Remote Front Panel

Sharp MFP Home Page

The Sharp MFP Home Page is an embedded website that makes it easy for users and administrators to manage the MFP through a standard web browser. Once authenticated, users can change their profiles and web links, as well as maintain their one-touch address keys to quickly distribute scanned documents. From anywhere on the network, administrators can login and access the device's status, configuration and network settings, as well as maintain user accounts, specify diagnostic e-mail alerts, clone settings and more.



► MFP Home Page

Sharp Remote E-Mail Diagnostics

Putting timely and relevant information into the hands of key operators, IT managers and Sharp-authorized Service Providers is a breeze with Sharp Remote E-Mail Diagnostics. Administrators can easily configure event-driven or scheduled alerts such as low consumable levels, maintenance reminders or click-counts, and specify the list of recipients for each. Alerts can be delivered by SMTP to e-mail addresses and many PDAs, pagers or mobile phones. This helps bring attention where it is needed, when it is needed, for increased device availability and reduced costs.

iDVM Architecture: Powerful Control From Near and Far...

With Sharp iDVM Architecture, the support of a knowledgeable service technician is only a click away. Implemented in conjunction with MWA Intelligence™ and based on the powerful capabilities of the Sharp MFPs and Sharp Printer Administration Utility, Sharp iDVM architecture provides your authorized Service Provider and Sharp's Support Professionals with the information they need to keep your MFP in top running order — no matter where they are located.



◆ scope™ Software

MWAI's scope software, developed specifically for and with Sharp, enables the Sharp providers to securely retrieve meter reads, alerts, and consumable levels, and access your MFP's front panel, service logs and diagnostic data through a secure network connection. With a customized deployment, this system keeps you in control of the access you grant to your service provider. Armed with this, you enable them to more quickly determine the cause and solution of issues and order replacements when necessary — often without a service call. Your Service Provider can also configure devices, clone configurations, update firmware and walk users through problems remotely, virtually eliminating the workload of your IT staff. And with automated reporting of click counts directly into the service provider's ERP system, you can be assured of accurate billing based on your actual usage.



Please refer to the Sharp iDVM Platform Compatibility Chart on Page 29 for detailed support by Sharp MFP model.

For more information please visit www.sharppusa.com/DeviceMgmt

Delivering the Next Generation of Productivity

Sharp OSA technology can transform your MFP into a powerful information portal that is highly customizable to the way you do business — today and into the future — providing fast flexible access to documents no matter where you are in the office. Now you can start and finish a task in one simple operation and you'll be able to manage your document workflow easily and more securely.



Accessed from the LCD control panel of the MFP, Sharp OSA applications help you realize enhanced productivity, better manage costs and streamline processes. Sharp OSA applications can be selected from the growing portfolio of integrations available from Sharp Partner Program members, or you can create your own customized applications. Now in its third generation, Sharp OSA technology allows users to interact with network applications faster than ever before with a stunningly beautiful user experience, a new web browser interface and support for higher-resolution widescreen displays. And with the external keyboard and intuitive operation, you will feel like you are simply using a workstation.

Sharp OSA applications can be developed quickly since they are based on the widely adopted Web Services architecture and standards like the SOAP protocol. And since the applications run on an external server, they can be rapidly deployed to one or many Sharp MFPs and centrally managed. Sharp has also further innovated the way your MFPs interact with add-on hardware through the industry's first Open USB capability, which enables support for a broad range of card-based authentication systems and other USB devices.



Please refer to the Sharp OSA Platform Compatibility Chart on Page 30 for detailed support by Sharp MFP model.

Benefits of the Sharp OSA Platform

◆ Instant Productivity for Your Organization

Engaging Interfaces

Intuitive, easy-to-use graphical user interface facilitates operation through customizable screens and interactive capabilities.

Customized Workflows

Manage your document workflow easily, efficiently and more securely.
Helps eliminate redundant tasks and seamlessly integrates your workflows.

Complete Access Control

Manage user access and usage of your MFP resources through integration capabilities for network security and cost accounting applications.

◆ Easy Solution for Your IT Organization to Embrace

Simplified Deployment

Centralized hosting of applications.

Investment Optimization

Tighter integration between IT assets and hardware provides greater control over your bottom line.

◆ Powerful Tools and Resources to Accelerate Your Development

Extensive Support

One of the strongest Partner Programs and Developer Networks in the Industry.

Streamlined Development

Application development is fast and easy through industry standards such as Web Services, XHTML and .NET environment.

◆ Wide Range of Applications Are Available To Help Your Business

You can create your own custom integrations or take advantage of the growing portfolio of Sharp OSA applications available from Sharp Partner Program Members which can provide:

- Document Management and Archiving
- Automated Document Workflow
- Document Scanning to E-mail
- Fax Servers
- Accounting and Access Control

Leverage One of the Industry's Most Vibrant Partner Programs

Sharp is committed to meeting the ever-changing demands of the market and has fostered an active and extensive Sharp OSA Developer community that adds value and functionality to our award-winning MFPs. As one of the most inclusive in the industry, membership in the Sharp Partner Program is open to qualified software and hardware vendors, Sharp customers, and authorized dealers.



Leveraging the robust capabilities of the Sharp OSA platform, Developers who are members of the Sharp Partner Program are able to deliver highly customized solutions that enable MFPs to reach deeper into the organization than ever before. They are also able to develop unique and engaging user interfaces on the LCD display that help facilitate operation and can help increase workflow productivity.

◆ Sharp OSA Validation

Through the Sharp Marketing Program, all Sharp OSA Developers are given the option of having their integrations validated by Sharp against a set of criteria to help ensure they work properly with Sharp OSA-enabled MFPs. Upon successful completion of testing, the integration earns the recognition of being Sharp OSA Validated and can be promoted with the use of the Validation Icon, providing assurance of successful operation to you.



◆ Sharp Compatible Validation

In addition to developers of Sharp OSA applications, the Sharp Partner Program is also open to qualified software and hardware vendors with products complementary to Sharp MFPs. This extension of the Partner Marketing Program allows vendors to submit their product for Sharp Compatible validation. Once validated, compatible products are promoted with a unique validation icon, providing confidence that they will work with Sharp MFPs.



The Sharp Partner Program introduces software which is designed to enhance the use of your Sharp products. Participants in the Sharp Partner Program are independently owned and operated third parties which Sharp has no interest in or control over. Sharp does not warrant or guarantee these third-party solutions in any way. Sharp has no responsibility for your use of these third-party products and solutions.

Sharp Partner Program: Validated Member Products



ACDI is a manufacturer of superior copy and print control devices. The EX2000SWB Vending System v4.057 copy and print control device allows users to make copies via coins, bills, cards, and/or PIN accounts. It provides payment options with optimum reportability. In addition, it allows organizations the option to charge multiple price lines for color, B&W, and premium paper sizes. You can track all meter usage through comprehensive reports that make reconciling easy.



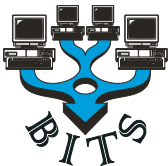
Founded in 1991, Apago Inc. is an innovative software technology company changing how people use and profit from electronic documents. The ONEticket 3.0 application is a universal print driver software that provides Sharp customers with an easy-to-use interface that brings out the power in Sharp's high speed MFP. With advanced job-building capabilities, including chapterization, imposition, stapling, tray mapping, custom tabs creation, plus paper and plex exceptions, the ONEticket universal driver streamlines complex jobs on Sharp MFPs.



Barr Systems is a leading provider of products, services and support that enable organizations to create, manage, and distribute their enterprise information. The Barr Enterprise Print Server™ (BEPS) V.5.0.46 application is a Microsoft Windows-based input/output management solution designed to receive data from multiple sources and distribute the print data to multiple destinations. The print server can be customized to connect to IBM® mainframes, AS/400s®, TCP/IP hosts, and network applications. In addition, you can select various output modules to connect to high-speed production printers, report distribution systems, and electronic storage systems.



Founded in 1986, Biscom pioneered the fax server and host computer integration marketplaces. The FAXCOM® Suite application enables messaging, capture, and indexing solutions for faxes and scanned paper documents. FAXCOM Suite 9.4.4.0 connects Biscom's FAXCOM Server product line with Sharp OSA-enabled MFPs, allowing users to scan and fax paper documents from the MFP through a network fax server.



Formed in 1990, Business I.T. Systems Ltd. has developed a number of innovative software solutions designed to bring productivity gains to digital and networked environments. The Callisto™ Managed Scan Version v2.1 application allows users to scan or print to and from back office applications at the MFP using a choice of different "DataLinks". One such DataLink is Managed Print Release which allows users to print documents to a central print queue, then walk up to any Sharp OSA-enabled MFP and print.


= Validated Sharp OSA Integration Module

= Validated Sharp Compatible Product


For more information please visit www.sharp-partners.com/Validated

Sharp Partner Program: Validated Member Products


CASTELLE®

Castelle has one of the largest install bases of fax servers. The FaxPress™ 9.0.0.7 fax server provides a complete solution for the network fax environment. It comes with all the necessary hardware and software in one server appliance, making it easy to install and operate. By acting as a server on the network, FaxPress allows client workstations access to incoming and outgoing faxes, phone books, transaction logs, and other fax-related data. FaxPress integrates with many popular e-mail systems, including Microsoft® Exchange, Novell® GroupWise® and Lotus Notes®. 




With over 5000 customers, docSTAR is a leader in integrated document management solutions. The integrated MFP-Link v1 solution dramatically simplifies the scanning and filing of documents on Sharp OSA-enabled MFPs. Powered by the Autostore framework and docSTAR's intelligent routing, the MFP-Link enables capturing and indexing documents directly from the Sharp MFP. Electronic filing is now easier, faster, and smarter. 




Established in 1996, DocuLex provides industry-acclaimed document management software. The 100% browser-based Archive Studio v4 document management software for Sharp MFP users enables secure document warehousing and sharing with remote access to organizations that have a need to share documents among multiple offices, other companies or the public. 



Founded in 1988, DocuWare ranks among the worldwide leading integrated document management software companies. The DocuWare 5.1x application automates business processes by easily and securely managing any type of document, regardless of format or source, in a central document pool with authorized access - worldwide. 



DPD International, maker of GoldFax™ software, is a leader in Windows network Fax Server solutions providing affordable prices for small, medium, and Fortune 1000 organizations worldwide. The GoldFax™ v6.1.4 application, built on Microsoft .NET™ technology, integrates Sharp OSA-enabled MFPs into enterprise-class Fax Server solutions at a small business price. 


 = Validated Sharp OSA Integration Module

 = Validated Sharp Compatible Product


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Sharp Partner Program: Validated Member Products




Drive is a company that creates powerful and innovative scanning and printing solutions enabled by Sharp OSA technology. With the Bar Code Module v1.0, Scanner Power Tools Module v1.0, Universal Database Connector v1.0, and Universal E-mail Connector v1.0, you get everything you always wanted from the control panel of your MFP. Greatly expand the MFPs feature set to include a variety of document/image processing capabilities and much more. 




emFAST Inc. has been constantly evolving network fax technology since 1990. The FACSys® Connector v1.1 seamlessly integrates with Sharp OSA-enabled MFPs allowing users to send and retrieve FACSys Fax Messages directly from the LCD touch-screen interface. With direct access to their FACSys Inbox and personal phonebooks, users can easily send and print fax messages while maintaining the security and reporting capabilities of FACSys. 




Equitrac® is a world leader and one of the most trusted names in intelligent print management and cost recovery solutions. The Equitrac Embedded v1.0 option for Equitrac Express® 4.0 or Equitrac Office® 4.0 compliments Sharp OSA-enabled MFPs by providing convenient, simple, and secure cost management at the MFP. When deployed in conjunction with a Sharp OSA-enabled MFP, Equitrac Embedded may replace the Equitrac Page Counter terminal and allows full cost management for copies, scans and faxes at your fingertips from the LCD control panel of your Sharp OSA-enabled MFP. 



Leveraging more than 15 years of fax server industry experience, FaxCore™ Inc. is a leading provider of fax server solutions. FaxCore 2007 is a fax server built on the Microsoft.NET® platform. Fax-enable Sharp OSA-enabled MFPs, e-mail servers and other business applications easily and seamlessly. FaxCore's web interface allows for browser-based faxing anywhere anytime and the appliance approach is easy to sell and support. 




Hershey Systems, Inc. is an employee owned corporation focused on DCM/ECM systems ranging from entry level to full enterprise including hosted solutions. Singularity v7 is a fully integrated, browser based solution that includes numerous capture options, integrated forms and workflow, and state of the art archive retrieval and distribution capabilities. Singularity meets and exceeds the highest standards for security and systems compliance. 



InfoDynamics is the innovator of inPOINT and Intact Document Solution Software. inPOINT v2.0 supercharges your Sharpdesk® software or Network File System with auto-naming and filing of scanned documents, and can query existing databases to help eliminate 90% of data entry and make renaming, moving and filing a thing of the past. Intact SMART™, a simple and fresh new take on feature-rich document management is a powerful easy-to-use solution that turns Sharp OSA-enabled MFP's into the center of productivity for any business. With Intact Books SMART™ the innovative integration with QuickBooks® you will increase productivity, ease-of-use and maintain uncompromising security. 

 = Validated Sharp OSA Integration Module


 = Validated Sharp Compatible Product

For more information please visit www.sharp-partners.com/Validated

Sharp Partner Program: Validated Member Products




Integrated Imaging develops and implements customizable document management software solutions and services. The ImageWorks Web v1.1.02 application is a web-based ASP document management service integrated with Sharp OSA technology.

Clients can scan and index documents quickly and easily - directly from Sharp OSA-enabled MFPs. Documents are then uploaded directly from the MFP to a Top Tier hosting facility and available to the client via a secure Internet portal. 




MWA Intelligence, Inc. delivers solutions and services around managing companies' employees and assets. The embedded Intelligent Device Management™ v.1.0 (eIDM) solution enables the automation of remote meter reading from all Sharp OSA-enabled devices. MWAI's eIDM solution enables the end-user to walk-up to any Sharp OSA-

enabled MFP and automatically send meter readings for billing CPC usage directly from the MFP LCD panel. The eIDM solution pushes copy/print activity data securely via an encrypted transmission through the MWAI Intelligent Service (IS) server or MWAI DSS server and then directly into the Sharp dealer's ERP system. 




MXI Security, a division of Memory Experts International Inc., leads the way in providing superior managed portable security solutions designed to meet the highest security and privacy standards. The Stealth MXP™, Version 7.0 application is a USB powered,

secure, multi-functional product with on-board processing for seamless, hardware-based encryption, secure storage and strong authentication. The portable device provides unprecedented security, functionality and flexibility in the management of sensitive corporate information on a portable device as well as protection and assertion of personal and corporate digital identities. Easy to use, Stealth MXP protects up to 8GB of data "on the move" with transparent 256-bit AES encryption and strong biometric user authentication to securely protect print and scan data. 




Founded in 1991, Omtool is a leading provider of document capture and handling solutions that help control the enterprise document lifecycle. Omtool's AccuRoute® Embedded Device Client v1.0 is a document handling platform that streamlines the capture, conversion, communication, and archiving of paper and electronic documents


for organizations of all sizes. AccuRoute provides users with the ability to capture both electronic and paper documents and store them in the preferred destination. 



Print Audit is a print management company that develops print tracking software and hardware solutions that enable organizations to analyze, reduce and recover their printing and photocopying costs. Print Audit Embedded for Print Audit 5 integrates

directly with the touch screen on compatible Sharp OSA-enabled MFPs allowing users to track walk-up copying, scanning, faxing, and server printing with the Print Audit 5 database. Users authenticate through the Sharp MFP LCD panel to access device features. All document details and costs are tracked along with the username and/or validated billing information. 


 = Validated Sharp OSA Integration Module

 = Validated Sharp Compatible Product


For more information please visit www.sharp-partners.com/Validated

Sharp Partner Program: Validated Member Products




Prism Software provides a complete suite of industry-leading software applications for the MFP and printer markets. The DocRecord v3 application is an advanced and powerfully featured, low cost document management system for all types of organizations. DocRecord provides both local and web-based document search and retrieval. Features include: e-mail retention, Microsoft® Office® integration, OCR, batch scanning, full text search, advanced search functions, viewing of over 300 file types in their native formats, automated document filing and indexing, audit trails, check-in and check-out, Bates stamping, versioning, roll-back, high security and much more. 




Speedy Scan Company Inc, is a leader in small business document management paperless office solutions. The Speedy Software Connector 2008.4.2.01V offers businesses a stress-free way to store and manage files from the LCD panel of Sharp OSA-enabled MFPs. The Speedy Software Connector has redefined document management with the ability to search files up to 25 different ways and continues to lead the way in small business document management and paperless office solutions. 



The Network Place, LLC is the creator of DocPlace™ - one of the newest, most sophisticated document management systems available on the market today. The DocPlace S-MFP Client v1 exposes a subset of DocPlace functionalities allowing users to scan, search and edit documents directly at the LCD panel of the supported Sharp OSA-enabled MFPs. Three editions of DocPlace (Enterprise, Standard and Express) give the flexibility to choose the most affordable solution that best suits business needs from various customer segments. 



Valley Office Solutions is a 25 year old office products dealer with years of experience providing document and data solutions. The FileMax Mail™ application is a scan-to-e-mail application that utilizes Sharp OSA technology to send e-mails directly from a Sharp OSA-enabled MFP device while simultaneously sending a copy to your mailbox regardless of the e-mail application that you use. Compatible with GMAIL™, YAHOO!®, AOL®, and most other SMTP e-mail, plus Microsoft® Outlook® and Exchange. 

 = Validated Sharp OSA Integration Module

 = Validated Sharp Compatible Product

For more information please visit www.sharp-partners.com/Validated

Document and Information Security

◆ The Risk to Office Multi-Function Peripherals

Technology makes an ever-increasing contribution to profitability in today's highly competitive business landscape. However, the same technology that enables high productivity in the workplace can easily be compromised if not sufficiently secured. The consequences of inadequate protection could be financial loss, identity theft, risk to intellectual property, or even fines and criminal charges in the most severe cases.

Organizations spend significant capital to protect digital assets from threats, yet frequently overlook one of the most integral devices in use today — the office MFP. The more advanced and integrated MFPs become, the greater the risk to confidential information during the document's life cycle when it is being copied, printed, scanned or faxed. For a comprehensive security strategy to be effective, it is imperative for organizations to demand a greater level of protection from MFP vulnerabilities.

An MFP is a powerful asset in your office's environment. Left unsecured however, an MFP can pose one of the greatest threats to your organization. Just consider the types of documents that are copied, printed, faxed or scanned on a daily basis — personal information, financial statements, confidential reports, e-mails, memos, customer data and employee information.

Intellectual property, private and personal information becomes portable once processed by an MFP, and is extremely susceptible to malicious use from both internal and external threats. While not all risks to confidential information are considered malicious, the potential for significant damage from inadequate protection can be only a matter of time.

◆ Common Vulnerabilities

Some of the most common vulnerabilities associated with an unsecured MFP include:

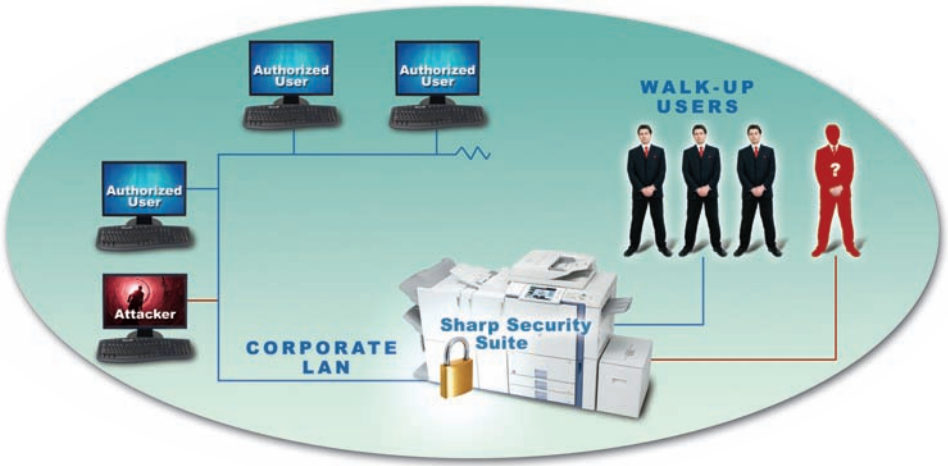
- Loss of productivity
- Regulatory non-compliance
- Loss of access
- Stolen information
- Lawsuits
- Unauthorized use

Please refer to the Sharp Security Compatibility Chart on Page 31 for detailed support by Sharp MFP model.

◆ Internal Threats

At the device, confidential information can be accidentally or even purposefully copied from stored documents, taken from the output tray or faxed without authorization. Any information stored on a local desktop computer or accessible through the Local Area Network (LAN) can be printed without authorization.

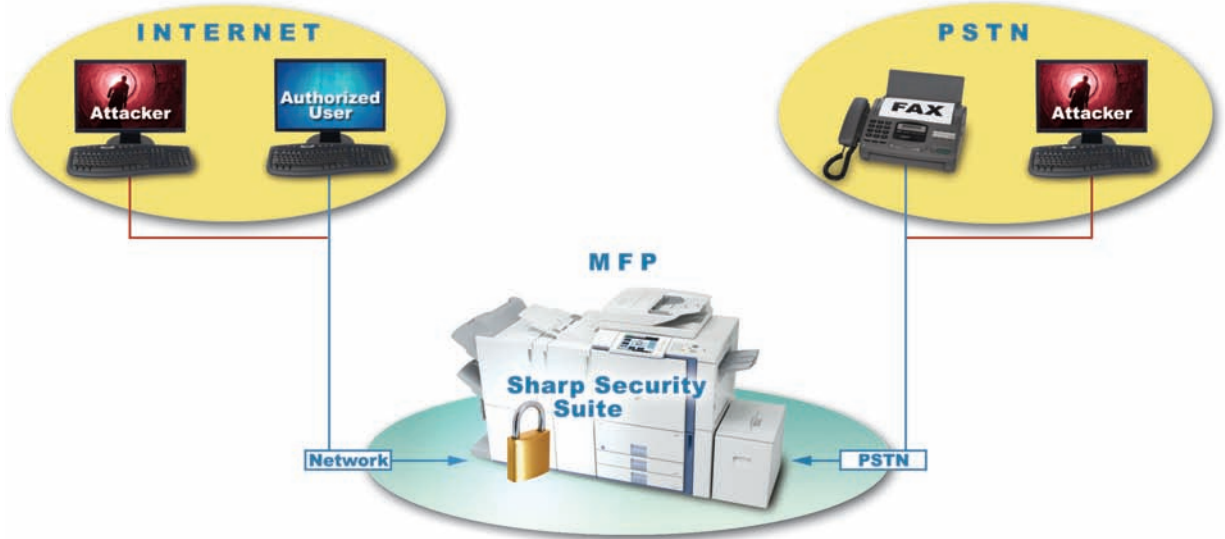
Internal Threats



◆ External Threats

From across a Wide-Area Network (WAN), the Internet or a Virtual Private Network (VPN), information such as stored documents, scan data or print data can be intercepted. In the worst case, a user from the outside can obtain confidential information, unleash a Denial of Service (DOS) attack, or even place a virus on the device via the network or a phone line. Through a FAX line, or corporate LAN, communications could be intercepted or sent without permission anywhere in the world. Even MFP data stored on a hard disk drive or in memory could be compromised or even taken off-site and stolen if not protected.

External Threats



For more information please visit www.sharppusa.com/MFPSecurity

Protecting Your Assets from Vulnerability

◆ The Leader in Digital Information Security

Sharp was the first to address security in digital imaging and received the first Common Criteria Validation for an MFP in 2001. Even today, Sharp remains the highest rated company in validated MFP products and is regarded as one of the industry's greatest security innovators. Businesses and government agencies worldwide have come to depend on this level of assurance, which Sharp pioneered and for which it continues to set the benchmark.

◆ The Sharp Security Suite

The Sharp Security Suite is effective at helping prevent unauthorized access to your most confidential information because security has been designed from the ground-up. At the core of the device is a proprietary embedded operating system that is resistant to attack from malicious code and virtually untouchable by viruses, worms or trojan horses. Around this impenetrable core, Sharp MFPs utilize a multi-layered approach to protection — providing better control over the users, devices, ports, protocols and applications that access your Sharp MFPs.

FAX AND NETWORK SECURITY

ACCESS CONTROL SECURITY

AUDIT TRAIL SECURITY

DOCUMENT SECURITY

ANTIVIRUS SECURITY

DATA SECURITY



◆ Data Security

The optional Data Security Kit (DSK) protects and controls the major MFP systems and subsystems (print, copy, scan, fax jobs, network settings, operating system, memory components, local user interface, engine and job controller). The DSK uses the Advanced Encryption Standard (AES) algorithm (128 or 256) bit on all data before it is written to RAM or Flash memory and the disk. The DSK also provides overwriting routines for deleted data, to ensure that all information is virtually irretrievable by unauthorized users.

◆ Access Control Security

To limit unauthorized access to each device, Sharp MFPs can utilize account codes, user/group profiles, passwords, or external user accounts contained in an LDAP or Active Directory server. All user credentials are transferred using a proven combination of Kerberos, SSL or Digest-MD5 encryption to help avoid interception.

◆ Network Security

Sharp MFPs feature an intelligent network interface that can limit access to specific computers on a network by IP or MAC address, and selectively enable or disable any protocol or service port on each device. All communications to and from the MFP can utilize Secure Socket Layer (SSL) for secure transmission over the network, and most devices also support SMB, IPv6, IPSec, 802.1x and SNMPv3.

◆ Antivirus Security

Sharp MFP products use unique embedded firmware and are not based on Windows operating systems. Therefore, Sharp MFP's internal systems are not subject to the same Virus vulnerability as Microsoft operating systems. We believe this approach provides the internal systems of our products with protection against common Windows executable viruses and other similar infectious software programs.

◆ Fax Security

The architecture of Sharp MFPs provides a logical separation between the fax telephone line and LAN. It is, therefore, virtually impossible for attackers to gain access to the internal systems of the MFP or the local network.

◆ Document Security

Protection for all sensitive documents can be assured through Sharp encrypted PDF files for scanning and printing, or using SSL (Secure Socket Layer) protocols for scanning, printing, e-mail and setup.

◆ Audit Trail Security

The Sharp MFP internal audit trail, and/or third party application software such as Equitrac Office, provides comprehensive auditing of all user activity. Certain federal regulations parameters, such as 'to', 'from', 'when' and 'file name' can be logged, reviewed and archived for conformance.

Security Standards Compliance

◆ IEEE Std. 2600™-2008 Security Standard

The IEEE 2600 hardcopy security standard, first published in June 2008, is the first industry recognized security standard for MFPs. It specifies security requirements and provides a new International reference to assess the security of the latest generation of MFPs. This standard defines all aspects of security including but not limited to authentication, authorization, privacy, integrity, device management, physical security, and information security for manufacturers, users, and others on the selection, installation, configuration, and usage of hardcopy devices (HCDs) and systems, including printers, copiers, and MFPs, and the computer systems that support these devices. This standard identifies security exposures for these HCDs and systems, and instructs manufacturers and software developers on appropriate security capabilities to include in their devices and systems, and instructs users on appropriate ways to use these security capabilities.

Sharp's new line of MFPs (MX-2600N/MX-3100N, MX-4100N/4101N/5001N, DX-C310/C400, DX-C311/DX-C401 MX-C311/C401 and MX-M283/M363N/M453N/M503N) are the first in the industry to meet the new IEEE Std. 2600-2008 security standard requirements.

For more information on how Sharp MFPs help mitigate risk by complying with and exceeding the IEEE-2600-2008 Security Standard requirements, please refer to the IEEE Std. 2600-2008 Hardcopy, Device and System Security document available separately.

For more information on the IEEE Std. 2600 -2800 Security Standard visit www.ieee.org/portal/site.

◆ Common Criteria-CC and ISO 15408

ISO 15408 (International Standard Organization 15408) refers to a set of evaluation standards for security products and systems established by the Common Criteria program. This set of criteria is simply referred to as ISO 15408. It provides a high level of confidence in the security functions of the products evaluated. While many MFP manufacturers still only achieve EAL2 Validation for their products, Sharp MFPs are measured against a higher level of criteria (EAL3 and up) for more meaningful results in real-world applications.



◆ NCMI

Navy Marine Corps Intranet (NMCI) — one of the largest networks in the government — requires that products must be certified to connect and for specific applications. Sharp offers a line of certified MFPs for Navy and Marine end users on the network.



◆ IPV6/IPSEC

IPV6 and IPSEC protocols are the secure expansion of the IPV4 protocol. To comply with the Federal Government and Department of Defense requirements to support the transition to IPV6, Sharp MFPs support the IPV6/IPSEC Protocols.



◆ DISA, NSTISSP #11 and DoD Directive 8500.2

The DISA (Defense Information Systems Agency) Guide, NSTISSP #11 and DoD Directive 8500.2 are a set security requirements that define security requirements for DoD information systems. Sharp MFPs comply with these requirements, and DAA approval documents are available.

◆ CAC-Common Access Card

HS-PD-12 set in place a program requiring positive ID. Sharp MFPs across the line comply by providing Common Access Card control of access to network resources. The Sharp provided CAC option has been field tested and accepted by a variety of DoD customers. All Sharp MFPs with scanning and network capabilities support the CAC requirements with the optional DCL310S plug-in from Cryptek.



For more information please visit www.sharppusa.com/MFPSecurity

Robust Security Solutions for Any Organization

Sharp MFPs have been rigorously tested and validated to provide the highest level of security protection available today. Sharp remains the first and only company to receive the highest achievable level of Common Criteria Validation for a complete MFP solution — Evaluation Assurance Level 4 (EAL4). While other vendors obtain certification for only individual components of an MFP at the lowest validated level, Sharp is committed to delivering the most comprehensive security solutions possible.

◆ Security for the Public and Government Sectors

With stronger control over all information access and dissemination, the highest level of privacy can be confidently assured for any governmental agency or department. Sharp MFPs have passed the most rigorous evaluations for commercial products available today, and meet the strictest requirements set forth in the National Security Telecommunications and Information Systems Security Policy (NSTISSP) #11 and DoD Directive 8500.2.

◆ Private Sector Regulations and Privacy

Sharp MFPs provide robust, complete control over information access, transmission and tracking to facilitate compliance with stringent mandates. This will mitigate risk and help avoid any penalties or law suits for non-compliance. By implementing the Sharp Security Suite, Sharp MFPs can help banks and investment institutions to meet the privacy requirements of the Gramm-Leach-Bliley (GLB) Act. Insurance and health providers can maintain Health Insurance Portability and Accountability Act (HIPAA) compliance with confidence. Businesses across all industries will benefit from the strict controls over financial information required under the Sarbanes-Oxley (SOX) Act.

Sharp MFP Security Levels How Secure Do You Need To Be?



Optimum Level (Includes Heightened Level)

Who should use it?

- Federal agencies, DOD, state offices
- Research & Development

Benefits

- Helps protect from attackers on fax lines
- Provides assurance claims
- Better user access control authentication

Applications

- Common Criteria Validation (CC DSK)
- Fax Security (separation between fax and network lines)
- Network Security (SSL Digital Certificate)
- CAC User Authentication
- Meet IEEE Std. 2600-2008 Security Standard

Heightened Level (Includes Standard Level)

Who should use it?

- Enterprise companies
- Human Resources
- Financial
- Accounting
- Healthcare
- Insurance
- Legal
- Education

Benefits

- Virtually eliminates latent document images
- Helps protect stored documents
- Access control authentication
- Helps protect documents in transit
- Audits user activity

Applications

- Data Security Kit (DSK)
- Access Control Security (LDAP and active directory authentication)
- Document Security (document encryption)
- Network Security (data and traffic encryption)
- Audit Trail Security (internal and third party log file)

Standard Level

Who should use it?

- General office
- SOHO
- Public offices

Benefits

- Confirms user access
- Protects user output
- Adds resistance to attack from malicious codes and viruses

Applications

- Access Control Security (account codes, PIN printing)
- Network Security (IP/Mac Filtering, Port/Protocol Management)

Appendix: Compatibility Charts

Sharp Print and IT Compatibility

	Black and White								Color						
General	AR-M162/ M207	AR-M257/ M317	AR-M355/ M455	MX-M350/ M450	MX-M283/ M363/M453/ M503	AR-M550/ M620/ M700	MX-M550/ M620/ M700	MX-M850/ M950/ M1100	DX-C310/DX-C400 DX-C311/DX-C408 MX-C311/MX- C401	MX-2300/ 2700	MX-2600/ 3100	MX-3500N/ 3501N/ 4501N	MX-4100N/ 4101N/ 5001N	MX5500N/ 6200N/ 700N	MX-6201N/ 7001N
Speed B&W PPM	16/20	25/31	35/45	35/45	28/36/45/50	55/62/70	55/62/70	85/95/110	31/40	23/27	26/31	35/35/45	41/41/50	55/62/70	62/70
Speed Color PPM	—	—	—	—	—	—	—	—	31/40	23/27	26/31	35	41/41/50	41	50
Functions (Some Functions Require Additional Equipment)	Print/Copy/ Scan/Fax	Print/Copy/ Scan/Fax	Print/Copy/ Scan/Fax	Print/Copy/ Scan/Fax	Print/Copy/ Scan/Fax	Print/Copy/ Scan/Fax	Print/Copy/ Scan/Fax	Print/Copy/ Scan/Fax	Print/Copy/ Scan/Fax	Print/Copy/ Scan/Fax	Print/Copy/ Scan/Fax	Print/Copy/ Scan/Fax	Print/Copy/ Scan/Fax	Print/Copy/ Scan/Fax	Print/Copy/ Scan/Fax
Maximum Paper Size	LDR	LDR	LDR	LDR	LDR	LDR	LDR	LDR	LGL	LDR	LDR	LDR	LDR	LDR	LDR
External Keyboard	—	—	—	—	—	—	—	—	Optional	Optional	Standard	Optional	Standard	Optional	Standard
Print Controller	Standard	Standard	Optional	Standard for N Model	Standard for N Model	Optional	Standard for N Model	Standard for N Model	Standard	Standard	Standard	Standard	Standard	Standard	Standard
Postscript 3 Kit	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional
XPS	—	—	—	—	—	—	—	—	Optional	—	Optional	—	Optional	—	Optional
Network Scanning Expansion Kit	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Standard	Standard	Standard	Standard	Standard	Standard	Standard
Data Security Kit	—	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional
Sharp OSA® Platform	—	—	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional
Operating Systems Compatibility															
Microsoft															
Windows Vista	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Windows® XP x32	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Windows XP x64	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Windows® Me	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
WindowsNT 4.0	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Windows 2000	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Windows 2003	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Windows 2008	—	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Microsoft® Terminal Services	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Microsoft® Cluster Services	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Apple® Macintosh®															
MAC OS 9.X ¹	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
MAC OS 10.2 - 10.5.X ^{1,2}	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Planned	Yes	Yes	Yes	Yes
Linux / Unix															
PPD Files	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
BrightQ™ ⁸	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Novell®															
NDPS®	—	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
IBM AS/400															
LPR/port 9100	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
IPDS ⁴	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
SAP															
SAP R/3 - R/4.5+ ^{1,5} Device Type	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Applications Compatibility															
Citrix - Metaframe, Terminal Services ¹⁰	—	Yes	Yes	Yes	Yes ¹¹	Yes	Yes	Yes	Yes ¹¹	Yes ¹¹	Yes ¹¹	Yes ¹¹	Yes ¹¹	Yes ¹¹	Yes ¹¹
HP Output Server v3.2 - 3.4	Yes	Yes ⁹	Planned	—	—	Yes	Yes	—	Planned	Yes	Planned	Yes	Planned	—	—
Cerner - Millennium ⁶	—	Yes	Yes	Yes	Yes	Yes	Yes	—	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Mediatech - Windows Client-Server and Magic	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
McKesson - STAR Suite ⁷	—	Yes	Yes	Yes	Yes	Yes	Yes	—	Planned	Yes	Planned	Yes	Planned	Yes	Yes

1 Requires PS Print Kit option

2 Excludes MAC OS v10.2.2

3 Limited Support

4 With Optional Converter Box

5 Barcode Support with Optional TypeHaus BarCodeJet Printing Device

6 Print Drivers are Certified by Cerner

7 Print Drivers are Qualified by McKesson

8 From Codehost Inc.™

9 Novell - NDPS Server: NetWare6.5, Client: Window XP Pro / Novell Client 4.91; Novell R-Print: Planned for 2009

10 Citrix MetaFrame XP FR3, Citrix® Presentation Server 4.0, 4.5 FP1 (32 bit)

11 For XEnAPP5.0

Sharp iDVM Platform Compatibility

	Black and White					Color					
General	AR-series ¹	MX-M283/M363/ M453/M503 Series	MX-M350/ M450 Series	MX-M550/ M620/M700 Series	MX-M850/ M950/M1100 Series	DX-C311/DX-C401 MX-C311/C401 Series	MX-2300N/ 2700N Series	MX-2600N/ 3100N Series	MX-3500N/ 3501N/4501N Series	MX-4100N/ 4101N/5001N Series ⁶	MX-5500N/ 6200N/7000N MX-6201N/7001N Series
Speed	—	28/36/45/50 ppm	35/45 ppm	55/62/70 ppm	85/95/110 ppm	31/40 ppm b/w 31/40 ppm color	23/27 ppm b/w 23/27 ppm color	26/31 ppm b/w 26/31 ppm color	35/45 ppm b/w 35 ppm color	41/41/50 ppm b/w 41/41/50 ppm color	55/62/70 ppm b/w & 41 ppm color 62/70 ppm b/w & 50 ppm color
Function ²	Print/Copy/ Scan/Fax	Print/Copy/ Scan/Fax	Print/Copy/ Scan/Fax	Print/Copy/ Scan/Fax	Print/Copy/ Scan/Fax	Print/Copy/ Scan/Fax	Print/Copy/ Scan/Fax	Print/Copy/ Scan/Fax	Print/Copy/ Scan/Fax	Print/Copy/ Scan/Fax	Print/Copy/ Scan/Fax
Maximum Paper Size	LDR or LGL	LDR	LDR	LDR	LDR	LGL	LDR	LDR	LDR	LDR	LDR
External Keyboard	—	Standard - Retractable	—	—	Optional	Optional	Optional	Standard - Retractable	Optional	Standard - Retractable	Optional
Print Controller	Standard/Optional	Standard ³	Standard ³	Standard ³	Standard	Standard	Standard	Standard	Standard	Standard	Standard
Postscript 3 Kit	Optional	Optional	Optional	Optional	Optional	Standard	Optional	Optional	Optional	Optional	Optional
XPS Expansion Kit	—	Optional	—	—	—	Optional	—	Optional	—	Optional	—
Network Scanning Expansion Kit	Optional	Standard ³	Optional	Optional	Optional	Standard	Standard	Standard	Standard	Standard	Standard
Sharp Administration Utility Suite											
Sharp Printer Status Monitor - (SMON)											
Print Completion Notification	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Consumable Level	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Out of Paper Notification	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Sharp MFP Home Page											
User Setup	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
User Folder Setups	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Scan Destinations	—	Yes	—	—	Yes	Yes	Yes	Yes	Yes	Yes	Yes
User Custom Favorites	—	Yes	—	—	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Admin Setup	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
User/Group Access Control and Permissions	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Machine Configuration	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Machine Maintenance	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
SSL Secure Home Page Access	—	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Password Protected Access	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Sharp Remote E-Mail Diagnostics											
Service Alerts and Consumable Level	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Meter Reads	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Sharp Printer Administration Utility - (PAU)											
Imager Home Page Access	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Print Driver Distribution	—	Yes	—	—	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Device Discovery	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Device Status	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Consumable Status	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Meter Reads	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Remote Front Panel	—	Yes	—	—	—	Yes	—	Yes	—	Yes	—
Remote Service Logs (22-06, 22-03)	—	Yes	—	—	—	Yes	—	Yes	—	Yes	—
Firmware Download	—	1 to N	1 to 1 ⁵	1 to 1 ⁵	1 to 1 ⁵	1 to N	1 to 1 ⁵	1 to N	1 to 1 ⁵	1 to N	1 to N
Device Cloning	—	1 to N	1 to 1 ⁵	1 to 1 ⁵	1 to 1 ⁵	1 to N	1 to 1 ⁵	1 to N	1 to 1 ⁵	1 to N	1 to N
MWAI™ - scope™ (Optional Dealer Software)											
Remote Access to User Site	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Automatic Meter Read Collection	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Automatic Meter Read Integrated with Dealer ERP Systems ⁴	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Automatic MFP Event Notification	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Secure Remote Communication (SSL)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
IntelliDashboard™ Reporting Capabilities	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

1 AR-M237/M257/M317/M277/M350/M455/M550/M620/M700 Series, AR-M162/M207 Series, AR-208 Series, AR-168 Series

2 Some Functions Require Optional Equipment

3 Optional on U Series

4 Dealer ERP Systems Support: OMD®, Nextgen™ and e-automate™

5 Using MFP Home Page

Sharp OSA Platform Compatibility

	Black and White				Color						
General	MX-M283/M363/M453/M503 Series	MX-M350/M450 N Series	MX-M550/M620/M700 Series	MX-M850/M950/M1100 Series	DX-C310/DX-C400 Series	DX-C311/C401 MX-C311/C401 Series	MX-2300N/2700N Series	MX-2600N/3100N Series	MX-3500N/3501N/4501N Series	MX-4100N/4101N/5001N Series	MX-5500N/6200N/7000N MX-6201N/7001N Series
Speed	28/36/45/50 ppm	35/45 ppm	55/62/70 ppm	85/95/110 ppm	31/40 ppm b/w 31/40 ppm color	31/40 ppm b/w 31/40 ppm color	23/27 ppm b/w 23/27 ppm color	26/31 ppm b/w 26/31 ppm color	35/45 ppm b/w 35 ppm color	41/41/50 ppm b/w 41/41/50 ppm color	55/62/70 ppm b/w & 41 ppm color 62/70 ppm b/w & 50 ppm color
Function ¹	Print/Copy/ Scan/Fax	Print/Copy/ Scan/Fax	Print/Copy/ Scan/Fax	Print/Copy/ Scan/Fax	Print/Copy/ Scan/Fax	Print/Copy/ Scan/Fax	Print/Copy/ Scan/Fax	Print/Copy/ Scan/Fax	Print/Copy/ Scan/Fax	Print/Copy/ Scan/Fax	Print/Copy/ Scan/Fax
Maximum Paper Size	LDR	LDR	LDR	LDR	LGL	LGL	LDR	LDR	LDR	LDR	LDR
LCD Display ²	8.5" Touchscreen Color	8.9" Touchscreen Mono	8.9" Touchscreen Mono	10.4" Touchscreen Color	4.3" Color	8.5" Touchscreen Color	8.1" Touchscreen Mono	8.5" Touchscreen Color	8.9" Touchscreen Mono	8.5" Touchscreen Color	10.4" Touchscreen Color
External Keyboard	Standard	—	—	Optional	Optional	Optional	Optional	Standard	Optional	Standard	Optional
Scan ² / Single Pass Duplex Scan	Standard	Standard	Standard	Standard	—	—	Standard	Standard	Standard ³	Standard ³	Standard
Remote Front Panel	Standard	—	—	—	Standard	Standard	—	Standard	—	Standard	—
Sharp OSA Technology Support											
General Features for Sharp OSA Applications (ACM or EAM)											
Custom User Interface - Browser-Based Forms	Yes	—	—	—	Yes	Yes	—	Yes	—	Yes	—
	Yes	Yes	Yes	Yes	—	Yes	Yes	Yes	Yes	Yes	Yes
Support for USB Devices (Open USB capability)	Yes	—	—	—	Yes	Yes	—	Yes	—	Yes	—
Supported File Types for Sharp OSA Print API ⁵	TIFF, JPEG, PDF Encrypted PDF, PCL, PS & XPS	—	—	—	TIFF, JPEG, PDF Encrypted PDF, PCL, PS & XPS	TIFF, JPEG, PDF Encrypted PDF, PCL, PS & XPS	—	TIFF, JPEG, PDF Encrypted PDF, PCL, PS & XPS	—	TIFF, JPEG, PDF/ Encrypted PDF, PCL, PS & XPS	—
Sharp OSA Trial Mode	Yes	—	—	—	Yes	Yes	—	Yes	—	Yes	—
Application Communication Module (ACM)	MX-AMX2	MX-AMX2	MX-AMX2	MX-AMX2	MX-AMX2	MX-AMX2	MX-AMX2	MX-AMX2	MX-AMX2	MX-AMX2	MX-AMX2
Programmatically configure and execute scan job	Yes ⁴	Yes ⁴	Yes ⁴	Yes ⁴	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Supported Protocols for Scan File Transfer	FTP/S	FTP/S	FTP/S	FTP/S	HTTP/S, SMB, FTP/S	HTTP/S, SMB, FTP/S	FTP/S	HTTP/S, SMB, FTP/S	FTP/S	HTTP/S, SMB, FTP/S	FTP/S
Receive event notifications	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
External Accounting Module (EAM)	MX-AMX3	MX-AMX3	MX-AMX3	MX-AMX3	MX-AMX3	MX-AMX3	MX-AMX3	MX-AMX3	MX-AMX3	MX-AMX3	MX-AMX3
Authenticate all MFP users (walk-up and remote)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Track total clicks for copy, print, scan and fax jobs	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Track clicks by page size and color for all MFP jobs	Yes	—	—	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Receive event notifications	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Enable MFP features by user	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Limit number of clicks per user	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Security Features (ACM or EAM)											
SSL-encrypted communications (HTTPS)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
SSL-encrypted file delivery	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
SSL certificates	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional

Server Requirements	
General	Server Requirements are specific to each integrated application. Sharp OSA technology is designed to work on any system supporting XML, but has only been tested with the systems listed below
Operating System	Microsoft® Windows® XP Professional, Microsoft Windows 2000 Professional, Windows 2000 Server Windows Vista™ Ultimate, Windows Vista Enterprise or Windows Vista Business 32-bit w/IIS 7, Linux-Red Hat Linux 3
Web Server Requirements	Microsoft Internet Information Server (IIS) 5 or higher Apache 2.0 or higher
Other Software Requirements	Any middleware required by server for Web Services processing. IIS - Microsoft.NET Framework 1.1 or higher Apache - Axis 1.2 or higher

1 Some Functions Require Optional Equipment
 2 Display Size Diagonally Measured
 3 Not Available on MX-3500N or MX-4100N

4 Requires Network Scanning Expansion Kit
 5 Some File Types Require Optional Equipment

Sharp Security Compatibility

	Black and White						Color					
General	AR-M237/M277 AR-M257/M317 Series	AR-M355/ M455 Series	MX-M350/ M450 Series	AR/MX-M550/ M620/M700 Series	MX-M283/M363 M453/M503 Series	MX-M850/ M950/M1100 Series	DX-C310/ DX-C400 DX-C311/ DX-C401 MX-C311/ MX-C401 Series	MX-2300N/ 2700N Series	MX-2600N/ 3100N Series	MX-3501N/ 4501N/MX-3500N Series	MX-4100N/ MX-5001N Series ⁹	MX-5500N/ 6200N/7000N/ 6201/7001 Series
Speed (PPM)	23/27ppm 25/31ppm	35/45ppm	35/45ppm	55/62/70ppm	28/36/45/50ppm	85/95/110ppm	31/40 b/w / 31/40 color ppm	23/27 b/w / 23/27 color ppm	26/31 b/w / 26/31 color ppm	35/45 b/w / 35 color ppm	41/50 b/w / 41/50 color ppm	55/62/70 b/w / 41 color ppm
Functions ¹	Print/Copy/Scan/Fax	Print/Copy/Scan/Fax	Print/Copy/Scan/Fax	Print/Copy/Scan/Fax	Print/Copy/Scan/Fax	Print/Copy/Scan/Fax	Print/Copy/Scan/Fax	Print/Copy/Scan/Fax	Print/Copy/Scan/Fax	Print/Copy/Scan/Fax	Print/Copy/Scan/Fax	Print/Copy/Scan/Fax
Printer Controller	AR-P17/AR-P27	Standard ²	Standard ²	Standard ²	Standard ²	MX-PBX4	Standard	Standard	Standard	Standard	Standard	Standard
Network Interface Card	AR-P17 ³ , AR-NC5, ³ AR-P27	Standard ²	Standard ²	Standard ²	Standard ²	Standard	Standard	Standard	Standard	Standard	Standard	Standard
Network Scanning Expansion Kit	MX-NSX1	MX-NSX1	MX-NSX1	MX-NSX1	Standard ⁴	MX-NSX1	Standard	Standard	Standard	Standard	Standard	Standard
Facsimile Expansion Kit	AR-FX7	AR-FX12	AR-FX12	AR-FX8	MX-FXX2	MX-FXX1	MX-FXX3	MX-FX1	MX-FXX2	MX-FX2	MX-FXX2	MX-FX3
Hard Disk Drive	—	Standard ⁴	Standard ⁴	Standard	Standard ⁴	Standard	Standard	Standard	Standard	Standard	Standard	Standard
Security Features												
Access Control Security												
Account Codes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Comprehensive Embedded User Access Control	No	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
User Authentication	LDAP	LDAP	LDAP	LDAP	LDAP	LDAP	LDAP	LDAP	LDAP	LDAP	LDAP	LDAP
Confidential Print	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Follow You Printing™	Optional ^{5,6}	Optional ^{5,6}	Optional ^{5,6}	Optional ^{5,6}	Optional ^{5,6}	Optional ^{5,6}	Optional ^{5,6}	Optional ^{5,6}	Optional ^{5,6}	Optional ^{5,6}	Optional ^{5,6}	Optional ^{5,6}
Card Access Control	Optional ⁷	Optional ⁷	Optional ⁷	Optional ⁷	Optional ^{7, 16}	Optional ⁷	Optional ^{7, 16}	Optional ⁷	Optional ^{7, 16}	Optional ⁷	Optional ^{7, 16}	Optional ⁷
Fax Security												
Confidential FAX	—	—	—	—	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Separation Between FAX and Network Connections	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Filter Junk Fax	—	—	—	—	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Data Security												
Commercial Data Security Kit	AR-FR12 AR-FR24U, AR-FR25U	AR-FR22U for U Series AR-FR21U for N Series	MX-FRX7U for U Series MX-FRX6U for N Series	AR-FR11U MX-FRX5U	MX-FR15U for U Series MX-FR14U for N Series	MX-FRX8U ⁸	MX-FR12U MX-FR13U MX-FR13U	MX-FRX1U	MX-FR10U	MX-FRX2U	MX-FR11U	MX-FRX3U ⁹ MX-FRX9U ⁹
Common Criteria Data Security Kit	AR-FR12M AR-FR24, AR-FR25	AR-FR22U for U Series AR-FR21U for N Series	MX-FRX7 for U Series MX-FRX6 for N Series	AR-FR11 MX-FRX5	MX-FR15 ¹² for U Series MX-FR14 ¹² for N Series	MX-FRX8 ⁹	MX-FR13 ¹⁰ MX-FR13 ¹⁰	MX-FRX1	MX-FR10	MX-FRX2	MX-FR11	MX-FRX3 ⁸ MX-FRX9 ⁹
EAL Validation Level	EAL3+	EAL3+ for U Series EAL3 for N Series	EAL3+ for U Series EAL3 for N Series	EAL3	EAL3	EAL3	EAL3	EAL3+	EAL3	EAL3+	EAL3	EAL3+
Data Security Kit Features												
Functions ¹	Copy/Print/Scan/Fax	Copy/Print/Scan/Fax	Copy/Print/Scan/Fax	Copy/Print/Scan/Fax	Copy/Print/Scan/Fax	Copy/Print/Scan/Fax	Copy/Print/Scan/Fax	Copy/Print/Scan/Fax	Copy/Print/Scan/Fax	Copy/Print/Scan/Fax	Copy/Print/Scan/Fax	Copy/Print/Scan/Fax
Encrypts Image Data	Fax data only	Yes ¹¹	Yes ¹¹	Yes ¹¹	Yes ¹¹	Yes ¹¹	Yes ¹¹	Yes ¹¹	Yes ¹¹	Yes ¹¹	Yes ¹¹	Yes ¹¹
Hard Disk Overwrite	Not Applicable	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
RAM Overwrite	Yes	Yes ¹³	Yes ¹³	Yes	Yes ¹³	—	—	—	—	—	—	—
FAX ROM Overwrite	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Resistance to (DOS) Denial of Services	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Resistance to Common Virus Attacks	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Document Control (Anti-Copy)	—	—	—	—	—	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Lock User after 3 Retries	—	—	—	—	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Hard Drive Overwrite Features	Not Applicable	—	—	—	—	—	—	—	—	—	—	—
Encryption (# of bit)	—	128	128	128	256	128	256	128	256	128	256	128
# Overwrites	—	Up to 7	Up to 7	Up to 7	Up to 7	Up to 7	Up to 7	Up to 7	Up to 7	Up to 7	Up to 7	Up to 7
Overwrite Method	—	Random Data	Random Data	Random Data	Random Data	Random Data	Random Data	Random Data	Random Data	Random Data	Random Data	Random Data
Automatic Overwrite after each Job	—	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Automatic Overwrite at Start Up	—	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Manual Overwrite	—	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Document Filing												
Protection Method without DSK	—	Folders and/or Document level password protection	Folders and/or Document level password protection	Folders and/or Document level password protection	Folders and/or Document level password protection	Folders and/or Document level password protection	Folders and/or Document level password protection	Folders and/or Document level password protection	Folders and/or Document level password protection	Folders and/or Document level password protection	Folders and/or Document level password protection	Folders and/or Document level password protection
Protection Method with DSK	—	Adds encryption	Adds encryption	Adds encryption	Adds encryption	Adds encryption	Adds encryption	Adds encryption	Adds encryption	Adds encryption	Adds encryption	Adds encryption
Network Security												
IP Filtering	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
MAC Address Filtering	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Port Management	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Password Protected Setup	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
IPSec, IPv6, SSL, TLS	Yes ¹⁴	No	Yes	Yes ¹⁴	Yes	Yes	Yes	Yes ¹⁷	Yes	Yes ¹⁷	Yes	Yes ¹⁷
802.1x, IEEE 2600.2008 ¹⁵	No	No	No	No	Yes	No	Yes	No	Yes	No	Yes	No
SNMPv3	Yes	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
SMB	Yes ¹⁴	No	Yes	Yes ¹⁴	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Audit Trail Security												
Embedded Log File	No	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Equitrac Copy Audit Trail	Optional ^{5,6}	Optional ^{5,6}	Optional ^{5,6}	Optional ^{5,6}	Optional ^{5,6}	Optional ^{5,6}	Optional ^{5,6}	Optional ^{5,6}	Optional ^{5,6}	Optional ^{5,6}	Optional ^{5,6}	Optional ^{5,6}
Equitrac Print Audit Trail	Optional ⁵	Optional ⁵	Optional ⁵	Optional ⁵	Optional ⁵	Optional ⁵	Optional ⁵	Optional ⁵	Optional ⁵	Optional ⁵	Optional ⁵	Optional ⁵
Scan Audit Trail												
Scan to E-mail	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Document Security												
Scan Encrypted PDF file	No	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Print Encrypted PDF file	No	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

1 Some Functions Require Optional Equipment

2 Standard on N Series. MX-M350/M450U Series Requires (MX-NBX3) Printer Controller, AR-M355/ M455U Series Requires (AR-P21) Printer Controller, MX-M550/M620/M700U Series Requires (MX-NBX1), AR-M550/M620/M700U Series Requires (AR-P19) Printer Controller, MX-M283/M363/M457/M503 requires MX-PB10

3 RJ45 Network Interface Included with the Printer Controller, Certain Operating Systems and Protocols May Require (AR-NC5J) Option
4 Standard on N versions
5 Requires Equitrac Office or Equitrac Express
6 Requires Equitrac Embedded for Sharp's MFPs (for 35ppm and up) or PageControl

7 Common Access Card with DCL310S or 3rd Party Applications with Sharp OSA Technology (for MFPs 35 ppm and up)
8 For MX-5500/6200/7000 Only
9 For MX-6201/7001 Only
10 Available Q4/2009
11 FIPS 197 AES Encryption
12 Available 2010

13 For MFP without Hard Disk
14 For AR-M257/M317 and MX-M550/M620/M700
15. Meet standard requirements
16. Common Access Card with MX-EC50 for N series and MX-DX-C311/C401 (Q4/2009)
17. For SSL/TLS

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SHARP ELECTRONICS CORPORATION
Sharp Plaza, Mahwah, NJ 07495-1163
1-800-BE-SHARP • www.sharpusa.com

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