

Leaf

# Leaf AFi

Medium-format  
Digital Camera System



# Leaf AFi

## The world's most advanced medium format, 6 x 6 autofocus digital camera system

Today's professional photographer needs a digital camera system that meets the stringent demands of the photographic market. The Leaf AFi is the innovative all-new digital camera system for the demanding professional.

The Leaf AFi system was created with input from leading photographers. Delivering world-renowned, uncompromised image quality, it integrates superior imaging components, advanced Leaf imaging module technology and Leaf Capture, the fastest capture software on the market.

The Leaf AFi digital camera system delivers up to 82 frames per minute (in ultra fast mode) and features a large ergonomically designed touchscreen and advanced imaging technology that's simple and intuitive to use.

**"The camera is a pleasure to use and simply feels right in my hand. The interface is highly intuitive and made for a short learning curve. I was shooting in minutes."**

Adam Chinitz, USA

### **Best in Class optics - Schneider AutoFocus Digital (AFD) lenses**

The Leaf AFi digital camera system features specially developed lenses for digital shooting and optical performance that supports the high expectations of today's photographers and clients.

### **Ultra fast shooting - up to 82 frames per minute**

Never miss a critical shot with unlimited burst shooting at a capture rate as high as 70 frames per minute (82 frames per minute in ultra fast mode) with uncompromised image quality.

### **Complete control - 6 x 7cm touchscreen**

View and edit your RAW images quickly on the large 6 x 7 cm touchscreen.

### **Use your existing Rolleiflex lenses and accessories**

Get the most from your equipment investment: The Leaf AFi digital camera system is compatible with a large variety of lenses and accessories, including AF and non-AF Rolleiflex 6008 lenses and most accessories.

### **Comfort and flexibility - rotating, multi-position handgrip**

4 positions ensure ergonomically optimal angles for different shooting positions. View the handgrip's LCD panel, regardless of the camera's grip position.

### **Switch from landscape to portrait - back rotation mechanism**

The imaging module mounts to the camera body both vertically or horizontally. Shoot landscape or portrait by turning only the camera imaging module—no need to lose time in camera or tripod adjustments.

### **Adaptable shooting position - 3 viewfinder options**

Waist-level, 90° or 45° viewfinders. Reposition the viewfinder to make shooting any image comfortable. The 45° and 90° viewfinder can be repositioned at a 90° angle to the lens in both directions. All viewfinders enable full functionality of the camera, including light metering and internal information display.

### **Portable power - efficient power management**

Unique, one system-one camera battery power management. Choose from single battery, double battery, or FireWire + battery use. Or use two batteries to enable the imaging module to remain on even during rotation. Lighten the weight and save time with only one battery pack to recharge.

### **Rugged, durable materials and design**

The camera is manufactured for professional use, with a lightweight metal chassis and an ergonomic handgrip. The camera back is constructed from rugged aircraft-grade aluminum. The soft covering provides a solid grip and long-lasting comfort.





# Uncompromising image quality

## Lens quality

PQ and PQS auto focus lenses by Schneider-Kreuznach are the result of cutting-edge design, innovative technology and precision manufacturing. Lenses use the unique Direct Drive technology developed by Rollei, with its microcomputer-controlled, motor-driven diaphragm and shutter for precise, accurate performance.

## Leaf shutter



The most advanced medium-format AF mechanism, with a high-speed sync (up to 1/1000 sec). The leaf shutter blades in the PQS lenses are hand-stamped in Germany of specially made carbon fiber produced for the aerospace industry. They are extremely thin and the smooth frictionless blades work on an air cushion. The shutter and diaphragm in the lens are driven by two linear motors and controlled with maximum precision in

1/3 increments by the camera's microcomputer.

## Auto-focus mechanism

Multiple autofocus options ensure crisp images in all shooting situations. You can set the camera to "focus bracketing" and the camera will adjust the plane of focus automatically from exposure to exposure. Or use "focus trap" and the Leaf AFi will start shooting as soon as the subject is in focus range.

All lenses are fully synchronized over their entire shutter-speed range and provide optimum sharpness, color balance, brilliance and speed.



## Advanced metering sensor

Choose from three different metering modes to capture perfectly exposed images in any lighting, or to suit any creative requirement:

- Multi-zone measurement
- Center-weighted measurement
- Spot measurement



## Large, bright viewfinder

The camera features an extraordinarily large, bright viewfinder with an internal LCD, so you can compose and focus your images with a clear view and a full display of the camera's essential settings.

## Dampened mirror reduces camera shake



The Leaf AFi's mirror features an effective, specially-designed dampening mechanism that virtually eliminates camera shake, leading to sharper images.

"I get to do what I love, because Leaf does what they do so well."

George Lange, USA

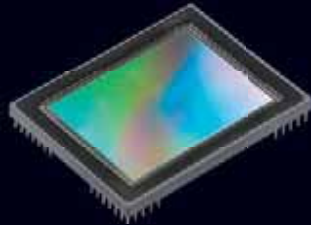




# Superior image technology

## Sensor

The CCD sensor captures the highest possible dynamic range. Purer colors result from the elimination of cross-talk due to uniformity across the 7.2 or 9 micron pixel-size sensor. The sensor's intelligent software controls an active cooling system that maintains a low sensor temperature for imaging consistency.



## IR Filter

The IR cutoff filter is designed to serve several functions. It matches the spectral response of the camera to the human eye as closely as possible. Its uncoated glass ensures that the spectral response is independent of angle, so the same color is received across the sensor in all photographic situations including wide angle lenses and view cameras with tilt and swing. The IR filter's design seals and protects the sensor against dust and damage.

## Electronics



Advanced electronics, featuring analog front-end circuits to digitize the CCD signals, a dedicated printed circuit board with a low-noise design and patent-pending dual-output reading mechanism, result in a high signal quality with minimal noise and excellent linearity.

Leaf's proprietary Digital Signal Processor and microprocessor apply advanced algorithms to process the image at an early stage, for improved image accuracy. Images are compressed for faster file transfer, then processed through an efficient pipelined, real-time software architecture, for the fastest capture rate of any medium-format system.

## Software

Leaf Capture software provides easy-to-use, professional imaging tools that bring out the full capabilities of the Leaf AFi camera.



# Unparalleled performance

## Quality

Delivering world-renowned, uncompromised image quality, the Leaf AFi integrates superior imaging components, advanced Leaf imaging module technology and Leaf Capture, the fastest capture software on the market.

## Performance

The Leaf AFi system delivers the fastest shooting speeds of any camera in its class, with a practically unlimited burst depth. These speeds are enabled by advanced communication and CF technologies and Leaf Capture software.

## Ultra Fast mode

In ultra fast mode, the Leaf AFi shoots at speeds of up to 82 frames a minute. The ultra fast mode synchronizes shutter release and mirror movement for optimum image quality even at optimum speed.

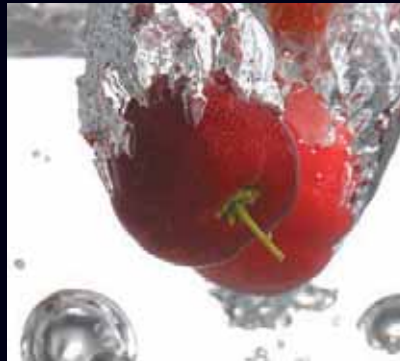
## Precise, high speed autofocus

The camera's autofocus is sharp and accurate, thanks to the combination of Schneider-designed Auto Focus Digital (AFD) lenses with an integrated motor drive, and an autofocus measuring system within the camera body. Two autofocus modes are available: single/continuous, and autofocus-bracketing.

The focus electric motor drive is integrated in lenses. Example: For AFD Xenotar 2.8/80mm, the maximum focusing stroke is 8.2mm (corresponding to 1m), and the lens movement time is 250ms. The speed times for smaller required focusing strokes are proportionately shorter. The measuring and computing time for auto focus is negligible (the upper limit is 15-35ms depending on the illumination and structure of the composition).

## Intelligent manual and remote operation

Control the camera manually—with digital or mechanical controls—or control it remotely, from the computer, with Leaf Capture 11 software. You can quickly access all of the camera's menu functions with "Red Dot" extension buttons.



## Manual or fully automatic at the touch of a button

Obtain accurate exposures using multi-zone, center-weighted or spot metering and programmed, shutter or aperture priority modes. Shoot with single or continuous autofocus, or set the camera to manual mode and take complete control of the shot.

## Interchangeable camera back

Leverage your Leaf AFi investment, by using the Leaf AFi imaging module with other medium- and large-format cameras. Use optional Graflok, Mamiya RZ or other adaptors.

## Back rotation

The Leaf AFi allows the imaging module to be turned from landscape to portrait format, without the need to rotate the camera.

## Efficient power management

Up to 2,000 exposures with a single charge. Proven battery technology, already in use with Leaf Aptus and Leaf Aptus S imaging modules, uses a single rechargeable lithium battery located in the camera's grip. Unique power management allows single battery, double battery (camera + imaging module), or FireWire power (imaging module) + battery (camera) to enable the imaging module to remain on even during rotation. An external DC supply is also available.

## Variety of high-capacity storage

You can choose to store images on a CF card, a removable FireWire hard drive, or on your computer (in tethered operation).

## Easy firmware updates

Keep your camera technology on the cutting edge: automatically update your firmware yourself using the Leaf Capture software.

## Sophisticated, advanced functions in "Red-Dot" mode

Set the camera to focus bracketing and take a series of shots with the camera adjusting the plane of focus automatically from exposure to exposure. Or, take advantage of the focus trap feature and the camera will automatically start shooting the moment the subject is in focus.





# Schneider Auto Focus Digital (AFD) lenses

## Specially designed for digital photography

The AFD lenses by Schneider are the result of cutting-edge design and innovation. Specifically created for use with high resolution digital camera backs, the lenses use the unique Direct Drive technology developed by Rollei, with its microcomputer-controlled, motor-driven diaphragm and shutter for precise, accurate performance. Lenses are fast, sharp, deliver brilliance and color balance and are fully synchronized at all shutter speeds. The result is images of uncompromised quality.

## Leaf shutter

The leaf shutter blades in the PQS lenses are handstamped in Germany of specially made carbon fiber produced for the aerospace industry. They are extremely thin and the smooth frictionless blades work on an air cushion. The shutter and diaphragm in the lens are driven by two linear motors and controlled with maximum precision in 1/3 increments by the camera's microcomputer.



## Glass

AFi lenses include advanced glass types with particularly high refractive indices. These provide a combination of proper lens curvatures and suitable glass types, optimally corrected for sharp and brilliant images.

## Anti-reflection coating

All lenses include High Fidelity Transfer (HFT) coating for optimum flare suppression and brilliant colors. The coating consists of special ultra-thin films evaporated on the lens surfaces. The result is a noticeable reduction in the amount of light reflected from the lens elements and thus less contrast-degrading flare. In addition, light transmission is increased, allowing full use of lens speed.



# Leaf AFi imaging module

## Highest speed

Experience freedom and flexibility with capture speeds as fast as 0.87 seconds per frame or 70 frames per minute (82 frames per minute in ultra fast mode).

- Fastest image transfer speed using FireWire 800 technologies
- Fastest Read/Write speeds using CompactFlash (CF) cards

## Uncompromised image quality

Get stunning, film-like quality, regardless of resolution.

- Unique color filters ensure consistent and accurate color reproduction
- Large sensor, with large (7.2 or 9 micron) pixel size, provides unmatched detail, richness and color, low noise and broad dynamic range, for detailed highlights and shadows
- Broad ISO: from 25 to 800 (depending on the model of imaging module)

## Complete control, functionality and portability

Use the large 6 x 7 cm touchscreen to control a wide range of functions, including predefined and custom presets:

- Edit and adjust the actual RAW image
- Easily create and name files and directories for file storage
- Manage pre-shoot setup options like creating image settings, file and folder names
- Conveniently annotate individual files with custom text, even in portable mode, using the on-screen keyboard
- Flag, move and sort your images with handy editing tools
- Quickly access gray balance, spot meter and 1:1 zoom on screen
- Personalize functions with a user button that takes you instantly to the functions you use most, such as histogram and image flagging



## Enhanced productivity and faster shoot-to-delivery

Adjust and control images while shooting, and manipulate RAW images in a range of thumbnail sizes on the intuitive display. The image orientation automatically adjusts to the camera rotation.

- Access focus control during the shoot with the loupe tool
- Take advantage of wireless connectivity via Bluetooth, and view the images on a portable HP iPAQ
- Use the lossless 16-bit file compression to speed up file handling without loss of image quality

# Leaf Capture 11—the fastest capture software

## Loupe and detail window tool



Quickly check focus by viewing an area of the image or any thumbnail at a scale of 100%.

## Multiple monitor support



Get the right shot faster, by shooting and viewing on one monitor, while your assistant and/or client sees them on a second monitor, at the same time.

## Color temperature slider



Accurately compensate for varying light conditions with the Color Temperature and Tint sliders. By setting the right temperature for the lighting, you ensure that your shot returns the truest color.

## Live View



See, in real-time, a video-like image in Leaf Capture's Live View display, also with dual monitor support. See the live image, focus, check depth of field, composition and layout before you take a single shot.

## Grid and layout overlays



Quickly set up the final composition by importing digital files from art directors directly into the software for display on the monitor.

## Image management



For maximum productivity, open and work on images, or continue to shoot while other images are processing in the background.

## Wireless preview



Continue to shoot while clients and art directors view the images on a wireless device, with Bluetooth WiView. Supported on selected devices such as various models of HP iPAQ Pocket PC.

## Color profiles



Set up your shoot to the best-match profile. Leaf Capture is fully ICC compliant and includes a wide range of ICC camera profiles. Using CMYK output profiles, images appear as they will in the final printed piece during the shoot.

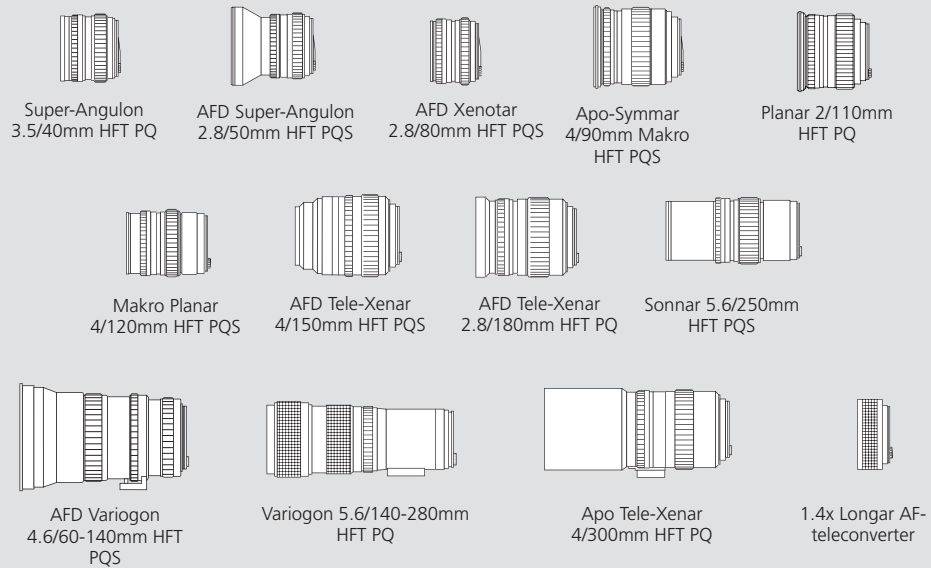
## From capture to print



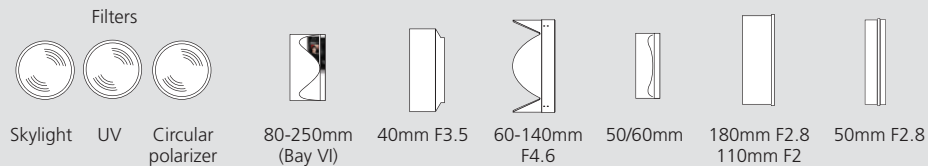
Leaf Capture software is specifically designed for Leaf's digital camera systems. It takes you from capture to editing and final processing to final print through a straightforward and intuitive process that mirrors the workflow of the professional photographer.

# A variety of camera accessories

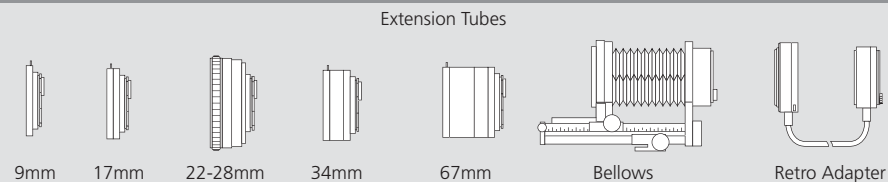
## INTERCHANGEABLE LENSES AND CONVERTERS



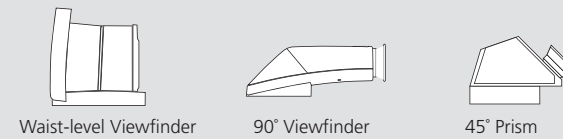
## FILTERS AND LENS HOODS



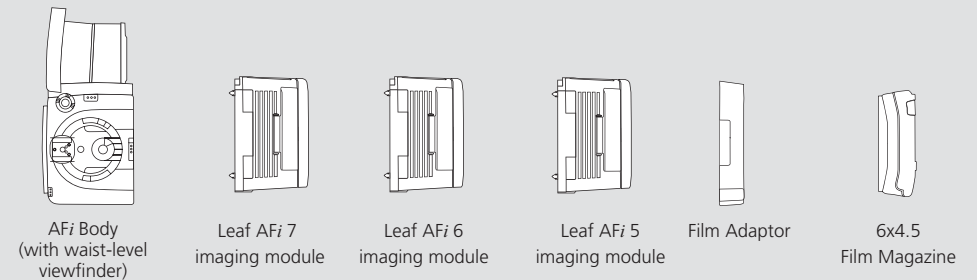
## MACRO ACCESSORIES



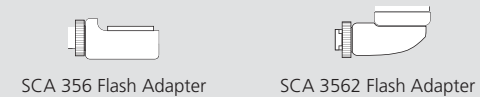
## VIEWFINDER ACCESSORIES



## CAMERA AND IMAGING MODULES



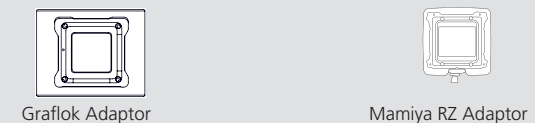
## FLASH ACCESSORIES



## MISCELLANEOUS ACCESSORIES



## ADAPTORS



# Specifications

	Leaf AFi 7	Leaf AFi 6	Leaf AFi 5
<b>CCD Size</b>	48 x 36mm	44 x 33mm	48 x 36mm
	6726 x 5040	6144 x 4622	5356 x 4056
<b>Speed—ultra fast mode (frames/min)</b>	56	71	82
<b>Speed—normal mode (frames/min)</b>	50	60	70
<b>Resolution</b>	33 MP	28 MP	22 MP
<b>File Size TIFF (16-bit)</b>	190 MB	159 MB	126 MB
<b>File Size MOS</b>	63 MB	53 MB	42 MB
<b>Frames/burst</b>	Unlimited	Unlimited	Unlimited
<b>Sensitivity</b>	50-800	50-800	25-400
<b>Compatibility with view camera</b>	Yes	Yes	Yes
<b>Dimensions: Camera body</b>	157 x 112 x 78	157 x 112 x 78	157 x 112 x 78
<b>System Weight: Includes battery, 80mm lens, waist-level viewfinder and digital imaging module.</b>	1970 g	1970 g	1970 g
<b>Camera type</b>	Medium format digital single lens reflex camera with 6 x 7 touchscreen LCD back		
<b>File format</b>	Leaf RAW file format - standard, open, RAW HDR file format		
<b>File format camera</b>	MOS compressed (16-bit RAW) MOS non-compressed (16-bit RAW)		
<b>File format output</b>	<ul style="list-style-type: none"> <li>• MOS compressed (16-bit RAW)</li> <li>• MOS non-compressed (16-bit RAW)</li> <li>• TIFF 16-bit</li> <li>• TIFF 8-bit</li> <li>• JPEG</li> <li>• Leaf HDR</li> <li>• RGB or CMYK</li> </ul>		
<b>Color depth</b>	16 bits (65,536 levels per channel)		
<b>Color management—portable</b>	Input (camera) profile and working space		
<b>Color management—tethered</b>	Input (camera) profile, working space and output profiles according to output device		
<b>Dynamic range</b>	12 f-stops		
<b>Lens mount</b>	Rollei bayonet mount. 10-contact signal strip for aperture and shutter speed transfer. Exposure control fully functional, even with bellows attachment, extension tubes and retro (reversing) adapter.		
<b>Shutter</b>	Leaf shutter powered by linear motors (direct drive)		
<b>Shooting modes</b>	<ul style="list-style-type: none"> <li>• Single</li> <li>• Continuous shooting</li> </ul>		
<b>Action grip</b>	4 position grip with detachable leather hand-strap		
<b>Operating time with battery</b>	Up to 2000 exposures		
<b>Image storage options</b>	CF card, via FireWire directly to the computer, or to an external hard drive		
<b>Orientation sensor</b>	Yes		
<b>Viewfinder options</b>	<ul style="list-style-type: none"> <li>• Waist-level viewfinder (standard) with optional diopter adjustment (-4.5 to +2.5). Image magnification with loupe 3 times.</li> <li>• 45° prism with optional diopter adjustment (-4.5 to +2.5). Image magnification 2.5 times.</li> <li>• 90° viewfinder with built-in diopter adjustment (-4 to +4). Image magnification 3.4 times.</li> </ul>		
<b>Information in viewfinder options</b>	Viewfinder LCD display: Aperture, shutter speed, AE mode, exposure indicator, meter type, focus indicator, rear sync, normal sync, flash readiness, orientation sensor, number of shots remaining, battery level.		
<b>Camera control</b>	Full remote control from computer in tethered mode		
<b>Autofocus</b>	Yes. Also has Auto Focus Assist with internal IR illuminator & instant manual focus override.		

<b>Focus lock</b>	Yes
<b>Autofocus area mode</b>	Single area autofocus
<b>Auto focus range</b>	EV 1 to EV 19 at ISO 100 with 80mm f/2.8 lens
<b>Focus tracking</b>	In Continuous AF mode
<b>Focus bracketing</b>	Yes. 3, 5, 7 or 9 shots
<b>Focus trapping</b>	Yes
<b>Exposure modes</b>	Programmed, shutter priority, aperture priority and manual
<b>Exposure compensation</b>	+/- 5 EV
<b>Exposure time</b>	1/1000 to 32 seconds
<b>AE lock</b>	Yes
<b>Exposure bracketing</b>	3 exposure range and 5 exposure range in 1/3, 2/3 and full stop increments
<b>Light metering</b>	1/3 stop increments
<b>Metering range</b>	Exposure metering EV 0 to EV 19 at ISO 100 with 80mm f/2.8 lens
<b>Metering modes</b>	Multi-zone, center-weighted and spot metering
<b>Flash synchronization</b>	Normal sync, rear sync and no flash
<b>Automatic flash</b>	<ul style="list-style-type: none"> <li>• Flash ready light and flash compensation indicator in viewfinder</li> <li>• Film flash ISO 25 – 1600</li> </ul>
<b>Flash compensation</b>	+/- EV3
<b>TTL flash</b>	TTL flash available with Rollei SCA 3562 adapter. ISO 25 - 1600
<b>Histogram &amp; gray balance</b>	Yes
<b>Self timer</b>	1/4 second to 128 seconds
<b>Remote control</b>	Cable release
<b>Tripod</b>	1/4", 3/8" threads and quick release tripod plate
<b>Leaf Capture 11 workflow software</b>	Free, for an unlimited number of users
<b>Text input</b>	Yes, via touchscreen
<b>LCD on imaging module</b>	3.5" (6 x 7 cm) touchscreen
<b>LCD functionality and display</b>	Image preview, histogram, gray balance, file management, battery status, 1:1 preview, preshoot file naming, image flagging, job folders, custom file annotations, exposure alarms, ISO, IPTC and EXIF metadata
<b>Wireless</b>	Bluetooth (WiView)
<b>Firmware</b>	User upgradeable via FireWire cable
<b>Languages</b>	Chinese, English, French, German, Italian, Japanese, Spanish
<b>Connectivity</b>	FireWire 400/800
<b>Live view</b>	Standard in tethered mode
<b>Lens multicoating</b>	Lenses for AFi cameras are HFT coated (High Fidelity Transfer). The coating consists of special ultra-thin films evaporated on the lens surfaces. The result is a noticeable reduction in the amount of light reflected from the lens elements and thus less contrast-degrading flare. Also, light transmission is increased, allowing full use of lens speed.
<b>Tested CF cards</b>	CompactFlash Cards Type I & II, SanDisk Extreme series (recommended) including Extreme IV line, SanDisk Ultra II series, Lexar CF Pro series.
<b>Power supply</b>	A single battery powers both camera and imaging module. The imaging module can also be powered via DC converter, FireWire, car lead adapter or battery. Rechargeable Li-ion battery (7.2 VDC / 2350 mAh).
<b>Operating temperature</b>	0-40° C
<b>Operating humidity</b>	15-80% (non-condensing)



# Leaf

our science *your art*

## About Leaf

Since introducing the world's first digital camera back in 1992, Leaf has been recognized as a worldwide leader in the professional photography market. With extensive knowledge in image processing, color management and file conversion technology, Leaf has become the preferred digital equipment supplier for the world's leading professional photographers. Leaf Capture workflow software enhances productivity, while allowing today's professionals to get the perfect shot. The Leaf Aptus family offers images of the highest quality, richest shadows, clearest highlights and with brilliant sharpness. The product range now expands with the Leaf AFi medium format digital camera system.

**For more information visit [www.leaf-photography.com](http://www.leaf-photography.com).**

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