

FUJIFILM

*Professional  
Imaging*



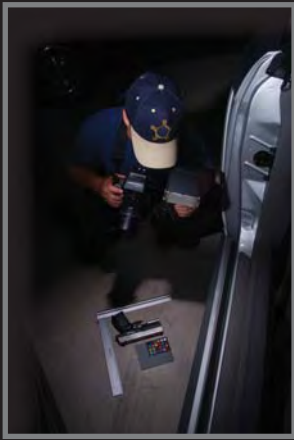
## **NEW FinePix S3 Pro UVIR**

Get ready to see things...

***Differently***



**Infrared** **UV**



Scientific and forensic digital photography has come of age with the introduction of the Fujifilm FinePix S3 Pro IR series of digital SLR cameras. Gone are the days of third party custom modifications that void warranties and leave you without support.

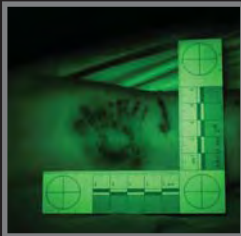
As infrared film becomes less common due to availability and costly complex chemical processing, the need for high resolution DSLR's that provide faster results in both infrared and ultra violet wavelengths has become critical. Fujifilm's new S3 Pro IR model now makes it possible to capture, analyze, transfer, and output images faster than film processing.

### Digital IR and UV Applications include:

Forensic science, medical analysis of skin conditions, toxicology, vascular tracing, tattoo documentation, biological trace detection, evidence and counterfeit documenting, crime scene and forgery investigations, surveillance, gun shot residue, burned documentation recovery, bit mark analysis, and autopsies.

For the law enforcement community, special new light sources are often used to see in alternate spectrums during the evidence-gathering phase of an investigation. Therefore in-field, high-resolution documentation in the ultraviolet or infrared spectrums has become key to many aspects of a case. It's now important to photograph field evidence before it is removed and undergoes potential change from further analysis.

#### ALTERNATE LIGHT IMAGING



400nm with #15 yellow filter <sup>3</sup>



IR with 900nm filter



Surveillance <sup>2</sup>

### FinePix S3 Pro UVIR

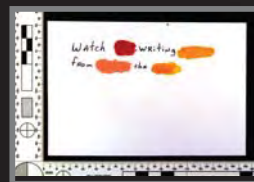
The Super CCD SRII's low band pass filter (ultra violet protection) has been removed along with the IR protection filter. This optimizes the wide dynamic of the Super CCD SRII to see in both visible, UV, and IR spectrums at once.



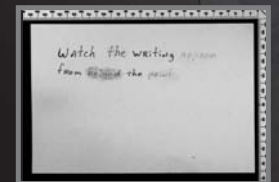
4

5

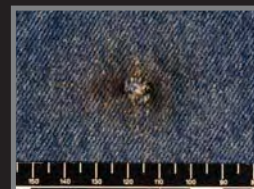
The application for the IRUV model is primarily scientific in nature. Due to sensitivity to such a wide range of wavelengths, manual focusing and exposure control are required. Capture of a desired wavelength is managed by direct lens filtration, tuned to the light source in use. Fujifilm's exclusive 30-second Super CCD live preview mode allows fast and easy pre-capture verification and direct manual focusing via the LCD before the image is captured. Some SLR lenses are protected against UV and IR light penetration; therefore review all lens technical specifications.



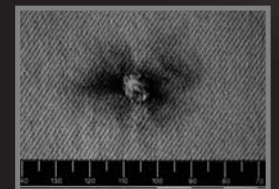
Obliterated Writing (standard) <sup>6</sup>



IR <sup>7</sup>



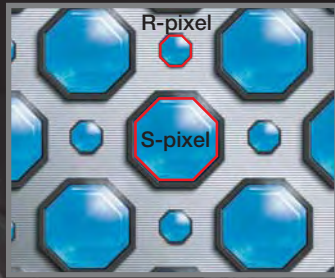
Gun Shot Residue (standard) <sup>8</sup>



IR <sup>9</sup>

The S3 Pro IR's exclusive 30-second Super CCD live-preview mode allows fast and easy pre-capture verification and direct manual focusing via the LCD before the image is captured.

### Fujifilms Exclusive Super CCD SR II



with 400% wide dynamic range captures more highlight and shadow detail with less noise. With an ultra-high resolution maximum image size of 12.1 million recording pixels, detail is astonishing.

Super CCD SR II

### Live CCD Focusing

Live CCD post-capture preview and focus verification provide a live 30-second preview from the CCD to the LCD monitor. This feature is not found on standard DSLR's, and allows verification of focus even when the optical viewfinder is rendered useless from dark IR filters covering the lens.



Focused



10 Pin

### ISO

Up to 1600 ISO with very low noise even during long 30-second exposures.

### Nikon compatibility:

- Supports Nikon F mount lenses – For optimum performance, check lens UV and IR specifications
- Nikon Flash interfaces
- Nikon 10 pin port for tethered shutter release reduces camera shake during long exposures.

### B&W Mode

In-camera B&W capture mode allows for proper conversion of files from the familiar reddish IR color image into B&W images with maximum preservation of all image data.

### BLOOD PATTERN ANALYSIS

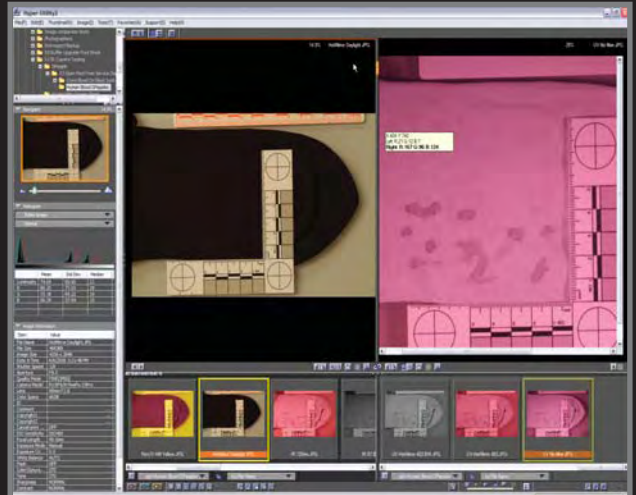


HotMirror Daylight



IR 87 BW

Advanced RAW file processing and secure tethered firewire high-speed remote shooting from your PC or MAC is possible using the optional Hyper Utility ver3.x.



Hyper Utility Main Screen



Tethered PC Shooting



Raw Processing

### IMAGING SAMPLES



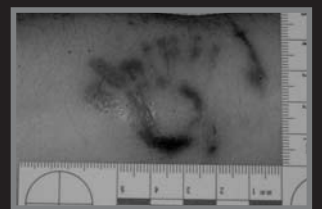
Altered writing samples (IR) 10



Altered writing samples (standard) 11



Bitemark (IR) 12



Bitemark (UV) 13

Image recognition:

1,2 - ©2006 BioMed Studios

3, 12, 13 - ©2006 Gregory S. Golden, D.D.S.

4, 5, 6, 7, 8, 9, 10, 11 - ©2006 Brooks Photo Imaging

# SPECIFICATIONS

## DIGITAL CAMERA FinePix S3 PRO UVIR

<b>Type of camera</b>	Interchangeable-lens SLR-type digital camera
<b>Number of effective pixels*</b>	12.34 million (S-pixel: 6.17million, R-pixel: 6.17million) pixels
<b>CCD sensor</b>	23.0x15.5mm Super CCD SR II Number of total pixels: 12.9million (S-pixel: 6.45million, R-pixel: 6.45million) pixels
<b>Number of recorded pixels</b>	Still image: 4,256x2,848 (12.1million)/3,024x2,016/ 2,304x1,536/1,440x960 pixels
<b>Storage media</b>	Slot No.1: xD-Picture Card™ (16MB – 2GB) Slot No.2: CF/Microdrive™ (Compatibility is listed on Fujifilm website: <a href="http://home.fujifilm.com/products/digital/">http://home.fujifilm.com/products/digital/</a> )
<b>File format</b>	JPEG-DCF compatible (Exif Ver 2.21**) (Design rule for Camera File system compliant / DPOF-compatible) CCD-RAW (14bit)



### Number of images/recording time

Quality	4256 × 2848				3024 × 2016				2304 × 1536				1440 × 960			
	RAW-WIDE	RAW-STD	JPEG F	JPEG N	JPEG F	JPEG N	JPEG F	JPEG N	JPEG F	JPEG N	JPEG F	JPEG N	JPEG F	JPEG N		
Image Data Size	Approx. 25 MB	Approx. 13 MB	Approx. 4.7 MB	Approx. 2.4 MB	Approx. 3.0 MB	Approx. 1.5 MB	Approx. 1.7 MB	Approx. 1.7 MB	Approx. 880 KB	Approx. 1.0 MB	Approx. 520 KB					
DPC-128 (128MB)	5	9	26	53	42	84	72	144	122	241						
DPC-256 (256MB)	10	19	53	107	85	169	146	290	245	484						
DPC-512 (512MB)	20	39	107	214	170	339	292	580	491	967						
340MB Microdrive	13	27	73	146	116	232	200	396	338	671						
1GB Microdrive	41	81	220	437	349	698	597	1173	995	1932						

<b>Lens mount</b>	Nikon F mount (with AF coupling, AF contacts)
<b>Usable lenses</b>	D/G type AF Nikkor lenses: All functions possible AF Nikkor other than D/G type: All function except 3D Matrix Metering possible Non-CPU: Usable in Manual exposure mode (exposure meter will not be accurate w/S3 Pro IRUV)
<b>Lens servo</b>	Single Servo AF (S), Continuous Servo AF, Manual focus (M) Focus tracking automatically activated in subject's status in Single Servo AF (S) or Continuous Servo AF (C)
<b>Picture angle</b>	Approx. 1.5x focal length in 35mm format equivalent
<b>Auto focus</b>	TTL phase detection (Auto AF may not perform well with S3 PRO IRUV) Detection range: EV -1 to EV 19 (ISO 100 equivalent at normal temperature) (Manual focus is recommended under IR applications) (see live preview function)
<b>Focus areas</b>	One of five focus areas can be selected
<b>AF Area mode</b>	Single Area AF Dynamic AF (Dynamic AF Mode with Closest Subject Priority is available)
<b>Focus lock</b>	Focus is locked by pressing AE/AF Lock button or lightly pressing shutter release button in Single Servo AF
<b>Shutter</b>	Electronically controlled vertical-travel focal-plane shutter
<b>Shutter speed</b>	30 sec. to 1/4000 sec. Bulb, X-contact, Max. 1/180 sec.
<b>Sensitivity</b>	Equivalent to ISO 200/400/800/1600 (Although ISO setting below 200 is possible, it's not recommended)
<b>Exposure metering system</b>	TTL full-aperture exposure metering system Three metering systems selectable (limitations with lens used) • 3D-10 Matrix Metering: EV 0-21 • Center-Weighted metering: EV 0-21 • Spot Metering: EV 3-21
<b>Exposure compensation</b>	±3 EV range, in 1/2 steps
<b>Exposure modes</b>	P: Auto-Multi Program (Flexible program possible), S: Shutter-priority Auto, A: Aperture-priority Auto, M: Manual
<b>White balance</b>	Automatic (WB is not applicable under IR conditions) Manual: Fine, Shade, Fluorescent light (Daylight), Fluorescent light (Warm White), Fluorescent light (Cool White), Incandescent light, Custom1, Custom2

<b>Viewfinder</b>	To focus the camera use Live Preview LCD function if dark UV and IR lens filters are in place. Fixed-eyelevel pentaprism, built-in diopter adjustment (-2.0 to +1.0m <sup>-1</sup> ) Frame coverage: Approx.93% vertical, Aprox.95% horizontal
<b>Eye point</b>	24 mm
<b>Focusing screen</b>	Clear Matte Screen II with focus brackets and On-demand Grid Lines able to display
<b>Viewfinder information</b>	Focus indications, Metering system, AE lock, Shutter speed, Aperture, Exposure mode, Electronic analog exposure display/exposure compensation display, Frame counter/exposure compensation value, Ready-light, Multiple exposure, Focus area, Flash exposure compensation, Five sets of focus brackets (area) / Spot metering area, Center-Weighted metering, On-Demand Grid Lines able to display
<b>LCD panel (top panel) display</b>	Shutter speed/Exposure compensation value, Aperture, Exposure compensation, Flash exposure compensation, Auto exposure bracketing, Bracketing bar graphs, flexible program, Flash sync mode, AF area mode Focus area, Battery power
<b>LCD monitor</b>	2.0-inch low temperature polysilicon TFT (approx. 235,000 pixels, wide-type LCD, approx. 100% frame coverage)
<b>Built-in flash</b>	Guide No.12 (ISO 100, m), flash coverage: 20mm or longer lens
<b>Flash sync. mode</b>	Front-curtain sync (normal sync), Red-eye reduction, Red-eye reduction with slow sync, Slow sync, Rear curtain sync
<b>Ready light</b>	Lights up when flash fully charged with built in flash Blinks for 3 sec. for full output warning
<b>Accessory shoe</b>	Standard ISO-type with hot-shoe contact ( Safety lock provided )
<b>Remote release</b>	Electronic shutter release
<b>Self-timer</b>	Electronically controlled: timer duration: 20sec./10sec./5sec./2sec.
<b>Video output</b>	NTSC/PAL selectable
<b>Digital Interface</b>	USB 2.0 (High-speed) for data storage, IEEE1394 for data storage & shooting
<b>Sync contact</b>	X-contact only: flash synchronization up to 1/180 sec.
<b>Power source</b>	4 AA type Ni-MH batteries (sharing power with camera body), AC Power Adapter AV-5VX (Optional)
<b>Dimensions</b>	147.8 (W) x 135.3 (H) x 78.5 (D) mm / 5.8 (W) x 5.3 (H) x 3.1 (D) in.
<b>Weight</b>	Approx. 815g / 28.7oz. (excluding battery & lens)
<b>Shooting modes</b>	Single frame shooting Continuous shooting • D-range: STD mode: Max. 2.5 frames/sec. RAW: Up to max. 7 frames, JPEG: Up to max. 12 frames • D-range: WIDE mode: RAW, Max. 1.4 frames/sec. Up to 3 frames JPEG, Max. 1 frame/sec. Up to 6 frames Preview mode/Multiple exposure
<b>Parameter setting</b>	Color ——— HIGH/ STD/ ORG/ B&W Film simulation — FILM SIMULATION F1/ F2 Color space ——— sRGB/ Adobe-RGB Contrast ——— HARD/ STD/ ORG Sharpness ——— HARD/ STD/ ORG D-range ——— WIDE : AUTO / WIDE 1/ WIDE 2 STD
<b>Playback function</b>	Single frame/ Thumbnails in 9 segments Playback zoom/ Histogram indication/ Standard chart
<b>Accessories included</b>	4 AA type Ni-MH batteries, Battery Charger for Ni-MH batteries, Shoulder Strap, Body cap, Eyepiece cap, LCD cover, Cable Holder, USB cable (with Filter), IEEE 1394 cable, Video cable CD-ROM: USB driver, FinePix Viewer, ImageMixer VCD2 for FinePix, RAW FILE CONVERTER LE
<b>Disclaimer</b>	S3 PRO UVIR's Auto Focusing and Auto Exposure may not function properly due to the wide range of lighting conditions between UV & IR. Manual Exposure Compensation and Focus is required.

### Lens Compatibility Chart (Types of CPU lenses and other usable lenses/accessories)

Mode	Focus mode			Exposure mode			Metering system		
	Autofocus	Manual with electronic rangefinder	Manual	Any mode other than M	M	3D 10-segment	10-segment	Centre-Weighted, Spot <sup>1</sup>	
<b>Lens/accessories</b>									
CPU Nikkor	D-type AF Nikkor <sup>3</sup> , G-type AF Nikkor <sup>3</sup> , AF-S, AF-I Nikkor								
	PC Micro-Nikkor 85 mm f/2.8D <sup>4</sup>	—	✓ <sup>5</sup>	✓	—	✓	—	✓	
	AF-I/AF-S Teleconverter <sup>9</sup>	7	7						
	Non-D/G-type AF Nikkor (except AF Nikkor for F3AF)	✓	✓		✓	✓	—	✓	
Non-CPU Nikkor	AI-P Nikkor		8						
	AI-S or AI type Nikkor, Series-E, AI-modified Nikkor	—	✓ <sup>8</sup>	✓	—	✓ <sup>10</sup>	—	—	
	Medical-Nikkor 120 mm f/4							11	
	Reflex-Nikkor	—	—	✓	—	✓ <sup>10</sup>	—	—	
	PC-Nikkor			5					10
	AI-S or AI type Teleconverters	—	✓ <sup>7</sup>	✓	—	✓ <sup>10</sup>	—	—	
Non-CPU Lens	Bellows Focusing Attachment PB-6 <sup>12</sup>		7					10	
	Auto Extension Rings (PK-11A, PK-12, PK-13 and PN-11)	—	✓ <sup>7</sup>	✓	—	✓ <sup>10</sup>	—	—	

\* Number of effective pixels: The number of pixels on the image sensor which receive input light through the optical lens, and which are effectively reflected in the final output data of the still image.

\*\* Exif 2.21 is a newly revised digital camera file format that contains a variety of shooting information for optimal printing.



Specifications are subject to change without notice.

### ✓ Compatible — Incompatible

- Spot Metering area can be shifted with focus area selector with CPU Nikkor lens.
- IX-Nikkor lenses cannot be attached.
- This camera is compatible with the Vibration Reduction function of the VR Nikkor lens.
- The camera's exposure metering and flash control system do not work properly when shifting and/or tilting the lens, or when using an aperture other than the maximum aperture.
- Without shifting and/or tilting the lens
- Compatible with AF-S and AF-I Nikkor except AF-S 17-35 mm f/2.8D IF-ED, AF-S 28-70 mm f/2.8D F-ED, AF-S 12-24mm f/4G, AF-S DX ED 17-55mm f/2.8G, AF-S DX ED 18-70mm f/3.5-4.5G, AF-S ED 24-85mm f/3.5-4.5G and AF-S VR ED 24-120mm f/3.5-5.6G.
- With maximum effective aperture of f/5.6 or faster
- With maximum aperture of f/5.6 or faster.
- Some lenses/accessories cannot be attached.
- With exposure mode set to Manual. The exposure meter cannot be used.
- With exposure mode set to Manual and shutter speed set to 1/60 sec. or slower but the exposure meter cannot be used.
- Can be mounted when used with the Nikon Auto extension ring.  
• Reprocopy Outfit PF-4 can be attached in combination with Nikon Camera Holder PA-4.  
Note: Please refer to the web site (<http://home.fujifilm.com>) for more details of "Lens Compatibility"

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