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.



IQ280 Digital Back Specifications



- → 80 megapixel resolution for extreme detail level
- 645 full-frame CCD
- → 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				
CCD	Full frame CCD			
Lens factor 1.0 / Full frame				
Resolution 80 megapixel				
Active pixels	10320 x 7752 pixels			
CCD 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			

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°

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 per-formance, 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 645AF			

WIDE ANGLE & TECHNICAL CAMERAS

 4×5 " 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 7.1 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	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		

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IQ2 Series Digital Back overview



IQ280

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.

IQ260

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.

IQ260 Achromatic

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.

Sensors	40 4 mm 53.7 mm		40.4 753.9 mm		40.00 mm 53.7mm
Lens Factor	1.0		1.0		1.0
CCD size effective	53.7 x 40.4 mm		53.9 x 40.4 mm		53.7 x 40.3 mm
Active pixels full resolution	10328 x 7760		8984 x 6732		8964 x 6716
Active pixels Sensor ⁺	5162 x 3878		4490 x 3364		-
Pixel size (micron)	Full res. 5.2 x 5.2	Sensor ⁺ 10.4 × 10.4	Full res. 6 × 6	Sensor ⁺ 12 x 12	Full res. 6 x 6
Resolution (megapixels)	80	20	60	15	60
Light sensitivity (ISO)	35 - 800	140 - 3200	50 - 800	200 - 3200	200 - 3200
Exposure time	1/10.000 sec 2 minutes		1/10.000 sec 1 hour		1/10.000 sec 2 minutes
Image quality	16k	pit-OptiColor+, 13 f	-stops Dynamic Range		13 f.stops
Capture time (frames per sec.*)	0.7	0.9	1.0	1.4	1.0
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. 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.

www.phaseone.com

