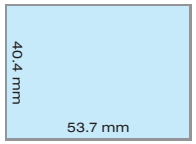
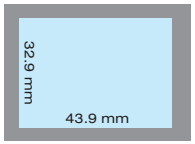
IQ Digital Back Overview

	IQ180		IQ160		IQ140	
Description	World leading image quality with 80 megapixel full-frame resolution. Switch to Sensor+ and get 20 megapixel full-frame images as well as a faster workflow and ISO sensitivity up to 3200. Enjoy also the new, intuitive touch screen.		The IQ160 digital back is the optimal solution for the demanding photographer, offering 60.5 megapixel full-frame captures and a new touch screen with a fast and intuitive zoom, pan and browse function.		The IQ140 digital back delivers the perfect combination of world leading image quality and a fast workflow. The new touch screen provides complete intuitive control on set.	
Sensors						
Lens Factor	1.0		1.0		1.3	
CCD size effective	53.7 x 40.4 mm		53.9 x 40.4 mm		43.9 x 32.9 mm	
Active pixels full resolution	10328 x 7760		8984 x 6732		7320 x 5484	
Active pixels Sensor+	5162 x 3878		4490 x 3364		3658 x 2740	
Pixel size (micron)	**Full res.** 5.2 x 5.2	**Sensor+** 10.4 x 10.4	**Full res.** 6 x 6	**Sensor+** 12 x 12	**Full res.** 6 x 6	**Sensor+** 12 x 12
Resolution (megapixels)	80	20	60.5	15	40	10
Light sensitivity (ISO)	35 - 800	140 - 3200	50 - 800	200 - 3200	50 - 800	200 - 3200
Exposure time	1/10.000 sec. – 2 minutes		1/10.000 sec. – 1 minute			
Image quality	16bit-OptiColor+, 12.5 f-stops and Lens+ technology					
Capture time (frames per sec.*)	0.7	0.9	1.0	1.4	1.2	1.8
Image buffer	1 GB Advanced high speed RAM					
Display	3.2" touch screen with 1.15 megapixels 290 ppi(dpi) 16 million colors, 170° viewing angle					

*) Maximum expected performance. The actual performance will be dependent on the camera model and on the camera and digital back capture modes.
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IQ140 Camera System

Touch the Future

The Phase One IQ140 camera system is the first step into the intuitive future. The 4-button navigation is now complemented by touch screen navigation, providing complete intuitive control of the Phase One IQ140 digital back.

New technology means more options, but the Phase One solution is always focused on performance, quality and stability. Digital photography has never provided more options. The Phase One IQ140 will easily reproduce scenes with extreme tonal range and details in one shot from a full 12.5 f-stop dynamic range.

Enjoy the seamless compatibility between Phase One digital focal plane lenses or Schneider Kreuznach leaf shutter lenses and the Phase One 645 DF camera body, which in conjunction with the Phase One IQ140 will provide the optimal solution for the demanding photographer.

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what the world's best photography is made of

IQ140 Digital Back Specifications

Inset image © Jens Honoré

- 40 megapixel resolution for extreme detail level
- 10 megapixel Sensor+ resolution for higher light sensitivity and faster workflow
- Extreme 12.5 f-stops dynamic range
- 1.15 megapixel resolution 3.2” display with vibrant colors
- Touch screen functionality to pan, browse and zoom up to 400%

Imaging technology	
Lens Factor	1.3
Resolution	40 megapixel
Active pixels	7320 x 5484 pixels
CCD size effective	44 mm x 33 mm
Pixel size	6 x 6 micron
Image ratio	4:3
Dynamic range	12.5 f-stops

IQ140 full resolution capture mode	
Resolution	40 megapixel
Pixel size	6 x 6 micron
RAW file compression	IIQ large: 40 MB IIQ small: 26 MB
ISO	50, 100, 200, 400, 800

Sensor+ capture mode	
Resolution	10 megapixel
Pixel size	12 x 12 micron
RAW file compression	IIQ large: 10 MB IIQ small: 7 MB
ISO	200, 400, 800, 1600, 3200

Output files (via Capture One)	
Color depth	16 bit per color
Image file formats	All output formats of Capture One are possible: TIFF-RGB, TIFF-CMYK, JPEG
Color management	RGB, Embedded ICC profile, CMYK

LCD screen	
Size	3.2"
Resolution	1.15 megapixel touch screen
Viewing angle	170°

Lighting
Supports all photographic lights: Flash, tungsten, daylight, fluorescent, HMI

Operating conditions	
Temperature	-10° to 50°C (14° to 122°F)
Humidity	15 to 80% RH (non-condensing)

Computer minimum requirements	
Mac	Fast Intel Core™ 2 Duo or later CPU, 4 GB RAM, Fast HDD: RAID 0 configured systems for max performance, Nvidia 8800 series graphics card or newer
PC	Intel® Pentium® 4, 4 GB RAM, 64bit,10 GB free hard disk space, IEEE 1394 interface, Windows XP®, Service Pack 3 or Windows Vista®, Service Pack 1

IQ back mounts	
Phase One/ Mamiya	Phase One 645DF/AF Mamiya 645DF/ AFDIII
Phase One H101	Hasselblad H1 and H2
Hasselblad V	Hasselblad 555ELD, 553ELX, 503CW and 501CM Via adaptor: Mamiya RZ67 Pro II Mamiya RB67
Contax	Contax 645 AF

Wide angle & technical cameras
4 x 5" via FlexAdaptor: Arca Swiss, Cambo, Linhof, Toyo, Sinar, Plaubel, Horseman.

Storage files
Phase Ones IIQ RAW file format speeds up the image capture and file transfer. It increases the storage capacity by turning the full 16 bit image data into a compact RAW file format. The default IIQ RAW-large format is completely lossless.

Software
Capture One 6.2 or later

Certifications
CE

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645DF Camera Body Specifications

- Open platform for maximum choice and compatibility
- Durable, proven platform for secure operation
- Ergonomic handling and ease of use
- Use Phase One digital lenses, Mamiya AF/AFD lenses or Hasselblad V lenses
- Exposures from 1/4000s to 60 minutes
- Flash synchronization up to 1/1600 sec.

Shutter speed from 1/4000s to 60 minutes, extremely high flash synchronization up to 1/1600 second to stop action with fast shutter speed or flash.

The mirror and viewfinder of the Phase One 645DF camera are almost three times larger than those of 35mm cameras, providing much greater control of focus and composition.

While hosting a complete list of features and custom functions, the Phase One 645DF camera is extremely easy to use. All settings important to the exposure are easily controlled by manual dials and soft buttons.

Camera type	Modular 645 AF SLR body
Lenses	Phase One Digital focal plane lenses, Schneider Kreuznach leaf shutter lenses and Mamiya 645 AFD lenses Compatible with Hasselblad V lenses
Backs	Open platform back mount
Auto focus	TTL phase-difference AF with 3 focus points Focus confirmation in manual mode Infrared AF assists for unfailing focus Auto focus lock for swift AF/ M shift
Shutter	1/4000s to 60 minutes Up to 2 fps Shutter speed bracketing
Flash	Focal plane shutter: Up to 1/125s Leaf shutter lenses: Up to 1/1600s’ 1st and 2nd curtain flash synchronization X sync terminal and support for TTL flash
Light Metering	TTL metering (average, spot and auto) Programmable AEL button Exposure compensation: +/- 5EV
Mirror-Up	Electronically-activated by switch on grip

Viewfinder	Fixed prism viewfinder Exchangeable diopter from -5 to +3 LCD panel with full exposure information
Focusing Screen	Interchangeable focus screens Laser engraved mask for digital back Matte, Grid, Checker, Microprism
Selftimer	Self-timer from 2 to 60 sec
Remote	Screw-in cable release on shutter button Terminal for electronic triggering devices
Stop Down Preview	Stop down button on front of camera
Tripod Socket	1/4 inch and 3/8 inch included
Power Requirements	6 AA batteries (standard or rechargeable) External battery pack – 6 AA batteries External AC adapter
User configuration	3 Custom dial modes for capture settings 19 custom functions Customizable dials and buttons
Size	W, H, D // 6, 5, 7.2" // 153, 128, 184mm
Weight	35 oz. / 1030g. w/o batteries

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