

  
**QIDENUS**  
*RoboticBookScanner (RBS)*



*Preserving The Past For The Future*



**QIDENUS TECHNOLOGIES**

[www.roboticbookscan.com](http://www.roboticbookscan.com)

# QIDENUS Technologies

## Conservation



- highest protection due to gentle bionic page-turning
- variable bookcradle with optimum aperture angles
- gentle touch- and suction-free scanning

## Economy



- intelligent workflow and software management
- high-end production line ➤ minimum maintenance
- operating efficiency ➤ 1 operator handles up to 4 robots
- compatible with future digital camera developments

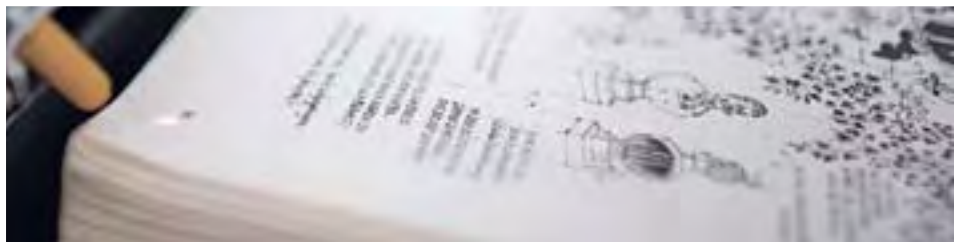
## Technology



- 2 in 1 machine: automatic and manual system in one device
- the bionic finger – patented self-learning turning mechanism
- compact, portable, highly economic
- integrated quality control and process management
  - never miss a page with intelligent double-page control and self-centering book cradle
  - curvature-free scanning with or without glass plate

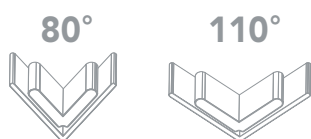
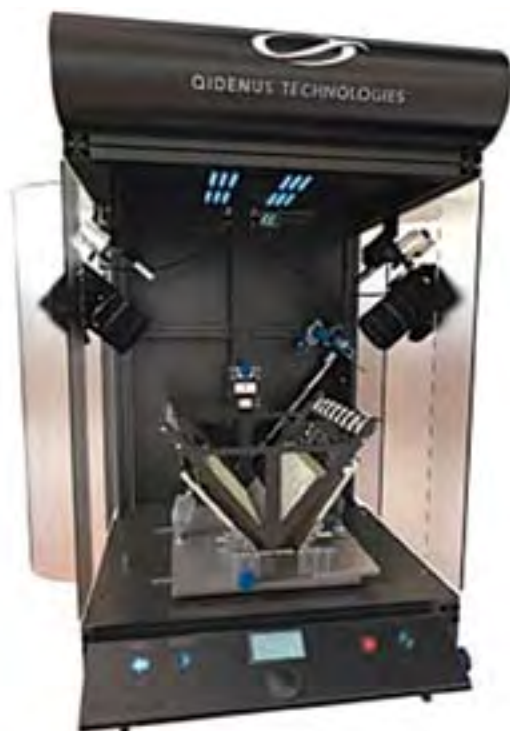
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*Provider Of High Quality  
Book Scanning Solutions*



# Robotic TableTop Book Scanners: RBS TT A3+ and RBS TT A2+

Automatic robot built for quality, economy and efficiency



variable bookcradle

## Specifications:

### cycle speed

2,000 pages/hour

### efficient operating modes

automatic/semi-automatic\*/manual

### high image resolution

A3+ 400 or 300 dpi (depending on applied cams)

A2+ up to 300 dpi

### color tone

24-bit color: 8-bit grayscale: 1-bit b/w

### max. page size

A3+ 2x 29cm x 37cm (11.4 in x 14.6 in)

A2+ 2 x 37cm x 55cm\*\* (14.6 in x 21.6 in)

### max. book thickness

15 cm (5.9 in)

### page turning security

the integrated double-page sensor system guarantees secure page separation and automatized single turning

### complete digitization

unique ability to scan loose sheets, book covers and foldouts with one machine

### included software package

QiSoft Suite for image processing, quality control, conversion workflow management, Metadata and OCR \*\*\*

### included IT system

high-end server system for image capturing, batch processing and 4 TB internal storage

### formats

e.g.: JPEG, PDF, TIFF, GIF, RAW, PDF OCR, XML  
JPEG 2000: optional

### paper weight & quality

30-350 g/m<sup>2</sup> (30 lb text – 120 lb cover)  
in all textures and qualities

### book cradle

new adjusting book cradle system in gentle 80°

### machine dimensions/weight

66cm x 78cm/68kg  
26 in x 30.7 in/149.6 lbs

### digital camera systems (A3+)

Canon EOS 5D Mark II (21.1 mpix/400 dpi)

Canon EOS 500D (15.1 mpix/300 dpi)

\*uniquely efficient semi-automatic mode controlled via light sensor system

\*\* maximum page size does not apply to all operation modes

\*\*\*OCR licenses upon request to Qidenus Technologies or directly to ABBYY

Qidenus Technologies reserves the right to make changes to the specifications above without obligation to notify/January 2011

For more information:

[thecrowleycompany.com/scanning-equipment/qidenus/](http://thecrowleycompany.com/scanning-equipment/qidenus/)  
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# Competitive Advantages

## Qidenus Robotic Book Scanning Technology

### Revolutionary page-turning intelligence

The RBS TT units are the only true automatic bookscanners on the market featuring a page-turning intelligence. This revolutionary technology is capable of automatically re-adjusting the page-turning process within the book based on the electronic feedback of the **double-page control**, ensuring that the Qidenus is truly capable of turning a book from front to back without operator interaction.

### Intuitive page-turning mechanism

The RBS TT units use a solely mechanical page-turning mechanism, offering several advantages:

- no congestion of the page-turning mechanism from dirt (a known problem in competitive scanners)
- simple and easy integration of technology with different products and environments
- an independence from blowing/vacuum mechanisms for gentle handling, easier maintenance and increased paper compatibilities
- the ability of the "bionic finger" to perfectly adjust to customer/book needs
- no scan image obstruction (eliminating an unnecessary post-processing step)

### Variable optic system

The RBS TT units use a variable optic system consisting of different Canon DSLR's. Unlike the competitors, the Qidenus also offers integration with other camera systems, making the system more versatile to customer needs (i.e.: industrial cameras and the very high-definition Hasselblad camera).

### Intelligent glass plate

The RBS TT units use a pressure-controlled, automatic glass plate that is shaped in the same degree as the book cradle. This ensures flat images with no curvature while applying zero pressure to the book spine. Robots without a glass plate do not produce completely flat images.

### High-efficiency throughput and workflow system

Qidenus has developed an ingenious software workflow system that allows industrial scale digitization of books through sequencing of the different work steps, considerably minimizing the stop-times between book-loading. Operating on an SQL database system, the Qidenus can allocate batch processing, loading parameters and external post-processing at different locations, thereby ensuring that all processing does not need to be performed directly on the robot, but can be outsourced to an IT system for continuous scanning of unlimited books without the need to stop for post-processing.

### Switch operation modes with a single touch

Recognizing that not every book can be scanned automatically from beginning to end, the RBS TT units allow for an operator to switch between the manual and automatic modes with a single touch. This offers the flexibility to scan foldouts, book covers and difficult pages within the same machine, quickening the production process and eliminating potential post-production errors.

### Reduced labor costs

The RBS TT's page-turning intelligence and work system combine to create an operator/machine ratio of 1:3 (conservatively) to 1:5. Based on extensive testing, a single operator is capable of operating up to five machines at the same time, while competitive units require 1:1 operator interaction for their page-turning and digitization processes.

### Unprecedented customization

The Qidenus industrial approach of building high-efficiency, individual robotic systems allows for an unprecedented ability to configure a scanner to the exact specifications of the customers. Offerings include:

- variable book aperture angles
- a variety of optic systems
- security features
- implementation into existing or new IT workflow

### Low maintenance

The RBS TT units were built by a team of renowned engineers known for designing high-efficiency production lines for Siemens and BMW. All components and security features are of the highest quality and are made for high industrial throughput and low maintenance. The complete robot is made of custom-designed, cnc-drilled aluminum parts for maximum durability. All spare parts are available internationally on 24-hour notice.

**NOTE:** *In over 12 months of prototype scanning production, Qidenus did not experience a single incident of equipment/parts failure.*