## Value for Hospitals and Clinics

#### **Simplified Operations**

The integrated touchscreen shows all waiting studies, sorted by patient, coming from any connected DICOM source in your hospital. Via touch screen, you can select which study you want to store on the USB-Stick.

With the high-performance hardware you can create USB-Sticks with common data, approx. 500 MB, in less than 30 sec. This allows you to create media on the spot, whenever a patient shows up at your front desk.

## Security

The RX400M can exclusively be used with Rimage USB-Sticks that have special security features such as WORM (write once, read many) protection. This dramatically increase the propability that no other files that may contain malware, viruses or other threats can be added on the stick and thus get into highly sensitive networks.

Only with the RX400M system you are able to unlock the pre-protection, add new data, and reactivate the write protection afterwards. This limits the risks of Malicious USB-Sticks and provides an additional IT-Environment protection.

With the integrated, adhesive paper thermal printer you can easily label the USB-Sticks individually, ensuring you are handing the right stick to the right person. The dedicated patient labels are automatically created once you unplug a recorded and verified USB-Stick.

#### **Reliable Workflow**

Without any moving and mechanical parts, the RX400M is very service friendly. Most of the parts are easily swapable and accessible by opening the cover.

With the easily accessible SSD that is securely locked within an cage, containing device configuration data and locally used study data, you can even request an exchange unit if required and just use the existing SSD in the new unit. In this case, your sensitive data will never leave your environment.

## Value for System Integrators

#### **Dedicated Support**

The Rimage worldwide service organization has dedicated applications engineers to provide support during all stages of system integration.

#### **Easy Integration**

The RX400M API enables easy integration for DICOM Software providers. The RX400M is already fully integrated into several DICOM patient CD/USB Solutions.

## USB Technology

Allows Integrators to easily output on a new media source besides the Rimage optical systems.

# **Value for Patients**

## **Reliable Records**

Having the option of reusing your USB-Stick, you can keep track of all your medical data on a single source. This also allows doctors to see the entire patient's history, which helps them to better diagnose disease progression.

## **Shorter Wait Times**

RX400M will provide a USB-Stick with a typical study in about 30 seconds, so patients don't have to wait long for their personalized USB-Sticks.

## **Data Privacy and Security**

With the RX400M we are adding a new layer of security for patient records on physical data. Your personal medical data can be encrypted and in case of a loss, it will be nearly impossible to access your sensitive patient data and records. This feature however, needs to be supported by your DICOM Software.

## **DiCOM Data Import**

The Rimage RX400M also allows you to import existing DICOM Studies from other USB-Sticks or from CD/DVD ROM (optional). To protect your network from potential security risks, the RX400M stores the imported data in an isolated secure zone.

This workspace is virtually encapsulated from the entire network and can be configured to your needs for safety and security checks. Only verified data can be pulled on request, so you don't have to worry about your network security. The imported data can either be transferred to a new USB-Stick or can be imported into the PACS.

This feature will be added after product launch and will be available as an optional feature by the end of 2022.

# **System Specifications**

	Rimage RX400M		
RAM/HDD	16 GB RAM, 480 GB SSD		
Number of Recorders	4		
Optional HDD	Removable SSD waith up to 8 TB		
Display	10,1 Zoll Touch Display, 1280 x 600 px		
Network Adapters	Two 1 GB Ethernet		
Printer	Thermal Label Printer		
Label	PE-Foil labels, adhesive, 54x25 mm		
Height	6,2 in/ 158 mm (back), 3,2 in/ 82 mm (front)		
Width	17,95 in / 456 mm		
Depth*	10 in / 254 mm		
Weight	19,84 lbs/ 9 kg		
<b>Power Specifications</b>	100 - 240V~, 4-2A 60-50H		
Noise Level	Neutral: 40dBA/ Full Load: 52dBA		
Warranty	12 months		

# **Service Options**

For the RX400M system we offer two different types of maintenance contracts to accommodate the needs of our customers.

## Send-in Service

Customer needs to send in the RX400M system at his own costs. When the system arrives in the service depot, the Service team will repair the system as quickly as possible.

After repair, the system will be sent back to the customer and Rimage is covering the return freight costs.

## **CONTACT INFORMATION**

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The RX400 has been developed by X-Net Services GmbH, Rimage Europe GmbH and in cooperation with solution providers for electronic data archiving and exchange.

# RIMAGE<sup>®</sup> in Cooperation with



# RX400 M

# The Medical USB Solution - fast, easy & secure

Save your entire collection of diagnostic data in full resolution with just the touch of a finger. Deliver studies on a state of the art write protected RX400 USB-Stick with the RX400M high-performance data copy system. The USB Sticks can be used alongside conventional patient CD, with added benefits such as high speed, storage space and independence from the availability of a CD drive.

The compact RX400M is easy to set up for system integrators, health care providers and hospitals.

## Functionality

The RX400M is a compact, fully integrated desktop device including integrated computer, 4 front USB ports, label printer and touch screen and can be complemented with an internal DVD drive to import data from patient CD/DVD into PACS. Combined with leading DICOM solutions the system can be easily integrated into your existing workflows like a DICOM printer. Patient sticks are produced as easy as you know it from patient CDs with the advantages such as fast opening of data and high storage capacity that allows multiple studies.

The Rimage Patient USB-Sticks are automatically writeprotected so it can be used safely, and computer viruses don't stand a chance. The integrated printer prints the patient label as soon as the finished stick is unplugged.

RIMAGE<sup>®</sup> **RX400M** 

# The patient CD has been established for many years, but now has some disadvantages.

- Limited storage space
- Current PCs often do not have a CD drive anymore
- Opening the data is relatively slow
- A new CD is needed for each new examination (not sustainable)

# Patient portals are currently on the rise, but also have disadvantages.

- Data is usually only "online" for a few weeks
- Data is often only provided in low resolution
- Fast Internet access is required to open them
- They are difficult to use for older people
- Hackers may access and steal confidential medical records
- Server shutdown can caus temporal access problems

# The Rimage USB Stick is a useful addition to the two established solutions

- It offers enough capacity even for large, in full diagnostic quality resolution
- Files and Studies can be opened extremly fast
- Phisicians can have the entire medical history on a single source with our Rimage USB-Sticks\*
- Patients have the documents on a compact and easy-to-use data carrier.
- Chronically patients have all documents on one stick instead of on various CDs or portals.
- Permant usage of the USB Stick as new studies can be added multiple times (optional)\*

## Fast-Track Service

Rimage will send out a replacement unit to the customer on next working day on Rimage costs.

When the system arrives at the customer, the customer needs to send back the broken unit using the included return label. (Using the packaging of the replacement unit is recommended. The freight costs are covered by Rimage).

In both cases you need to claim an RMA number through our Rimage Service Team first. RX400M units sent to Rimage without RMA number will be rejected and returned to sender on cutomers cost. Rimage can't influence and is not reliable for the shipping time of the forwarder.





# What makes a Patient USB-Stick successful?

There are a few attributes a patient USB-Stick needs to provide to be successful in the market. One of the biggest is security. But this attribute does not only count for the data on the stick. Security is also important for the user as well as the referring doctors who will need to access the data.

With the Rimage patient stick we enhanced data security with unalterable data. This is achieved by WORM procedure. With "Write Once, Read Many" data on the Rimage patient USB-Stick cannot be modified. This provides high security against virus and malware, as the sticks can only be written by the RX400M system. Other USB-Ports can only read but not write any data on Rimage patient USB-Sticks.

With our Top Line and BaseLine Pro Stick, the Rimage RX400M system will be able to add more data to your existing data and protect the USB-Stick afterwards with our new multi-write protection feature. Here are some further advantages of the Rimage Patient USB-Stick:



**Security:** Every USB-Stick is write protected (WORM) and can be individually encrypted. (needs to be supported by your DICOM Software.)

**Multiple Use:** The RX400M can exclusively open Rimage WORM sticks and add new studies. Afterwards, the Patient USB Stick will be set to WORM again.

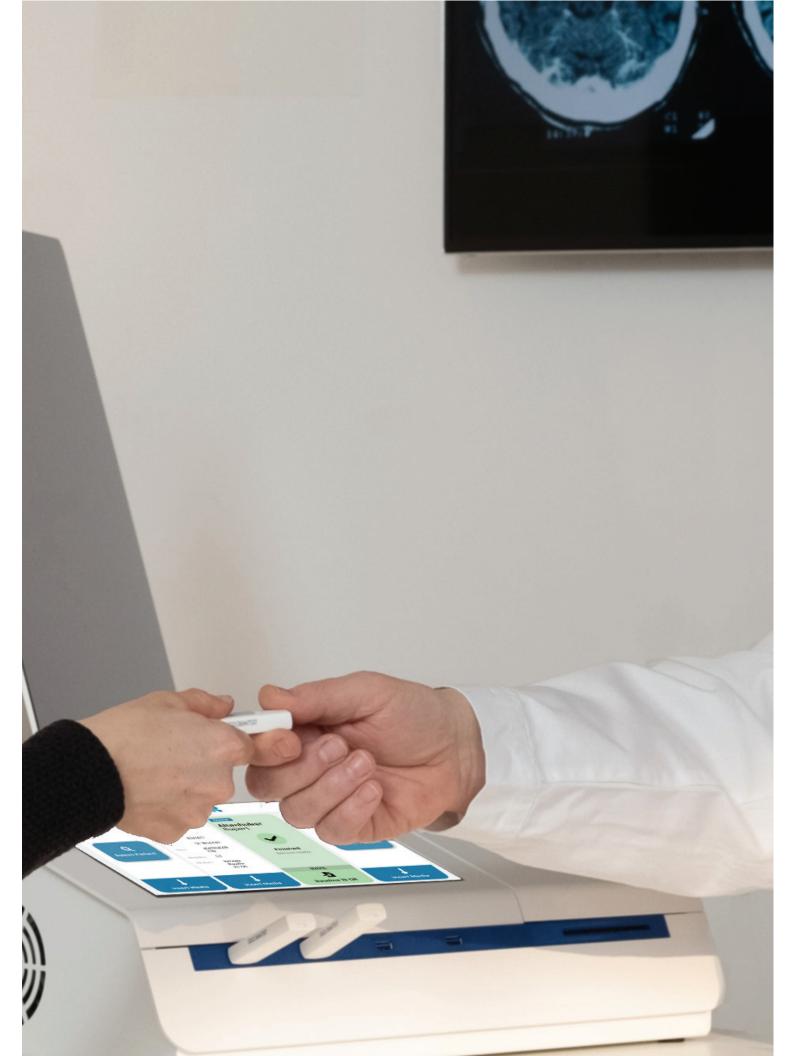
**Affordable Price:** The Stick is a one-time invest and can be used many years and with all kinds of patient data. This way it saves costs and is good for the environment by adding additional studies to the stick by avoiding plastic waste from obsolete patient CDs.

**Printed Patient-Info:** The RX400M automatically creates individual labels per USB-Stick.

**Simple & Fast Production:** Recording typical DICOM studies only takes 20-30 seconds. Jobs can be selected automatically or by selecting the patient's name on the touch screen.

**High Performance:** High quality sticks and the system design allow parallel production of up to 4 USB Sticks. This results in a throughput that can be several times higher than that of a CD robot.

**Fast Study Opening:** The reading performance of a Rimage Stick is multiple times higher than that of a CD or an online portal. This allows to open high-resolution studies in seconds.



# Areas of application

## Due to its high memory capacity and high speed, the Rimage RX400M is suitable for many areas of application, such as:

- Radiology as a replacement for the classic patient CD and for modern data-intensive procedures
- In pathology or mammography for high resolution images
- In pregnancy care for records of the complete child development
- Everywhere where high-resolution images or videos are created and for which CDs and patent portals areof limited use.

# **Rimage Patient USB-Sticks**

To provide you the best USB stick in value for money, we created two Patient USB sticks - one for a single time use and one for multiple use. In order to ensure a closed and secure enviroment, we are limiting the USB sticks that can be used with the RX400M to limit and avoid any threats (virus, malware, ...) from unknown media.

## Multi-use Patient USB-Stick

Our Top Line / BaseLine Pro Patient USB-Sticks can be used multiple times, as our Rimage RX400M systems, and only those, can re-open the patient USB-Stick to add further data to it, before they write protects the Patient USB-Stick again. With this, you can collect all of our medical data to a single stick, which helps doctors to see the progress the patient made or evaluate any potential risks based on previous diseases. Key specifications are:

USB Version: 3.1 Multi-Write Protect Feature Connector: USB A Max Read/Write Speed: 400/200 MB/s Sequential read/write: 40/30 MB/s Data Retention Time: up to 10 years Capacity: 16GB or 64GB

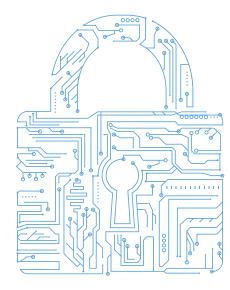
## Single Patient USB-Stick

The BaseLine Patient USB-Stick can only be written once. This stick is built for single time use and comes with a 3 year data retention time. Key specifications are:

USB Version: 2.0 SingleWORM Feature Connector: USB A Max Read/Write Speed: 200/100 MB/s Sequential read/write: 25/8 MB/s Data Retention Time: up to 3 years Capacity: 16GB

# State of the Art Software

/lultiple interfaces (JSON, REST API)
Supports writing directory structures or image to the devices (USB, SSD, SD,)
/erification (data integrity is automatically checked after writing)
Jser friendly web interface with support for all device sizes (pc, tablet, mobile phone)
Orders can be created with the easy to use web order creator or using our JSON order format
Extremely customizable orders via our advanced JSON order format (e.g.partitioning, file system, data from multiple sources)
REST API for status of system components and orders
Based completely on open source software
inux operating system (Ubuntu)
nplemented in Python
nstallation and support can be done completely remote



# Do you know WORM?

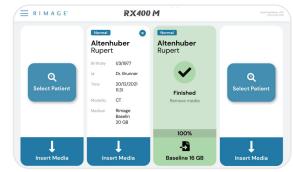
## After recording the requested data, the Rimage RX400M will lock the USB Stick on a hardware level.

This will prevent all further attempts to write, modify or erase data on the device. Being locked at the hardware controller level means that typical bypasses, such as formatting the device, will not work

Using alternate Operating Systems to access the device will not bypass the WORM protection either

Using Rimage Patient USB-Sticks ensures that the medical data is well protected and the risk of infection with a computer virus or malware is very limited.

# **Detailed Job View**



**Full Job List** 

ilot 1					>
Priority \$	Name \$	Birthday \$	Time \$	ld ¢	
Urgent	Altenhuber Rupert	1/3/1977	20/12/2021 11:31	Dr. Brunner	
Urgent	Altenhuber Rupert	1/3/1977	20/12/2021 11:31	Dr. Brunner	
Normal	Altenhuber Rupert	1/3/1977	20/12/2021 11:31	Dr. Brunner	
Normal	Altenhuber Rupert	1/3/1977	20/12/2021 11:31	Dr. Brunner	$\sim$
Normal	Altenhuber Rupert	1/3/1977	20/12/2021 11:31	Dr. Brunner	
-	Altenhuber Rupert	1/3/1977	20/12/2021 11:31	Dr. Brunner	

# Log-in Screen

