# RIMAGE®



# USB Solution - fast, easy & secure

Save data with an easy drag and drop
WebClient as well as a touch-screen interface.
Stored on state of the art, write protected
Rimage USB-stick that provides you even more
features and highest data transfer speeds and
capacities. We also support SATA SSD drives
with via optional external Docking station.

The compact RX400 is easy to set up for system integrators, resellers and end customers.

## **Functionality**

The RX400 is a compact, fully integrated, Linux based desktop device including integrated computer, 4 front USB ports, label printer and touch screen and can be configured with an internal DVD drive to securely import data from CD/DVD into your network. Combined with a state of the art WebClient, the system can be easily integrated into your existing workflows - just like a regular printer.

USB-sticks are produced as easy as simply as from our Rimage Optical Systems, with the advantages of much higher write/read speeds and high storage capacity up to 4 TB.

As secure as disc, Rimage USB-sticks are automatically write-protected when delivered, so it can be used safely, without risk of a computer virus. The integrated Thermal printer creates the label as soon as the data has been written and the finished USB stick is unplugged.

#### Advantages of USB

Optical Media 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 data is relatively slow
- · A new disc is needed if a new file needs to be added

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

- · Data is usually only available "online"
- Transfer-speeds vary based on network availability
- Older systems/ machinery don't always have the ability to access cloud data
- · Hackers may access / steal confidential data
- Insecure data transfer
- Server shutdown can cause temporary access problems
- · File sizes can get too big to push efficiently through portals
- · Ultimate expense of 'cold-storage' is unknown

# The Rimage RX400 / RX1000 is a useful addition to the two established solutions.

- Offers enough capacity even for large files and data collections (currently up to 4TB per Stick / 16TB SSD)
- · Files can be written and opened quickly
- Customers have all the documents on a compact and easy-to-use medium.
- Permanent usage of the USB Stick as new data can be added multiple times\*
- Enhanced security features using dedicated Rimage USB-sticks\*

# What makes a USB-stick reliable?

There are a few attributes a USB-stick needs to provide to be considered reliable 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 recipient who will need to access the data.

With the dedicated Rimage USB-stick we enhanced data security with unalterable data. This is achieved by several security options such as write protection. With this feature enabled, the Rimage USB-stick cannot be modified easily. With the ability of pre-protecting the USB-stick on delivery, it provides an additional level of security against viruses and malware, as the sticks can only be opened and written by the RX400 / RX1000 system. Other USB-ports can only read but not write any data on the pre-protected Rimage USB-sticks.

Here are some further advantages of the Rimage's USB-stick:



**Security:** Every USB-stick is write protected and can be individually encrypted. Furthemore we are offering features like copy protection, user right management and expiration dates.

Multiple Use: The RX400 / RX1000 can exclusively reopen a Rimage USB-stick and add new data (optional).

**Affordable Price:** The USB-stick is a one-time investment and can be used many years and with all types of data. This way it lowers cost and is considered eco-friendly by adding additional data to the stick and avoiding plastic waste from optical media.

**Printed Info:** The RX400 / RX1000 automatically creates individual labels per USB-stick.

Fast Production: With the combination of high performance RX400 / RX1000 and the Rimage USB-sticks you can archive write speeds with up to 450 MB/s.

**High Performance:** The system design allows parallel production of up to 4 (RX400) or 10 (RX1000) USB-sticks. This results in a throughput that can be several times higher than that of a CD robot. With multiple RX1000 you can increase the parallel production up to 80 USB-sticks

Fast Study Opening: The reading performance of a Rimage USB-stick is multiple times higher than that of optical media or an online portal.





## Areas of application

# The Rimage RX400 / RX1000 is suitable for many areas of application, such as:

- · Internal production and SW deployment
- · Government secure data transfer
- · Fulfillment Services flexible 1:1 or 1:n on demand
- Outsourced production remotely controlled by client with unalterable data

## Rimage USB-sticks

We are currently working on the integration of the latest generation of USB-sticks which are 56% more efficient compared to bridge-based USB external SSD. All of our Rimage USB-sticks can enable various security features (optional). All Rimage USB-sticks will meet the following specs:

- Up to 4TB in a small 26mmx60mm PCBA footprint
- · Support Triple-level cell (TLC) and Quad-level cell (QLC)
- · Compliant with Toggle 1.0/2.0/3.0/4.0 NAND flash interface
- · Compliant with ONFI 2.0/3.0/4.1
- Support up to 2 CH/16 Chip Enable (CE) within Single Design
- Flash IO Operating voltage supply 1.2v/1.8v
- · Data Reliability: 4th Generation LDPC ECC protection
- · Sourced in Taiwan

#### **USB-sticks**

Best-in-class for entry-level external USB flash drive applications with:

USB 3.2 Gen 2x1 (10Gbps) &

· Transfer rate: up to 800 MB/s

3D-TLC	Sequential (MB/s)		Random (MB/s)	
	READ	WRITE	READ	WRITE
250 GB	1000	375	165	250
500 GB	1000	800	185	260
1000 GB	1000	800	185	260
2D OTLC	Sequenti	ial (MB/s)	Randon	n (MB/s)
3D-QTLC	Sequenti READ	al (MB/s) WRITE	Randon	(MB/s) WRITE
3D-QTLC 250 GB				,,
	READ	WRITE	READ	WRITE

#### SATA SSD

SATA III Interface SSD for optional use in our external docking station:

- DDR4 / DDR3L DRAM and 8 Channels
- · Transfer rate: up to 550 MB/s

3D-TLC	Sequential (MB/s)		Random (MB/s)	
	READ	WRITE	READ	WRITE
1000 GB	550	530	TBC	TBC
2000 GB	550	530	TBC	TBC
4000 GB	550	530	TBC	TBC
8000 GB	550	530	TBC	TBC
16000 GB	550	530	TBC	TBC

"All data has been provided by our vendor.

#### State of the Art Software

Multiple interfaces (JSON, REST API)

Supports writing directory structures or image to the devices (USB, SSD, SD, ...)

Verification (data integrity is automatically checked after writing)

User 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

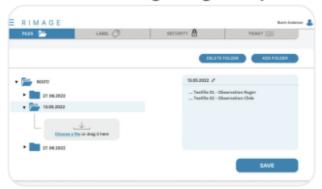
Linux operating system (Ubuntu)

Implemented in Python

Remote installation and support available

# WebClient view

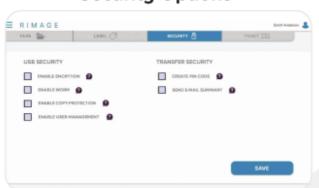
# Add Data by Drag&Drop



#### Fill out Label Information



## **Security Options**

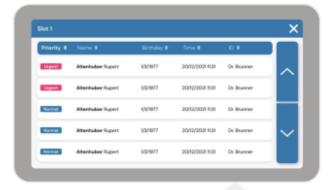


# System view

## Start Screen



#### Full Job Queue



#### PIN Entry Screen



#### Value for Business

#### Simplified Operations

With the drag and drop interface, our WebClient can be used intuitively within your entire network. The touchscreen on the system, either on the RX400 / RX1000, shows all pending jobs. By opening up the pending job list, you can select which job you want to write to the USB-stick.

With the high-performance hardware on the RX400 / RX1000 you can create USB-sticks with up to 450 MB/s sequential write speeds. This allows you to create USB-sticks quickly and efficiently.

#### Security

The RX400 / RX1000 has the option to be used with dedicated Rimage USB-sticks that have special security features such as write protection, copy protection, control of use rights, setting of expiration dates and more. This dramatically decreases the probability that files contain malware, viruses or other threats can be added on the stick and thus get into highly sensitive networks.

Only with the RX400 / RX1000 system are you able to unlock the pre-protected Rimage USB-sticks, add data, and re-activate write-protection afterwards. This pre-protection is an additional layer that limits the risks of malicious USB-sticks and provides additional IT-environment protection.

With the integrated, adhesive paper thermal printer you can easily label the USB-sticks individually, ensuring you can identify the stick at a later stage. The label content is easily specified within the WebClient and the labels are automatically created once you unplug a recorded and verified USB-stick.

#### Reliable Workflow

Once decided which files need to be transferred to a USB-stick, the user can decide what additional security features need to be activated. After that, the user creates the label information.

In future releases of the software, there will the the ability to create a PIN code individually or automatically by the system, which only allows the designated user to copy the created file/data set to a USB-stick when accessing the queue on the RX400 / RX1000. Email notification can be automated to support workflow needs.

#### Serviceability

Without any robotic parts, the RX400 / RX1000 is very service-friendly. Most of the parts are easily swappable and accessible by opening the cover.

With the easily accessible SSD that is securely locked within a ToughArmor cage, containing the device configuration and all transferred data, you can easily reuse the SSD drive in a replacement unit. In this case, your sensitive data will never leave your environment.

#### Value for EndUser

#### **USB Technology**

USB Media is compatible with nearly all end user devices (optional USB-C ports). The enhanced data capacity with up to currently 4 TB per USB-stick and up to 16TB per SSD provides the opportunity of collecting multiple data files on a single source.

With the possibilty of *spanning data over multiple Rimage USB-sticks, you will not run out of capacity*. And with the high sequential data read speeds of up to 500 MB/s the data can be accessed immediately.

#### **Data Privacy and Security**

With the RX400 / RX1000 we provide a new layer of security for your data. The data can be encrypted by integrating either your own encryption software or using an optional plugin for our Post-quantum cryptography (WIP). With this additional feature you can ensure that in case of a loss, it will be nearly impossible to access your sensitive data and records. With the additional features such as copy protection, user rights control and expiration dates, the security level can be enhanced dramatically.



# **System Specifications**

	Rimage RX400	Rimage RX1000
RAM/HDD	16 GB RAM, 480 GB SSD	16 GB RAM, 1TB M.2 SSD Cache per Module
Number of Recorders	4	10
Optional HDD	Removable SSD with up to 8 TB	NVME SSD with up to 8TB
Display	10,1 inch Touch Display, 1280 x 600 px	13.3 inch IPS Touch Display 1980 x 1080 px
Network Adapters	One 1 GB Ethernet	Up to Two 10 GB Ethernet (optional fibre)
Printer	Integrated Thermal Label Printer	External Thermal Label Printer
Label	B/W PE-Foil labels, adhesive, 54x25 mm	Depends on printer selected
Height	6.2 in/ 158 mm (back), 3,2 in/ 82 mm (front)	5.2 in/ 133 mm (back), 1.8 in/ 45 mm (front)
Width	17.52 in / 445 mm	16.85 in / 428 mm
Depth*	10 in / 254 mm	15.83 in / 402 mm
Weight	19.84 lbs/ 9 kg	17.86 lbs / 8.1 kg
Power Specifications	100 - 240V~, 4-2A 60-50H	100 - 240V", 4-2A 60-50Hz (max. 300 W)
Noise Level	Neutral: 40dBA/ Full Load: 52dBA	Neutral: 40dBA/ Full Load: 52dBA
Warranty	12 months	12 months

# **Warranty & Service**

The included 12-month warranty provides depot repair/ replacement and return shipping

#### Rapid Exchange Plus

Rimage will ship a replacement unit for next day delivery (where available) and will provide a shipping label to return the broken unit.

#### PLEASE NOTE:

THE SOFTWARE IS UNDER DEVELOPMENT FOR THESE SYSTEMS AS THEY ARE PRE-LAUNCH TO THE MARKET. DEPENDING ON MARKET INTEREST, SOME FEATURES MAY NOT BE IN-CLUDED IN THE FINAL DESIGN. FINAL SYSTEM DESIGN OF THE RX1000 MAY VARY.

#### CONTACT INFORMATION

#### **OUR PREMIERE PARTNER**



We provide solutions, products and services to migrate, ingest, manage and distribute digital content. We help clients refine their business processes and workflows to meet organizational goals and mandates, while reducing personnel and financial requirements.

GTGI is a Woman-owned small business.

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The RX400 and RX1000 have been developed by X-Net Services GmbH, Aurstia, Rimage Europe GmbH, Germany and in cooperation with solution providers for electronic data archiving and exchange.