

IQ280 Camera System



THE PINNACLE OF IMAGE QUALITY

The IQ280 gives you the pinnacle of image quality, made possible through its 80 megapixel captures. With it you can capture incredible details and reproduce your images in virtually any format and size with a minimum of post processing. ISO 35, this is how low you can go with the IQ280. No other camera or digital back can do this better than the IQ280. With this low ISO setting you are sure to get silk-like smooth images. Moreover the low ISO gives away the fact that the IQ280 lets you successfully capture images with a huge dynamic range and still retain unparalleled image quality.

Image capture is a breeze with an IQ2 digital back. Whether you are shooting to a memory card or

shooting tethered to a computer using USB3 or FireWire, we have designed the IQ2 backs to give you a fast and continuous capture experience.

Using Capture Pilot on your iPad or iPhone, you can connect wirelessly to an IQ2 digital back and enhance your capture process and productivity. IQ2 digital backs combine functional design with rugged and durable build quality. The backs are made of 100% aircraft grade aluminum and all electronic connectors and ports are protected with automatic retracting hatches or rubber covers to ensure they work continuously even in the toughest shooting environments.

PHASE **ONE**

what the world's best photography is made of

IQ280 Digital Back Specifications



- 80 megapixel resolution for extreme detail level
- 645 full-frame CCD Sensor
- Built in wireless technology
- Extreme 13 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

Sensor	Full frame CCD
Lens factor	1.0 / Full frame
Resolution	80 megapixel
Active pixels	10320 x 7752 pixels
Sensor size effective	53.7 mm x 40.4 mm
Pixel size	5.2 x 5.2 micron
Image ratio	4:3
Dynamic range	13 f-stops

IQ280 FULL RESOLUTION CAPTURE MODE

Resolution	80 megapixel
Pixel size	5.2 x 5.2 micron
RAW file compression	IIQ large: 80 MB IIQ small: 54 MB
ISO	35, 50, 100, 200, 400, 800

SENSOR + CAPTURE MODE

Resolution	20 megapixel
Pixel size	10.4 x 10.4 micron
RAW file compression	IIQ large: 20 MB IIQ small : 13.5 MB
ISO	140, 200, 400, 800, 1600, 3200

INTERFACES

Ports	FireWire, USB2/USB3
Wireless	2.4 Ghz and 5Ghz
Wireless range	Up to 8 meter in Adhoc mode Up to 30 meter with Router
Wireless security	WPA/WPA2 or EAP and optional 4 digit PIN code
Supported devices	iPhone, iPad, and iPod touch. Optimized for iPhone 5.

OUTPUT FILES (VIA CAPTURE ONE)

Image file formats	8 or 16 bit TIFF-RGB, TIFF-CMYK or JPEG
Color management	RGB, Embedded ICC profile, CMYK

LCD SCREEN

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

OPERATING CONDITIONS

Temperature	0° to 40°C (32° to 104°F)
Humidity	15 to 80% RH (non-condensing)

COMPUTER MINIMUM REQUIREMENTS

Mac	Intel Core™ 2 Duo or later CPU, 4 GB RAM, 10 GB free hard disk space, Monitor with resolution of 1280 x 800, Mac OS X 10.9, 10.8.5, 10.7.5, 10.6.8 or later
PC	Intel Core™ 2 Duo, 4 GB RAM, 64bit, 10 GB free hard disk space, Monitor with resolution of 1280 x 800, IEEE 1394 interface, Windows® 8 64bit, Windows® 7 64bit, Windows Vista® SP2 64bit,

IQ BACK MOUNTS

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

WIDE ANGLE & TECHNICAL CAMERAS

Via optional adapter for: Alpa, 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 size image data into a compact RAW file format. The default IIQ RAW-large format is completely lossless.

SOFTWARE

Capture One 7.1 or later

CERTIFICATIONS

CE, FCC

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, Schneider Kreuznach, Mamiya AF/AFD 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 is 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.

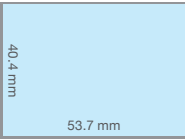
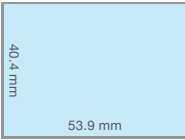

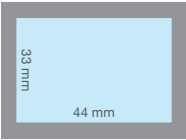
Camera type	Modular 645 Auto Focus SLR body.
Lenses	Phase One Digital focal plane lenses, Schneider Kreuznach leaf shutter lenses and Mamiya 645 AFD lenses. Compatible with Hasselblad V lenses.
Backs	Open platform back mount
Auto focus	TTL phase-difference Auto Focus. Focus confirmation in manual mode. AF assists for unfailing focus. Auto focus lock for swift AF/ M shift.
Shutter	Build-in focal plane shutter, support for in-lens leaf 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.
Self-timer	Self-timer from 2 to 60 sec.
Remote	Screw-in cable release on release button. Terminal for electronic triggering devices. Controlable from iPhone/iPad via digital back and Capture Pilot.
Stop down preview	Stop down button on front of camera.
Tripod socket	1/4 inch and 3/8 inch included.
Power requirements	Rechargeable 7.4V Li-Ion Battery or 6 standard AA batteries (standard or rechargeable). External battery pack 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

Content is subject to change without notice



IQ2 Series Digital Back overview

Camera Back	IQ280		IQ260		IQ260 Achromatic	IQ250
	<p>The IQ280 is the pinnacle of image quality. The highest resolution captures of any commercially available cameras. The 80 megapixel captures, dynamic range and unparalleled image quality makes it an ideal solution for a wide array of photographic disciplines.</p>		<p>The IQ260 goes beyond the norm; it's made for extraordinary captures. It can deliver long exposures of up to one hour and produce 60 megapixel captures that are virtually noise free.</p>		<p>The IQ260 Achromatic offers pure black and white images; no filters or interpolation applied. The 60 megapixel captures are stunning and pin sharp. there are endless opportunities to create very distinct imagery both for artistic and scientific purposes.</p>	<p>The IQ250 features the widest usable ISO range of any high-end camera system. Whether you are shooting at ISO 100, 6400 or anywhere in between. With this digital back you can capture unique images in available light anytime.</p>
Sensors						
Lense factor	1,0		1,0		1,0	1,3
Sensor size effective	53.7 x 40.4 mm		53.9 x 40.4 mm		53.7 x 40.3 mm	44 x 33 mm
Active pixels	10328 x 7760		8984 x 6732		8964 x 6716	8280 x 6208
Active pixels sensor ⁺	5162 x 3878		4490 x 3364		–	–
Pixels size (micron)	Full res.	Sensor ⁺	Full res.	Sensor ⁺	Full res.	Full res.
	5,2 x 5,2	10,4 x 10,4	6 x 6	12 x 12	6 x 6	5.3 x 5.3
Resolution	80	20	60	15	60	50
Light sensitivity	35 - 800	140 - 3200	50 - 800	200 - 3200	200 - 3200	100 - 6400
Exposure time	1/10.000 sec. - 2 minutes		1/10.000 sec. - 1 hour		1/10.000 sec. - 2 minutes	1/10.000 sec. - 1 hour
Image quality	16bit-OptiColor+, 13 f-stops Dynamic Range				13 f.stops Dynamic Range	14 f.stops Dynamic Range
Capture time (fps)	0.7	0.9	1.0	1.4	1.0	1.2
Image buffer	1 GB Advanced high speed RAM					2 GB Adv. 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. Content is subject to change without notice.

Rely on the Phase One IQ series digital backs to help you get your jobs done. Its highly durable build quality is designed and tested to work in the toughest environments, including extreme heat, cold, and humidity.

With superior service and support from Phase One, you are ensured unparalleled reliability that lets you stay focused on photography.