XF 100MP

Camera Systems

PHASE**ONE**

what the world's best photography is made of

Phase One XF 100MP
Camera System

Dedicated to image quality

For more than two decades we at Phase One have been pushing the limits of digital image quality. Striving to create the optimum experience for professional photographers that demand the best in quality and creative freedom, we've made every effort to ensure image quality is emphasized above all else. No effort is too great or decision too small when we consider how Phase One can optimize the end result and guarantee the best possible photograph. With the XF 100MP Camera System, everything we have been working on finally comes together in one system. Ultimate image quality combined with the ultimate creative freedom.

Introducing the XF 100MP Camera System – what the world's best photography is made of.

Niels V. Knudsen

Vice President
Innovation and Application Development

100MP
Full Frame CMOS Sensor

16-bit
Color

15 stop
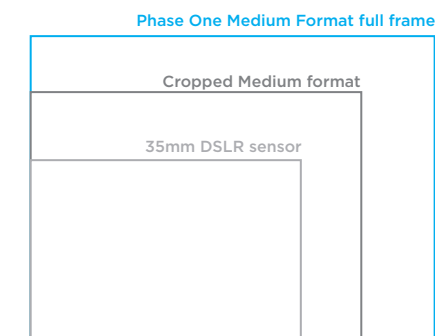**Dynamic Range**

12800
ISO 50 - 12800

Medium Format
Bigger is better

High resolution is only one of several advantages of full frame medium format. Phase One Medium Format delivers a more shallow depth of field, better tonality and much more creative freedom than medium format systems with smaller sensors.

Sensor size

The Phase One full frame 100MP medium format sensors are 2.5 times larger than those found in high-end 35mm DSLR and 1.5 times larger than the cropped size medium format 50MP sensors.

Phase One Medium Format full frame

Cropped Medium format

35mm DSLR sensor

1:1 Sensor size

- 53.4mm x 40.1mm
- 44mm x 33mm
- 36mm x 24mm

1.5
TIMES LARGER THAN CROPPED MF

2.5
TIMES LARGER THAN DSLR

PHASE**ONE**

100MP

Schneider · KREUZNACH

Resolution

100MP Full Frame CMOS perfection

We were the first to offer you Full Frame Medium Format CCD systems and now we're proud to be the first to offer a Full Frame Medium Format CMOS solution. The Phase One XF 100MP Camera System offers the same great advantages of full frame usability with the added benefits of CMOS technology. No lens crop factors, no focus screen masks, just uncompromising image quality from edge to edge.

© Alexander Flemming

Shot with XF 100MP and Schneider Kreuznach 120mm LS Macro

Color

16-bit color

The first CMOS based Medium Format system capable of capturing and processing full 16-bit color, the Phase One XF 100MP processes full color depth throughout the entire imaging pipeline. The result is a CMOS system that can deliver colors just as the previous leader in image quality, our exclusive Phase One CCD based counterparts. Not only does the XF 100MP Camera System capture the full color depth data, but the captured colors are optimized in-house by Phase One's image professor Niels V. Knudsen and his team, ensuring the very best in image quality from Capture One software.

"The XF 100MP captures the intricate detail of my creations with such astonishing precision, it surpasses every expectation I ever dreamt possible."

- Alexia Sinclair

© Alexia Sinclair,

Shot with XF 100MP and Schneider Kreuznach 80mm LS f/2.8

Dynamic range

15 stops of dynamic range

The Phase One XF 100MP Camera System delivers an unparalleled 15 stops of dynamic range, retaining unmatched detail in both highlights and shadows. This is the highest performing system in terms of dynamic range that the Medium Format world has to offer. The Phase One XF 100MP Camera System is engineered to provide the detail and unmatched quality, demanded by the worlds leading photographers.

"...People ask me what's the most important attribute of a medium format file. For me, it's not pixels or even the lenses, it's the incredible dynamic range..."

- Peter Eastway

© Peter Eastway

Shot with XF 100MP and Schneider Kreuznach 240mm LS f/4.5

© Peter Eastway
Shot with XF 100MP and Schneider Kreuznach 55mm LS f/2.8

Workflow

Fast and fluid Live View

One of the main advantages of CMOS technology is the stunning sensor read-out speed. One benefit from this read-out speed is fast and fluid Live View. It enables simple, clear and precise focus in real-time as well as immediate reference for dynamic composition. With Phase One XF Medium Format Camera Systems and high-resolution imaging, focus can be critical and Live View can ensure consistent success.

"The XF 100MP has the best high ISO performance of any camera I've used. Over 100MP, dynamic range to kill for, and high ISO performance that is better than anything else out there, what's not to love?"

- Tim Kemple

ISO
3200

at
100%

© Tim Kemple

© Alexia Sinclair

ISO flexibility

ISO 50 - 12800

The new Phase One XF 100MP Camera System offers clean and crisp images from ISO 50 to 12800, providing the freedom to capture incredible high-resolution images across a range of photographic disciplines. The extensive ISO flexibility offers full control of every capture scenario, with unprecedented support and integration through Capture One's proprietary software algorithms.

Capture One Pro

The Capture One difference

CMOS sensor technology allows for an unmatched Live View experience. With the IQ3 50MP, and now the IQ3 100MP, Live View is greatly improved with the ability to capture during Live View operation. Whether you are using Live View on the Digital Back itself or through Capture One Pro, a simple click of the shutter will capture your image at full resolution just as you are seeing it in real-time. Once the image is captured, you'll seamlessly return to live view to continue your required workflow.

© Mark Mawson

Service & support

Phase One offers the best in-class support, promising our hardware users a response from the globally positioned support team within 8 hours, regardless of location and no matter what the concern.

"We promise to respond within 8 hours. But typically, that is 7 hours more than we need"

– Ulf Liljegren, Phase One Support Manager

5-Year Warranty
Offering an industry leading 5-year warranty, Phase One covers the entire system from top to bottom, lens to sensor. If your Phase One system should suffer a fault within 5 years, we will fix your system quickly and without delay.

5-Year Uptime Guarantee
Exclusive to Phase One, we provide you with a worry free 5-year uptime guarantee. This guarantee provides you access to loan equipment should you need to send us your system for any reason, as well as on-site service should it be necessary.

Imaging Sensor

	XF IQ3 100MP		
Resolution	101 Megapixel		
Long exposure	60 minutes		
IIQ L 16 Bit	Yes		
Dynamic range	15 stops		
Sensitivity (ISO)	50 - 12800		
Lens factor	1.0		
Sensor type	CMOS		
Sensor size	53.4 x 40.1		
Active pixels	11608 x 8708		
Pixel size (micron)	4.6 x 4.6		
Output image dim. 300 DPI	98.3 x 73.2cm		
Output image dim. 600 DPI	49.1 x 36.9cm		
Mount options	Phase One XF (DF$^+$/DF)		
	Hasselblad H		
Tethered capture	Firewire 400/800		USB 2/3
Live View	IQ3 Touch Screen	via USB to Capture One	to HDMI output

For more information check the technical specification inlay

Controls & OS

- Rear button
- Front Dial
- Rear Dial
- Side Dial
- Top rear key
- Top front key
- Shutter release button (including half press)
- Front button
- Secondary shutter release button (including half press)
- Ergonomic grip with one hand access to controls

XF Top screen

Tools	Displays
Bullseye Level	Histogram
Focus Stack	Seismograph
Time-lapse	Vibration Analysis
Profoto Flash	Flash Analysis
HDR Sequence	

Camera OS

User Interface	OneTouch UI
Screen layouts	3 standard layouts
Custom Sets	3 configurations
Save and Load from CF	Camera Custom Sets Camera System Setup
Custom settings	80+ settings
User upgradeable via Back	Yes

Capture & Light metering

	Features			
Frames per second	Variable following digital back			
Capture Drive Modes	– Single	– Continuous	– Bracketing	– Vibration delay
	– Delayed	– Bulb	– Toggle	
Toggle Mirror-up	Yes			
Capture from liveview	Yes			
TTL Light metering	Average, Spot and Auto			
HAP-1 Light Metering	Used with waist level finder			
Profoto Air TTL	Up to 6 groups			
Flash Analysis Tool	Milliseconds / T5 and T1			
Viewfinder black-out time	150ms (FPS), 400ms (LS)			
AE Lock	Yes			
Exposure compensation	+/- 5 EV			

Focus & Autofocus

HONEYBEE
AUTOFOCUS PLATFORM

	HAP-1
Autofocus sensor	HAP-1 1MP CMOS Sensor
Autofocus processor	HAP-1 Processor with Floating Point Architecture
Autofocus assist light	HAP-1 Precision White light
Hyperfocal point focusing	Yes
Upgradeable autofocus configurations& patterns	Yes
Autofocus modes	Spot, Average, Hyperfocal
Interchangeable focusing screens	Yes

Viewfinder

	90° Prism	Waist level
Modular viewfinders on XF top screen	Yes	
Frame Coverage	97%	97%
Exchangeable diopter	3 options	5 options
Diopter range	Range from -5 to +3	Range from -2 to +2
Default diopter magnification	-2.5 to +2.5	0
Collapsable diopter	No	Yes
Visible Exp. information	Yes	On XF Top screen
Focus Confirmation	Yes	On XF Top screen
Light Measuring	Yes	Yes (HAP-1)

Size & Weight

	Dimensions (W x H x D)	Weight
XF Camera System* w/ 90° prism viewfinder	152 x 135 x 160 (mm)	1390g
XF Camera System* w/ waist level finder	152 x 173 x 160 (mm)	1020g
XF Camera Body w/o battery	152 x 108 x 85 (mm)	790g
IQ3 Digital Back	98,5 x 88,5 x 62,3 (mm)	695g
90° prism viewfinder	68 x 52 x 152 (mm)	500g
Waist level finder	67 x 17 x 57mm (closed) 67 x 65 x 57 (open)	130g

* without lens

What's in the box

	XF IQ3 Camera System	XF IQ1 Camera System
Phase One XF Camera with Prism viewfinder	Yes	Yes
IQ Digital Back	IQ3 100MP	IQ1 100MP
Waist level viewfinder	Optional	Optional
Blue Ring Lens	Any Prime Lens	80mm LS f/2.8
Capture One Pro 10	Yes	Yes
Pelican Storm Case	Yes	No
Modular F-stop ICU	Yes	No
Laptop compartment with built in sunshade	Yes	No
Charger for IQ3 and XF	Yes	Yes
3400 mAh Batteries	4	2
Card reader and CF card	Yes	No
Gray Cards & LCC calibraton kit	Yes	Yes
Sensor Cleaning Kit	Yes	Yes
FW and USB cable	Yes	Yes
Focusing screen	Yes	Yes

Lens range
Schneider Kreuznach

PHASE**ONE**

what the world's best photography is made of

Leaf shutter lenses

28mm LS f/4.5
Provides complete coverage of full-frame medium format, and provides the fastest flash synchronization capabilities.

35mm LS f/3.5
The professional choice for wide-angle, providing quality in both flash and daylight shooting.

45mm LS f/3.5
A moderate wide angle with very little field curvature, making it ideal for architecture and interior.

55mm LS f/2.8
Minimal distortion semi- wide-angle design provides a normal look, great for editorial portraits and lifestyle photography.

Leaf shutter lenses

80mm LS f/2.8
A preferred choice for location fashion photographers using fill flash and an essential lens for every photographers kit.

110mm LS f/2.8
A longer focal length with just enough optical compression for full-length fashion, beauty and portraiture.

120mm LS f/4.0 Macro
Ideal for close-up product shots, and equally ideal for close up beauty, action, nature and wildlife photography.

150mm LS f/3.5
A standard portrait lens with applications in fashion, beauty, lifestyle and sports.

Leaf shutter lenses

150mm LS f/2.8
A great portrait lens, with a big aperture opening, producing a very shallow depth of field, and a beautiful background bokeh.

240mm LS f/4.5
Ideal lens for getting close to your subject while maintaining your distance, whether you're shooting beauty, sports, landscape or wildlife.

40-80mm LS f/4.0
Ultra sharp rendition on all focal lengths. The optical quality of this zoom lens is comparable with what you would expect from a genuine prime lens.

75-150mm LS f/4.0
This lens provides flash sync up to 1/1600s and the freedom to compose your framing.

Speciality lenses

120mm TS f/5.6
Perfect for studio work, product shots and for creating stunning images using an offset focus plane. 8° tilt, 12mm shift, rotating lens groups 360° on both axes.

2x Teleconverter
The 2x teleconverter is especially well suited for landscape photography and a compact, flexible and affordable alternative to longer telephoto lenses.

Schneider KREUZNACH

Schneider Kreuznach Lenses

All of our lenses are designed together with world renowned German optics manufacturer, Schneider Kreuznach. We combined decades of experience in high-resolution optics and precision manufacturing to create phenomenally sharp lenses.

- High res German glass
- Breath-taking bokeh
- Dramatically shallow DOF
- Leaf shutter lenses
- Zoom & speciality lenses

PHASE**ONE**
what the world's best photography is made of

Leaf shutter lenses

PHASE**ONE**

28mm AF f/4.5

A Superb, extreme wide-angle lens for full format digital. Perfect for landscape, architecture and creative control.

PHASE**ONE**

35mm AF f/3.5

A compact and lightweight wide-angle. Ideally suited for street, landscape, interior or architecture photography.

PHASE**ONE**

45mm AF f/2.8

Using low dispersion glass, this wide-angle lens offers minimal chromatic aberration and is ideal for high contrast conditions.

PHASE**ONE**

80mm AF f/2.8

A great all-purpose lens, exhibiting outstanding optical performance. All scenes are captured with amazing detail and accuracy.

Focal plane lenses

PHASE**ONE**

120mm MF f/4 Macro

For beauty, portrait and close-up macro work, this lens will deliver amazing results.

PHASE**ONE**

120mm AF f/4 Macro

The 120mm AF Macro lens is staggeringly sharp and ideal for beauty, portraits and close-up macro work this lens delivers amazing results in all fine detail applications.

PHASE**ONE**

150mm AF f/2.8

To enhance operation for wedding and portraits, this lens offers fast internal focusing for easy use with special effect filters and vignettes.

PHASE**ONE**

75-150mm AF f/4

The versatility of this lens makes it a preferred choice for location photographers, securing great image quality at all focal lengths.

V-Grip

Providing advanced ergonomics and additional control options, the XF V-Grip ensures simplicity as well as dynamic improvements to handheld workflow applications. With an emphasis on design, the XF V-Grip incorporates an Arca-Swiss compatible mounting point and L-Bracket solution. Whether using the XF V-Grip hand-held or on a tripod, the ease of use and added controls make this accessory a valuable asset to any professional photographer.

B.O.B - Cable release

External shutter control is a must, be it in the field or in the studio. Phase One now has its own customizable and dynamic external shutter release control. The Phase One Break Out Box, or B.O.B, is a dynamic tool that is designed to meet your specific needs. With backwards compatibility for legacy Mamiya/Phase One accessories, the option for power and the ability to customize the cable length, B.O.B is much more than your average shutter release. Customize the button's function, and use it to activate the new two-step mirror control.

Waist-level finder

The waist-level finder is convenient for many styles of photography - be it in studio or on location. With the ability to retain the connection between photographer and model, or simply to attain a more effective working position, the waist-level finder is a great addition to the creative toolbox.

Stand Out

XF 100MP

For more information, please visit
www.phaseone.com

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