

# APOLLO-HS

Rollfilm



Microfiche



Aperture Card



Base

- 3-in-1 Modular Design – highly reliable
- LED light – Uniform light, Low power, no noise
- Optical scaling – TRUE DPI · 1,4,8,12 bit pixel depths
- Windows 7 Ultimate, Quad core, USB3, SSD Drives
- 4 Gbyte memory, 1 Gb/s LAN, dual monitors

SunRise Imaging Inc. leading the industry with the latest production microfilm scanners the Apollo and Apollo HS. GREEN hardware technology and Scanflo software.

Fully compatible with prior Sunrise hardware and software. The Apollo Series Production Microfilm scanner *with* Reelscan and Rowscan technologies!

See your authorized Sunrise Imaging Inc. reseller for details.

## SunRise Imaging Inc

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## Hardware Specifications

The SunRise 3-in-1 scanner consists of a Base Unit: computer, software, scanner controls, camera & light source. A Rollfilm, Ultrafiche, or an Aperture Card module completes the system for any type of microfilm to be scanned.

### FEATURES OF Sunrise 3-IN-1 scanner

3-in-1 Modular Design	Yes	Yes
Variable Optical zoom – not digital zoom	Yes	Yes
High resolution scan mode (8k)	Yes	Yes
High Speed scan mode (4k)	Yes	Yes
Ultra-stable chassis	Yes	Yes

### Apollo Apollo HS

### SOFTWARE

Windows 7 Ultimate Applications	Yes	Yes
ScanFlo Professional	Included	Included
ScanFlo Premier	Included	Included
Remote access diagnostics	Yes	Yes

### COMPUTING SYSTEM

Processor 4 <sup>th</sup> gen Intel	i7	i7
Memory	4 GB	4 GB
Hard Drive: Internal Solid State	128GB	256GB
DVD Optical drive	Yes	Yes
Removable 2.5" Drives (1 of 2 bays loaded)	500GB	1,000GB
External drive expansion via USB 3.0	Yes	Yes

### I/O

USB 2.0: Front -2, Rear -6 (2 are USB 3.0)	Yes	Yes
Monitor output: VGA / DVI / HDMI	Dual	Dual
Max Output Resolution	UHD	UHD (4k)
Mouse & Keyboard	Yes	Yes
LAN: Gigabit Ethernet	Yes	Yes

### IMAGING

Linear CCD 4k & 8k pixel array	Yes	Yes
Camera: Sunrise Apollo	Std.	High Speed
Lens: Nikon 60mm f/2.8	Yes	Yes
Light Source: Sunrise LED	Yes	Yes

### PERFORMANCE

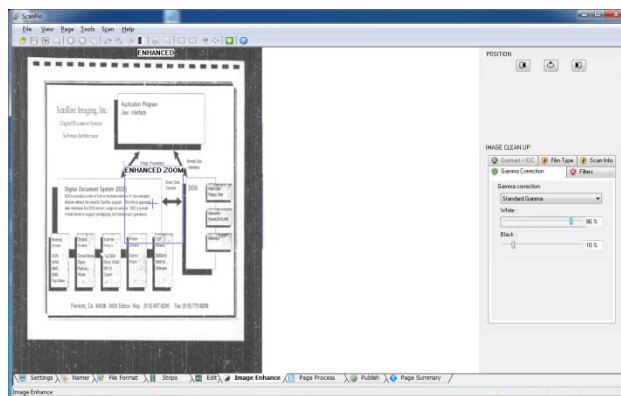
<b>Rollfilm: 16mm, 200dpi, 24X reduction</b>	200	375 / 750* images per minute
<b>Jacketed Fiche: 5 rows x 14 images, 200dpi, 24X reduction</b>	100	150 / 200* images per minute
<b>COM fiche: 15 rows x 18 images, 48 X reduction</b>	120	210 / 280* images per minute
<b>Aperture Card, 200dpi, 8-bit grayscale, 24X reduction</b>	600	700 images per hour

*Important Note: Performance is highly dependent upon film characteristics and quality. The above data is based on SRI production test films and is provided for reference only.*

- When using enhanced Sunrise Mode

### ELECTRICAL

Input power	110 / 220 VAC, 47 -63 Hz, 2 / 1 Amp
Temperature	OPERATING 10 to 35°C (50 - 95°F), NON-OPERATING 0 -70°C (0 -158°F)
Relative Humidity	[NON CONDENSING] OPERATING 10% to 90%, NON-OPERATING 5% to 95%
Altitude	0 -3,048 meters (0 -10,000 feet)
Safety	FCC Class A, CE ITE Class I



*ScanFlo application makes it easy and fast for you to setup and operate your 3-in-1 scanner*

*Specifications as of 04/01/2014 and subject to change without notice.*

## Software Specifications

The SunRise 3-in-1 microfilm scanners include the entire image processing capabilities you will need to output pages that duplicate the appearance of the original page scanned.

### Capabilities of Scanflo

<b>User interface</b>	Scanflo Professional, Scanflo Premier modes: wizard & classic, Tabbed dialogs, logically grouped, for fast parameter setting
<b>Real-Time</b>	Scan time image processing writes image files during the scan – immediate results
<b>Archive Scan</b>	Raw Scan is fast and simple, post scan image processing allows QA
<b>Scan settings</b>	Scan job parameters are automatically saved.
<b>Digitized data stream</b>	Simultaneous bi-tonal and 8 bit grayscale scanning
<b>File formats</b>	TIFF, TIFF LZW, JPEG, GIF, PDF, PDF-LZW for bi-tonal and grayscale
<b>Grayscale scanning</b>	Up to 12 bit pixel depths
<b>Image processing</b>	Bi-tonal & 4, 8, 12 -bit grayscale. Edge Sharpen, Crop, Deskew, 90/180/270 Rotation, Blip detection, Mirror Flip, Invert
<b>Gamma</b>	Enhance contrast by stretching grayscale linear and custom tables
<b>Special features</b>	Rollfilm – fast rewind, Ultrafiche – apply five different image processing options on same fiche
<b>Crop &amp; deskew</b>	Crop & save with or without deskewing
<b>Ease of use</b>	Tool Icons, tabbed dialogs, drop down mouse menus, mouse wheel parameter change
<b>Help</b>	Context sensitive help, how to use the software including step by step instructions

### MICRO FILM SUPPORT

<b>Film polarities</b>	Negative/Positive
<b>Reduction</b>	7x – 72x [Scan dpi: Half CCD reduction (4K mode) 2,500 - 11,000] [Scan dpi: Full CCD reduction (8K mode) 4,900 - 23,000] Note: The minimum range can be lower by use of the optional extension tubes
<b>Document size</b>	A0 – A4 (A – E)
<b>Compression</b>	Bi-tonal: TIFF uncompressed, TIFF CCITT G4, Multi page TIFF, PDF, PDF LZW Grayscale: TIFF uncompressed, TIFF LZW, JPEG (8-bit), GIF (8-Bit), PDF, PDF LZW

### Mechanical Dimensions (max.)

<b>Base Unit</b>	H 29" (74 cm) x L 30" (76 cm) x W 14" (36 cm)
<b>Base Unit+Rollfilm</b>	H 29" (74 cm) x L 30" (76 cm) x W 24" (61 cm)
<b>Base Unit + Ultrafiche</b>	H 29" (74 cm) x L 30" (76 cm) x W 28" (71 cm)
<b>Base Unit + ApertureCard</b>	H 29" (74 cm) x L 30" (76 cm) x W 36" (92 cm)
<b>Shipping container - Base Unit</b>	Box 1: 35" (89cm) x19" (48cm) x 9" (48cm) 40lbs    Box 2: 35" (89cm) x19" (48cm) x14" (36cm) 45lbs
<b>Shipping container – RF Module</b>	H 13" (33 cm) x L 28" (86 cm) x W 18" (46 cm) 27 lbs
<b>Shipping container – MF Module</b>	H 13" (33 cm) x L 34" (86 cm) x W 18" (46 cm) 47 lbs
<b>Shipping container – AC Module</b>	H 13" (33 cm) x L 34" (86 cm) x W 18" (46 cm) 37lbs

## Modules



Rollfilm

**Film types:**

16mm, 35mm  
auto detection variable size  
pages  
Portrait/Landscape  
orientation  
Simplex/Duplex/Multiplex,  
COM  
Oil Well Logs (Continuous  
forms)  
Blipped

**Options:** 1000 foot reel  
attachment;  
16mm 3M cartridge  
adapter



Microfiche

**Film types:**

Standard and jumbo fiche,  
Jacketed and COM fiche  
Oil Well Logs, AB Dick,  
Microx, Step & repeat fiche

**Options:** Reflective title bar,  
AB Dick locator pins and filter



Aperture Card

**Film types:**

Cine/Comic  
Multiple T-Card (1,2,3... images per card)

**Standard:**

Hollerith code reader

