

## HASSELBLAD CF-39 / CF-39MS

Presenting the world's largest sensor - 39 million pixels – in the most flexible digital camera back system on the market today.

The Hasselblad CF-39 line of digital backs offers 39Mpix digital capture with the i-Adapter, Hasselblad's interchangeable camera interface, and the option for true color multi-shot capture. The CF 39 line matches the functionality of the Hasselblad H2 camera perfectly, giving you access to the H system range of digital central shutter-based lenses, the most advanced high-performance lenses in the world, and extended digital features such as Digital APO Correction technology and Instant Approval Architecture. The Hasselblad CF 39 line brings unprecedented flexibility to the specialist professional photographer, and enables you to take full advantage of all that leading edge digital photography can offer.

### 39 million pixels

The CF-39 line uses a 39 megapixel sensor that is more than twice the physical size of today's 35mm sensors. This sensor holds more and larger pixels, which guarantees superior image quality and provides moiré free color rendering without gradation break-ups in even the finest lit surfaces. Images shot with the CF-39 line have unsurpassed clarity and sharpness, thanks to the ultra-high pixel resolution produced by the 39 Mpix sensor. This sensor produces the largest digital files currently available for professional photography, making them ideal for the most demanding, high resolution printing applications and give the photographer increased flexibility and creative control when cropping or enlarging for printing. The CF-39 line represent the finest image capture quality possible; all images are the result of the superior performance of the H System camera and lenses and have been fine tuned with Hasselblad's unique Digital APO Correction technique. The new Hasselblad Natural Color Solution also gives optimal color reproduction across all job types.

In a studio environment, the CF-39 line enables you to increase the color resolution of your captures by means of a unique multiple-exposure technique controlled by the optional Multi Shot Module (patent pending). The result is unique color resolution and absolutely moiré free images. The Hasselblad CF-39 can be upgraded with the 4\*Res module at any time. The Hasselblad CF-39MS comes with the Multi Shot Module already built in.

Today's photographers demand higher resolution, less noise, and improved composition, all of which the CF-39 line provides. The new 39Mpix CF-39 and CF 39MS are true Hasselblad backs, with every feature and aspect of their performance representing the superior quality and design that go into each Hasselblad product.



### H2 platform for Digital APO Correction

The CF-39 backs capture an extended set of metadata and then perform an automated correction for color aberration effects with every shot. This means that your digital captures are automatically optimized to provide the finest detail that a given lens can resolve. We have named this feature "Digital APO Correction" (DAC), signifying the digital, APO-chromatic correction of the images that takes place. Implementation of this feature includes detailed mapping of each H system lens, ensuring that each image represents the best that your equipment can produce. We are confident that the image quality you achieve as a result of the DAC functionality will make you - and your customers - look twice.

### Unique Hasselblad Natural Color Solution

In the past, color management solutions have imposed limitations on professional digital photographers, because of the need to choose a specific color profile to suit a specific job in order to capture various skin tones, metals, fabrics, flowers, etc. Hasselblad has helped solve this dilemma, with the development of the new Hasselblad Natural Color Solution to be used with its FlexColor imaging software. Working with the new Hasselblad Color Solution enables you to produce outstanding and reliable out-of-the-box colors, with skin tones, special product gradations, and other difficult colors reproduced easily and effectively.

We have developed a new Hasselblad raw file format called: 3F RAW (3FR) to help implement our new unique color solution. The new 3F RAW file format is designed to ensure that images captured on Hasselblad digital products are quickly, effectively and safely stored on the available media (CF card, Imagebank, etc). The file format includes lossless image compression, which reduces the required storage space by 33%. Combined with the architecture of the Hasselblad backs, this allows you to capture up to 35 shots per minute.

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The 3FR file defines the colors in the Hasselblad RGB color space with its out-of-the-box quality, and used in FlexColor it removes both the need for experimenting with different color profiles to get optimal colors and the need for selective color corrections.

### DNG File Format

The 3FR files can be converted directly into Adobe's raw image format DNG ('Digital Negative'), bringing this new technology standard to the professional photographer for the first time. The DNG file format enables raw, compressed image files to be opened directly in Adobe Photoshop. This enables photographers to operate quickly and efficiently, reducing the "downtime" taken to process image data and enabling final images to reach the customer more quickly. Hasselblad image files carry a full set of metadata, including capture conditions, keywords and copyright, facilitating work with image asset management solutions. For specialist commercial photographers, the full productivity and creative freedom offered by Hasselblad's FlexColor workflow software is also available via importing the DNG file.

### Capable of working with multiple cameras

The Hasselblad CF-39 models can be attached to most of the professional SLR and View Cameras of the market with a simple 4-screw attached plate, enabling you to bring digital capture to your favorite cameras and lenses with one convenient digital back. See detailed list of supported cameras below.

### Instant Approval Architecture

Limitless digital image capture loses some of its potential if the photographer cannot quickly review and select the best images to present to the client. Building on the success of its Audio Exposure Feedback technology, Hasselblad has created Instant Approval Architecture (IAA), an enhanced set of feedback tools, designed to liberate the photographer to focus on the shoot rather than the selection process. IAA triggers audible and visible signals for each image captured, telling the photographer immediately whether the image has a red, amber or green light status. The information is recorded both in the file and in the file name, providing a quick and easy way to classify and select images, in the field or in the lab. The CF-39 backs are

fully integrated with Hasselblad's Instant Approval Architecture, bringing automated image classification into your digital workflow from the split second of capture. IAA is a Hasselblad trademark and Hasselblad has a patent pending on the invention. A larger, enhanced OLED display in the new Hasselblad products provides a realistic, high quality and perfect contrast image view, even in bright sunlight, to allow instant on-site image approval.

### FlexColor workflow for the specialist commercial photographer

FlexColor offers an image processing workflow with the highest degree of control for the studio photographer. In tethered operation, tools like live video and overlay masking help bring productivity to advanced set composition. The newest FlexColor version allows the photographer to manipulate color temperature and compare image details across multiple images for precise image selection. FlexColor works on the basis of the raw DNG files generated by the CF-39 backs. FlexColor runs natively on both Macintosh and Windows computers and is licensed to allow you to provide free copies for all your co-workers and production partners.

### Three modes of operation and storage

Optimum portability and image storage are critical for the professional photographer. The CF-39 backs enable you to choose between portable CF card storage, the flexible Firewire drive, or tethered operation with extended, special capture controls. With these three operating and storage options, the photographer is able to select a mode to suit the nature of the work at hand, whether in the studio or on location.

### "Instant" user interface

The CF-39 backs are operated via an easy-to-use user interface, utilizing a series of "instant" one-button-click operations including instant capture, instant browse, instant approval, instant zoom, and instant image info.

### Modular design

A clean and dust-free sensor is essential and the modular design of the camera allows for easy access to and cleaning of the sensor, saving you hours of retouching work later.



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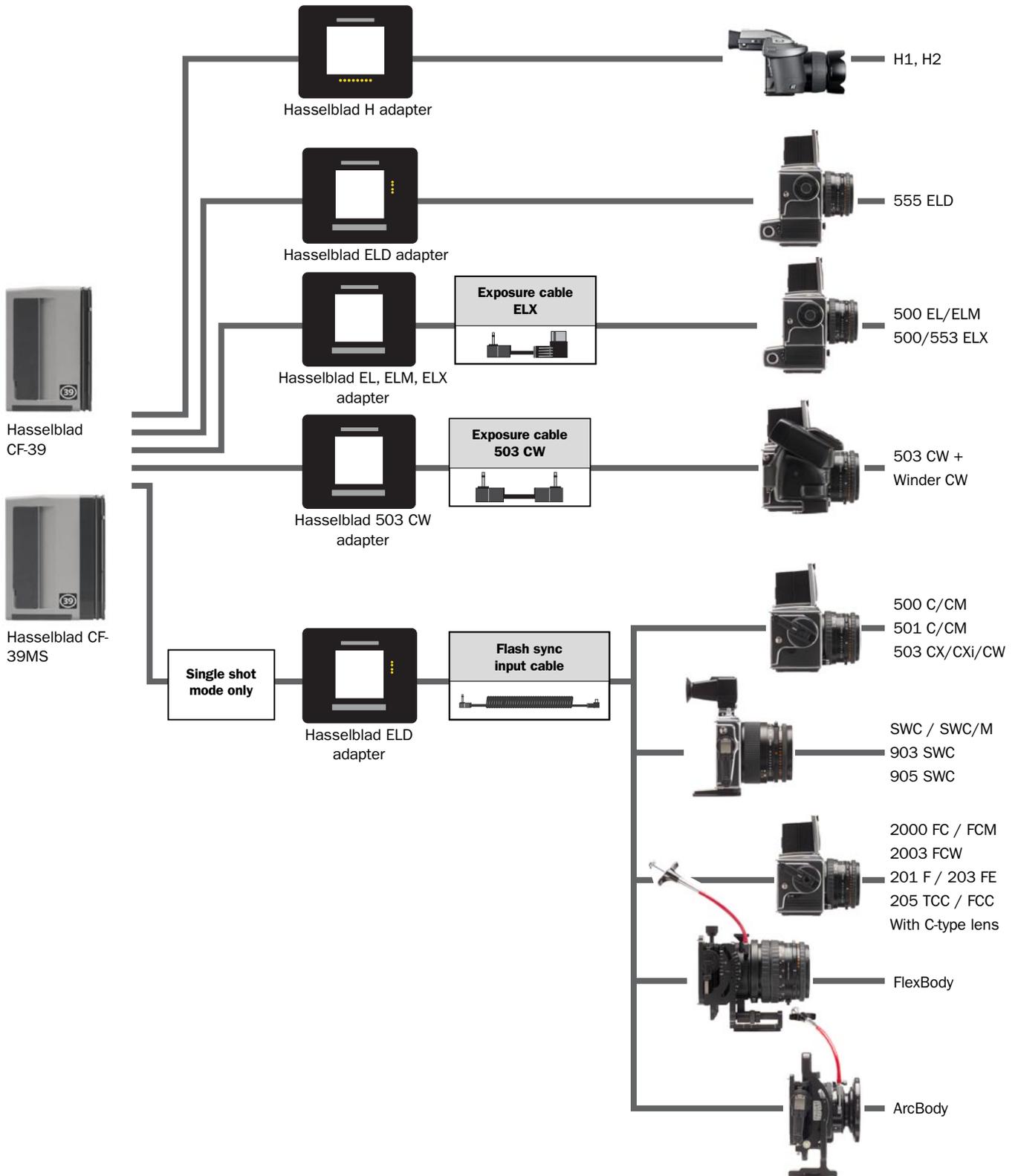
### Hasselblad CF-39 and CF-39MS technical specification

SPECIFICATIONS	Hasselblad CF-39	Hasselblad CF-39MS
Sensor size	39 Mpixels	
Sensor dimensions	36.7 x 49.0 mm	
Image size (8/16 bit RGB)	RAW capture 78 MBytes, lossless compressed 50 MBytes (average)	
Shooting mode	Single shot	Single & Multi-shot
Colour definition	16 bit	
ISO speed range	ISO 50, 100, 200 and 400	
Longest shutter speed	32 seconds	
Color management	Hasselblad HB RGB: • full dynamics • reproduction dynamics	
Image storage	CF card type II (write speed >20 MB/sec), New Image Bank 80 GB external hard drive or tethered to Mac or PC	
Storage capacity (single shot)	over 1500 images with 80 GB disk	
Battery type	Sony™ InfoLithiumL NP-F series	
Capture rate	35 captures per minute	35 captures per minute (single shot)
Color display	Yes, 2.2 inch OLED type, 24 bit color	
IR filter	Mounted on sensor	
Histogram feedback	Yes	
IAA - Instant Approval Architecture	Included, with: <ul style="list-style-type: none"> <li>• H2 awareness: yes</li> <li>• Acoustic feed back: yes</li> <li>• Metadata classification: yes</li> </ul>	
Software	Flexcolor (included) or Adobe DNG converter	
File format	Lossless compressed Hasselblad 3F RAW	
Platform support	Macintosh: OSX. PC: NT, 2000, XP	
Host connection type	FireWire 800 (IEEE1394b)	
Operating temperature	0 - 45 °C / 32 - 113 °F	
Camera support via i-adapters	Hasselblad H system and V system, Rollei 600X and AF, Contax 645AF, Mamiya 645 Pro, 645 AFD, RB and RZ67, Fuji GX680I/II/III. All view cameras via Hasselblad adapter. Horseman DigiFlex II and PrecisionWide 35 via Hasselblad adapter.	
Dimensions	81 x 81 x 53 mm [W x H x D]	81 x 81 x 68 mm [W x H x D]
Weight	450 g (excluding battery and i-adapter)	600 g (excluding battery and i-adapter)

Specification subject to change without notice.

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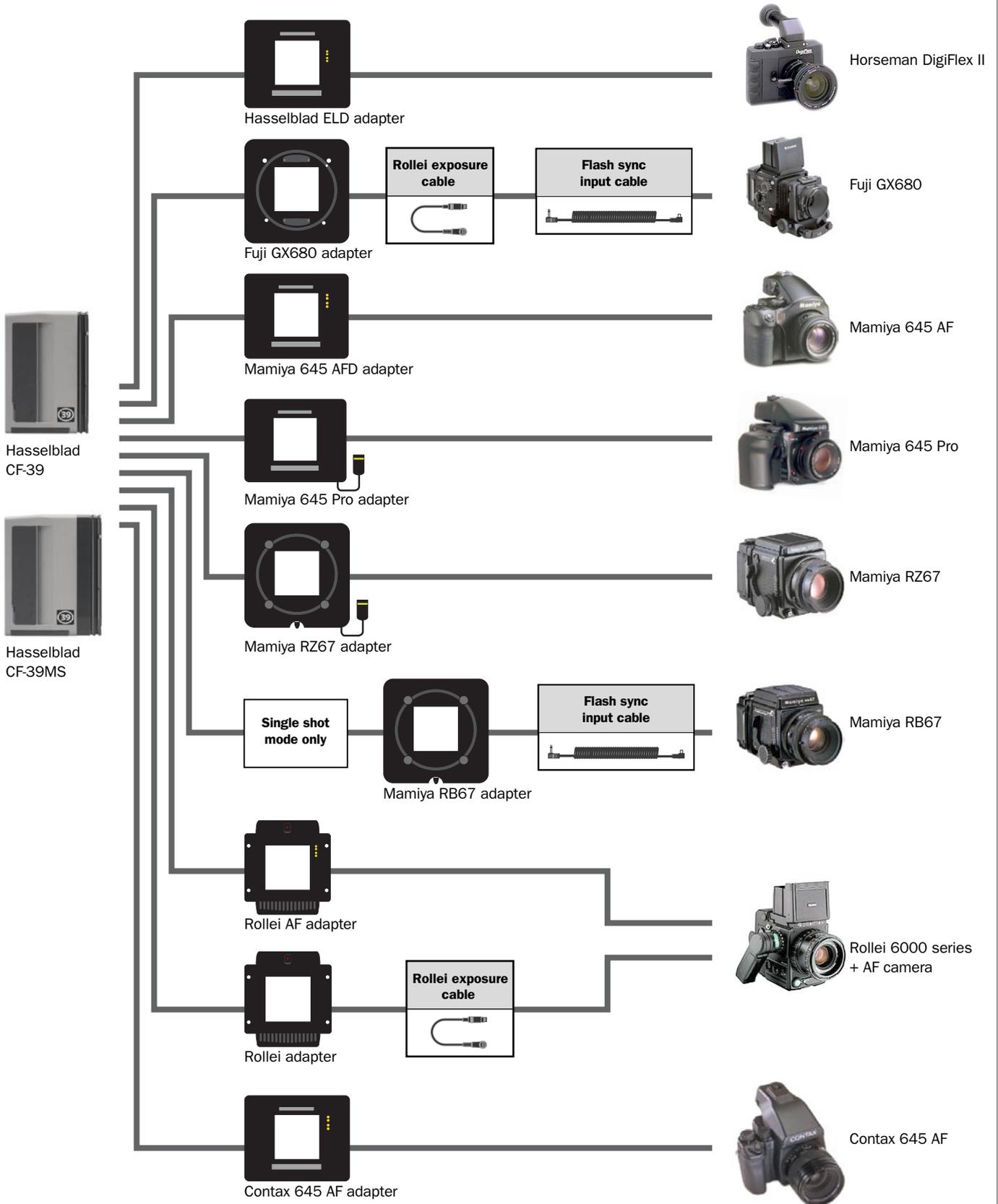
## Hasselblad connectivity diagram



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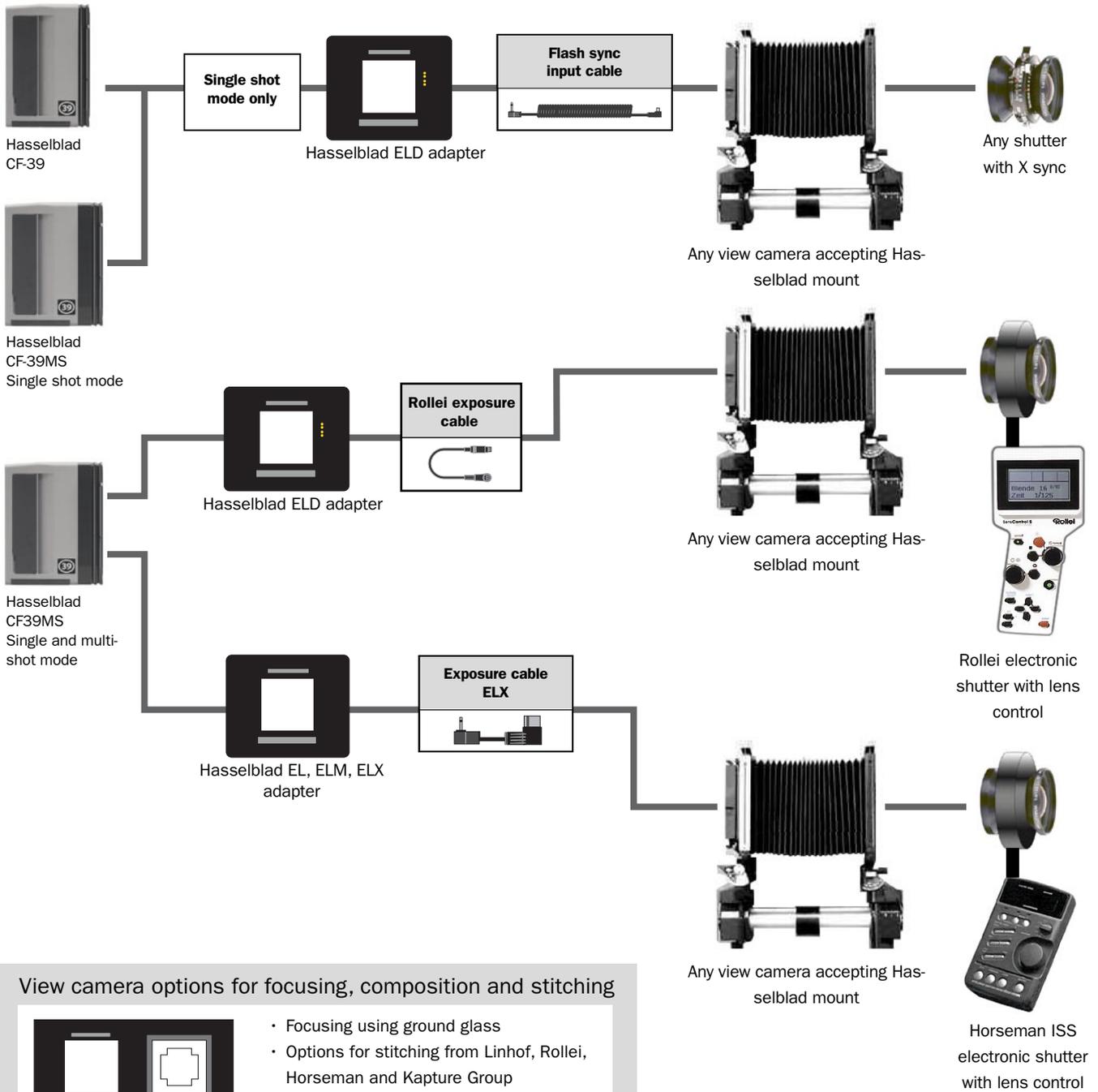
## Small and medium format camera connectivity diagram



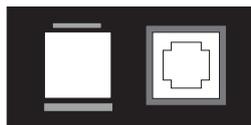
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## View camera connectivity diagram



### View camera options for focusing, composition and stitching



Sliding adapter

- Focusing using ground glass
- Options for stitching from Linhof, Rollei, Horseman and Kapture Group



Fixed mount

- Focusing using Hasselblad Flexcolor live video