

## profi III [A2<sup>+</sup>] X

The Dual-Use Scanner

...many good reasons



## book2net profi: Committed to Quality!

Unrivalled fast, flexible and precise



The **book2net profi** is one of the most successful and versatile book scanners in the international market and convinces users by its high quality, productivity, and reliability.

In particular, our innovative **Matrix Sensor Technology** has set new standards in terms of image quality and productivity.

The **book2net profi** is suitable for use in reading rooms as well as for professional working in institutions or digitization centers.



### Public system

- All-In-One Concept
- 23" Touchscreen
- Embedded PC
- Makrolon® pressure plate (optional)

## book2net profi III: Dual-Use Technology

### Versatile and variable

Thanks to the **dual-use technology**, the **book2net profi** is suitable for use in the reading rooms as well as for professional use in institutions or scan centers.

Corresponding to customer requirements, the **book2net profi** can be designed as a public system with integrated embedded PC and touchscreen or as a production system with a PC and an external proof monitor.

**Both concepts can be easily combined.** This versatility is unique and highly appreciated by our customers.

The dual-use concept of the **book2net profi** also offers the possibility to switch from the intuitive public software *Easy Scan* to the production software *Easy Scan Professional* and vice versa with just one touch of a button.



BRITISH  
LIBRARY

über unsere book2net  
Scanner:

*„For book scanning the  
real workhorses are the  
book2net scanner.“*

### Workstation

- External PC & proof monitor
- Keyboard & mouse
- Foot switch
- Makrolon® pressure plate
- Embedded PC (optional)
- 23" touchscreen (optional)

## book2net profi III: The Next Generation

We have followed these requirements in the development of the next generation of the **book2net profi**:

Equipped with the latest **X Matrix Sensor Technology**, high-quality optics, 23" touch screen monitor, conservational book cradle, innovative, environment-friendly LED illumination concept and modern-designed casing, the **book2net profi III** is setting new technological standards combining productivity and high quality with best user-friendliness.

The intuitive, user-friendly software *Easy Scan* has been functionally extended by a powerful **OCR software** as well as by a new type of **finger removal and flexible accounting software** for the delivery service.

### Optics

- Schneider precision lens
- Long-term durability
- 12 cm depth of field
- Brilliant color reproduction
- Perfect linearity
- Distortion-free

### 3D Analyser II

- Geometric 3D book analysis
- Finger removal
- Edge detection
- Page detection
- Type area detection
- Book-fold optimization (BFO)
- Preservation approved

### 23" Touchscreen (optional)

- Ergonomic touchscreen
- Optimized user friendliness
- Industry standard
- Zoom and proof monitor

### Integrated PC (optional)

- Fast and quiet
- MS embedded operating system 64-bit
- SSD technology (60% faster)
- UWF Technology
- Maximum security and virus protection



### X High-performance sensor

- High-resolution matrix sensor
- Selectable options:
  - ✕ 300 dpi
  - ✕ 400 dpi
  - ✕ 600 dpi
- 0.3 sec. Scanning time (double page, color @ 300 dpi)
- 2.2 sec. Processing time (scanning + imaging + storage)
- USB 3.0 Interface
- Optimized for OCR applications due to reduced noise

### LED Illumination

- Cold-light LEDs
- Fresnel lenses for homogeneous uniform illumination
- Eco function
- Low power consumption
- Adaptable to ambient light
- Uniform light distribution
- Constant wave-length
- Lighting time 0.5 sec.

### Book cradle

- Layout section 460 x 645 mm
- Self-adjusting
- Height compensation up to 15 cm
- 10 cm protective book spine gap
- Motorized locking mechanism
- Preservation approved

# **X71 — CMOS 71 MP Camera**

Cutting-edge technology « *Made by MICROBOX* »



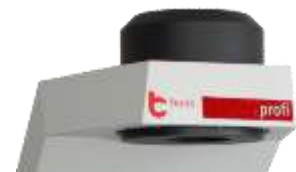
## **Guaranteeing the highest quality and performance!**

The new **X71** camera, developed by **MICROBOX book2net**, does represent world-leading technology in modern digital cameras.

Our **CMOS 71 MP** sensor technology is considered as the key technology of the future, allowing high-resolution images with superior image quality, ease of use and incredible speed.

## **Integrated in the book2net profi III**

The use of our pioneering technology brings you additional advantages in image quality and productivity.



## **Enjoy the benefits:**

- CMOS 71 MP sensor with BSI technic
- Exceptional image quality with perfect color management
- High resolution
- 12 cm depth of field
- Fast imaging
- Reduced processing times
- Automatic exposure control
- Minimal lighting requirements
- USB 3.0 interface (for optimal transfer rate)
- Optimized signal to noise relation



**Exceptional depth of field**



## Quality at All Levels

### ...due to BFO and 12 cm depth of field

Thanks to the high depth of field of 12 cm and the **optical book fold optimization** (BFO) integrated in our pioneering **Matrix Sensor Technology**, the **book2net profi III** ensures constant image sharpness across the entire layout section. Thus, even with uneven and/or wavy documents, an excellent scan result will be achieved. This applies in particular to the difficult book fold and edge areas.

Due to the exceptional **Matrix Sensor Technology** no later manipulation or mathematical correction of the image data is required. The image data are therefore genuine as raw data for the digital archiving and further processing. Furthermore, the scanning result guarantees ideal preconditions for a **precise OCR** thanks to its sharp outlines.



### Optical Book Fold Optimization (BFO)

Optimal scan results & sharp letter contours for OCR –  
Even with the most challenging originals!

## Optimal Depth of Field

### ...guaranteeing high quality at all levels

The high depth of field ensures that all information is captured without loss of quality, even in the book fold and edges. Furthermore, the capturing of the entire book is guaranteed without any need for height adjustment.



These results convince even in 3D!

## Green Technology: Less is more!

### ...and better for your books

Measures for energy reduction and climate protection are not only protecting the environment but also the development of an innovative and future-oriented technology. With the lowest consumption data the **book2net** scanners are making a significant contribution to a positive energy balance. They are emission-free, low noise and highly durable.

Economic and ecological responsibility is a clearly defined development specification which has been implemented in the new generation of the **book2net profi III**. With the reduction in illumination times to 0.5 seconds, and the adaption of the light intensity to the environmental conditions we make a directly measurable contribution to **Green Technology**. The light source can optionally be set to economical "eco-function" with low light intensity or to higher light intensity in order to overcome the ambient light. This is achieved due to the minimal light requirement of the matrix sensor and the use of especially calculated **Fresnel lenses** for an even, glare-free illumination of the layout section. As a result the **book2net** scanners are achieving an optimum image quality with reduced light intensity. The energy saving is up to 60%. As a matter of course the used White LEDs (cold light) are UV-/ IR-free.

### Innovative, glare-free LED illumination

The **book2net profi III** is equipped with a LED illumination system that provides a stable color temperature during operation. Thanks to the used **Fresnel lenses** an even illumination across the whole scan area is ensured.



- 0.5 sec. exposure time
- Eco function (2500 lux only)
- Adaption to environment  
light up to 6000 lux

The LED light source is without glare and UV-/IR-free, so that there is no radiation for the operator according to EN60825-1.

A high light intensity even over a short period of time can start biochemical processes, especially with old manuscripts with the consequence that paper, ink or paint changes their characteristics. As common book scanners working with line sensor technology are forced to capture with a minimum amount of light of 14000 lux the risk of damaging valuable books during digitization is high.

The **book2net profi III** allows you to reduce the intensity of the light down to 2500 lux.



## Ergonomics in Focus

During the development of the **book2net profi III** special attention was given to the ergonomics:

Thanks to the larger display, the new 23" monitor is capable for QA and increases the operator convenience. In addition the thumbnail overview with drag-and-drop functionality enables a comfortable and quick insertion, deletion or moving of scanned pages. The innovative Embedded Controller with SSD storage technology and 64 Bit-System allows an up to 60% faster data-processing and reduces residence times at the scanner significantly. A USB-capacity display is part of our concept as well as electronic shutter button.



### High-level operating comfort:

- 23" touchscreen
- Larger control buttons
- Comfortable thumbnail overview
- Drag-and-drop functionality
- Electronic trigger keys (smooth-touch)
- SSD storage technology
- Faster data processing
- Reduced residence times
- USB residual capacity display

## Self-adjusting Book Cradle

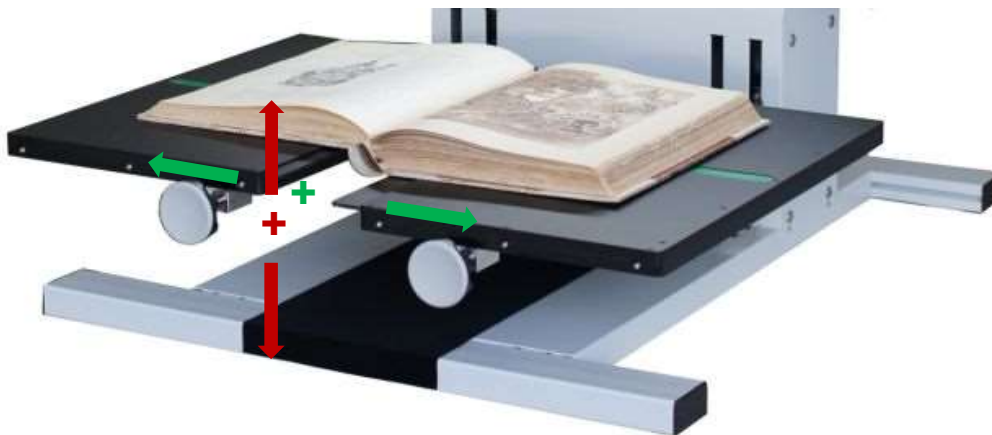
Fragile historical books, modern books, magazines, documents, files or ring binders - **the new self-adjusting, conservation book cradle A2+** (460 mm x 645 mm) is adapting to a wide range of different templates. It guarantees a particularly gentle treatment of the originals and allows a quiet, motionless scanning process.

The **adjustable spine-exemption** allows a particularly gentle handling of very sensitive or thick books.

The **layout section** is **optionally provided with a special scratch-resistant film or a non-reflecting, smooth coating**.

The **transparent and gentle Makrolon® plate** can be flexibly used: it can be removed quickly and easily when needed.

The **scanning process** is triggered via new, exceptionally sensitive **touch-pads** (smooth-touch).



+ Spine exemption up to 10 cm

+ Height adjustment up to 15 cm



Removable Makrolon® plate

## Supplements

### ...adapted to your special needs

To provide maximum flexibility for the user, we offer a wide range of accessories for our series of **book2net public/profi/ultra**.

#### 1. Magnetic ruler



- Short or long version
- Wood or black anodized aluminum

#### 2. Sloping application



- Adjustable angle A4 for scanning books that must not be opened by 180 ° (black anodized)
- Available with additional plates A2 & A3 (black anodized)

#### 3. A1 extension



- Extension with adjustable angle for scanning books up to A1 size and weighing up to 10 kg

## True Color Management

The integrated True Color Management meets the highest requirements in accordance with **Metamorfoze**, and **FADGI** standards regarding color quality, resolution, noise and linearity and is far ahead from conventional line sensor technology.

In the following chart the performance of the **book2net** scanner is presented by an actual-theoretical comparison. Compared are the measured results of a scan of an [X-Rite ColorChecker® 24 Patch Classic](#) target against the provided manufacturer reference data. All results are measured in the sRGB (IEC 61966-2-1) color working space for illuminate D65.<sup>1)</sup>

	book2net profi III			X-Rite ColorChecker®			
Mean Difference	Actual Value (7x7 Average)			Theoretical Value			Color Name
-1,67	116	84	70	115	82	68	Dark skin
2,67	193	144	129	194	150	130	Light skin
4,00	94	119	152	98	122	157	Blue sky
-1,33	91	110	65	87	108	67	Foliage
4,00	130	126	170	133	128	177	Blue flower
3,67	103	184	164	103	189	170	Bluish green
-3,67	215	125	55	214	126	44	Orange
0,00	80	91	166	80	91	166	Purplish blue
-1,00	195	82	108	193	90	99	Moderate red
-3,00	99	64	108	94	60	108	Purple
-2,33	155	190	71	157	188	64	Yellow green
3,67	215	164	43	224	163	46	Orange yellow
2,00	51	63	147	56	61	150	Blue
-1,00	77	148	69	70	148	73	Green
-3,33	179	52	68	175	54	60	Red
2,67	227	199	27	231	199	31	Yellow
-2,67	191	85	154	187	86	149	Magenta
-0,67	14	129	161	8	133	161	Cyan
2,00	241	241	240	243	243	242	White (.05)
3,33	195	200	195	200	200	200	Neutral 8 (.23)
2,33	154	162	157	160	160	160	Neutral 6.5 (.44)
2,33	119	121	118	122	122	121	Neutral 5 (.70)
2,00	82	85	82	85	85	85	Neutral 3.5 (1.05)
2,67	49	50	49	52	52	52	Black (1.50)
0,69	1) Reference scans have been made with book2net profi III serial no 1930526						

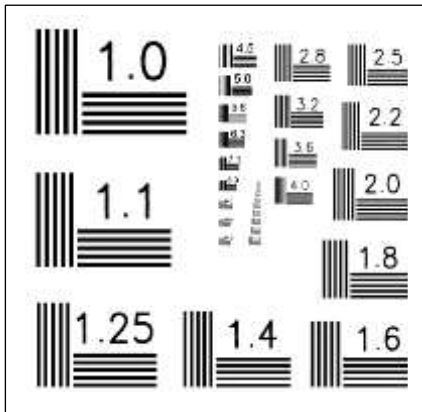
<sup>1)</sup> Reference scans have been made with **book2net profi III** serial no 1930526



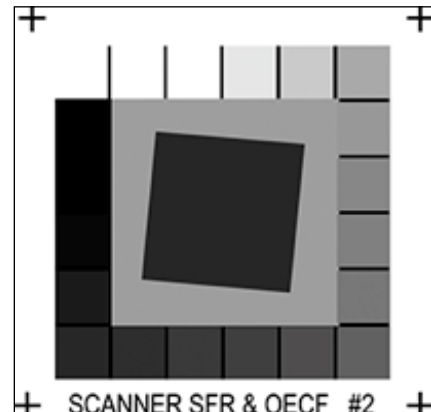
## Measurable Quality

### Resolution, grey scale & color matching

To provide our clients with constant, measurable quality, we work with ISO standard test charts for the calibration of resolution, grayscale and color.



Applied Image Inc® ISO Resolution Chart (T-10)



Imatest™ Scanner SFR & OECF QA-62



X-Rite® GretagMacbeth Color Checker



X-Rite® GretagMacbeth Color Checker SG



Universal Test Target (UTT)

## *Easy Scan : Save & Secure!*

### **...thanks to multiple safety concept**

All **book2net** scanners with an embedded PC are equipped from the factory with a **Windows Embedded operating system**. As a modularized and especially configured Windows operating system it combines performance with an in-creased safety and reliability and ensures long-term availability and support.

The Windows Embedded installation uses unique features which are only available for the Windows Embedded product family. The main features include the **Unified Write Filter (UWF)** that ensures a virus and write protection during the scanning process. It prevents any access to the system disk, since all write requests are routed directly to the temporary working memory. All applications and accesses of the user are made exclusively in the overlay.

This technology protects the system from corruption by viruses as well as against unexpected power outages because the original contents of the disk remains untouched and the system can be reset at any time to the original default again by rebooting.

In addition to the above the Copyright & Watermark functionality of the *Easy Scan* user-interface ensures the compliance with the copyright law.



#### **All-In-One Concept:**

- No external hardware (no PC, mouse and keyboard)
- Integrated PC
- Integrated Monitor
- Dual USB-Ports
- Safe from vandalism



## *Easy Scan Plus II: It couldn't be easier!*

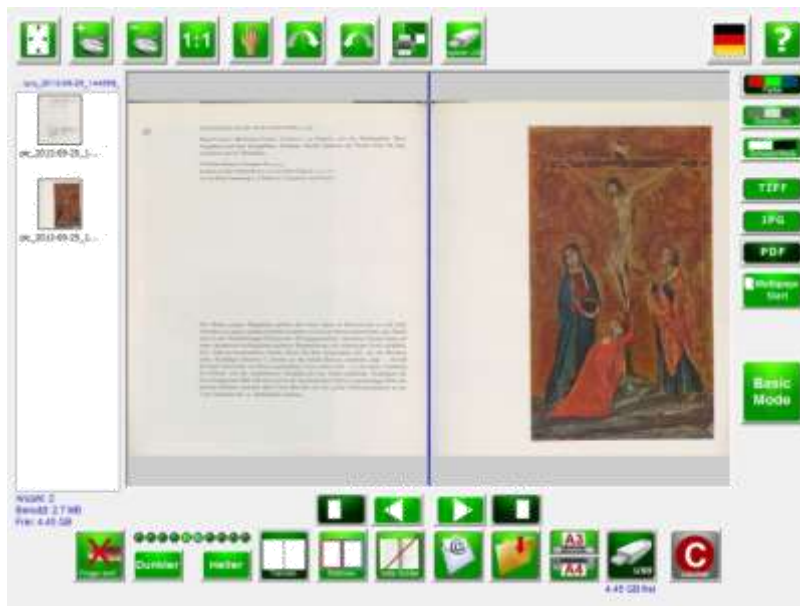
### The intuitive and user-friendly software

*Easy Scan Plus II* is a modern, multilingual, intuitive and incredible user-friendly software. The user interface can be customized by enabling or disabling features. All configuration parameters are visible at a glance, without branching into endless sub-menus. Finger removal, type-area and page recognition, automatic cutting and straightening and book-fold optimization are proceeded by in the range of milliseconds.

With *Easy Scan OCR* and *Easy Scan Delivery* two additional high-performance software packages are available as options. *Easy Scan Delivery* supports all major library delivery- and ordering systems, *Easy Scan OCR* is accessible for more than 120 languages and allows the fast and easy generation of searchable or editable documents by pressing either in single-page mode or in job mode.

### Individually adaptable user interface

... by just enabling or disabling the required features




- Multilingual (selectable and definable language drop-down menu)
- Thumbnail display
- Drag & Drop (insert, view, delete)
- Choice of color (COL, GS, BW)
- Choice of format (TIFF, PDF, JPEG)
- Multipage
- Adaptation of the center
- Automatic deskewing
- Full size scan
- Page separation Left side / right side
- Setting frames
- Print defined sections
- Contrast control
- Zoom function
- Book fold optimization and book curve correction
- Finger removal
- Direct keys for the most used settings
- Scan to USB
- Scan to printer

# Easy Scan OCR: for more than 120 languages!

## Scan, read, search, edit – quick & easy!

The professional *Easy Scan* software is directly integrated in the scanning process and is initiated by simply activating the appropriate button on the user interface. The *Easy Scan OCR* software convinces with impressive accuracy and speed.

*Easy Scan OCR* is available in more than 120 languages and creates searchable PDF or editable Word documents (doc/docx), optionally after each scan in single page mode, or at the end of a scan job in multi-page mode.



**Activated with one click**

OCR: Texterkennung Schritt 1  
Bitte warten...

für 120 Sprachen verfügbar

OCR

**Full text search in PDF file**

**Editable Word documents**

**Editable texts**



# *Easy Scan Professional*

## The professional software extension

*Easy Scan Professional* is the professional extension of our *Easy Scan Plus II* software, ensuring the same unrivaled user-friendliness and speed. The multilingual user interface can be customized according to your specific requirements just by enabling or disabling features. All configuration parameters are visible at a glance, without unnecessary branching into endless sub-menus.

With the integrated image enhancement, *Easy Scan Professional* meets the highest standards of quality and performance in the areas of digitization of cultural heritage as well as high volume digitization.

The software allows the storage of images in multiple file-/color-formats and resolutions with just one scan.

It couldn't be easier!

## ...to streamline your workflow!



Choose your options by easily unroll the menu by a simple touch!

- Scan in color, grayscale and black and white
- Thumbnail display & features
  - insert, delete, replace by scan or re-scan, replacing with pictures from file, placeholder left side or right side
  - direct reorganization of view and count to actions such as inserting or deleting files
  - automatic numbering
- Job history list to reload already processed scan jobs, including used job parameters
- Multiple processing of digitized scan jobs
  - scan once – process multiple times
  - generating different storage formats
  - change color depth etc.
- Automatic cutting, aligning and sharpening
- Adjustment of brightness / contrast
- Clipping and quick selection between the print sizes A3/A4
- One Touch for setting both frames with the same size
- Page separation, with mid shift of the dividing line
- 1:1 Quick view
- 3D-Analyser - Software for geometric book analysis
  - finger removal, edge detection
  - page recognition, type area recognition
- Book fold optimization and book curve correction
- OCR
- Tonal value correction
- Color profiling according to ICC
- Different storage formats
  - TIFF, JPEG, PDF
  - multipage PDF, multipage TIFF, PDF-A
- Fast storage to local hard disc, USB or SMB network shares

## *Easy Scan Professional*

### Comfortable and individual image processing

Our *Easy Scan Professional* software is also an excellent tool to support the individual manipulation of your images.

- Cropping  
...the software allows to define regions of interest by setting frames. Once adjusted the settings can be applied to a set of images.
- Add, insert, replace pages (e.g. with text or copyright notification)
- Manual deskewing
- Rotation
- OCR
- Large file format support (e.g. for files >1 GB)
- Insert watermarks (optional)
- Insert footers or headers (optional)



## *Easy Scan Professional*

### ...and efficient project management!

*Easy Scan Professional* can be easily integrated into the post-processing workflow. An intelligent job processing with job creation, job retention, job continuation and job post-processing, provides a basis for a wide variety of uses. Routines for error prevention and intelligent management framework also ensure a smooth workflow.



**Watch our video on:**

<https://www.youtube.com/watch?v=c1G2emE6Rk8>

### It couldn't be easier!

- Name files and documents
- Define different projects simultaneously
- Close and open projects/jobs as needed
- Continue from the end automatically
- Choose the storage format
- Add, insert, delete or replace pages easily due to the
- Automatic numbering
- Job history list to reload already processed scan jobs, including used job parameters
- Multiple processing of digitized scan jobs
  - scan once – process multiple times
  - generating different storage formats
  - change color depth etc.
- Export files
- Raw data
- Uncompressed TIFF
- Fast storage to local hard disc, USB or SMB network shares

## profi III [A2<sup>+</sup>] X

...the fastest solution for your daily business!



**We will be more than  
pleased to support you on  
your project!**

