

# Product Guide

PHASE**ONE**



Phase One strives to deliver the best equipment, software and workflow for the world's best photographers. We focus everything we do on digital capture.

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### Ultimate image quality

- Highest quality files with an extreme level of detail
- Superior color rendition and skin tone reproduction
- High dynamic range and virtually no noise

### Open platform – Freedom of choice

- Always the best equipment for the job
- Maximum choice and compatibility
- Unlimited versatility in use

### Peace of mind

- Extreme durability
- Best in class warranty and support
- Attractive upgrade path to new products ensuring long term value

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# Phase One Product Range



## Phase One 645DF Camera

Phase One redefines medium format digital capture with a seamless integration of lens, body, back and software. The Phase One 645DF Camera system easily matches integrated camera solutions while still being completely modular.

## Phase One Digital Lenses

The Phase One Digital Lenses are designed for ultimate image quality and freedom of choice. Their world class optical performance combined with unique lens enhancement features in Capture One guarantees perfect captures.

## P+ digital backs

The P+ digital backs represent more than a decade of leadership in medium format digital capture. Preferred by rental companies world wide and trusted by the world's best photographers, the P+ digital backs set the benchmark for durability, image quality and versatility.

## Capture One

Capture your creativity and deliver superior image quality. Take your clients beyond retouching and create lasting impressions instantly on the shot. Capture One takes your work to the next level through an extraordinary focus on capture.

# Phase One 645DF Camera System

## The ultimate experience

Choose the Phase One **Value Added** offering and experience a perfect match of products and services for ultimate choice and complete peace of mind. Go with the **Classic** offering to secure the superior Phase One image quality at an affordable price.

## Classic configuration

- P+ digital back
- 645DF camera body
- 80mm digital AF lens
- Capture One DB
- 1 year classic warranty

## Accessories

- Waterproof hard case
- Lens Wrapping
- Digital back battery
- Dual DB battery charger
- 4.5m Firewire cable
- Body and lens caps
- Camera neck strap

## Value added configuration

- P+ digital back
- 645DF camera body
- 80mm digital AF lens
- Capture One PRO
- 3 year value added warranty with digital back loan unit



## Accessories

- Waterproof stroller hard case with room for 17" laptop
- Multimount adapter for HB V-lenses
- 2 lens Wrappings
- 2 digital back batteries
- Extra camera battery cassette
- Dual DB battery charger
- DB Multi connector cable
- LCC calibration plate
- 2 GB CF card
- CF card reader
- 4.5m Firewire cable
- QP reference card
- Digiclean kit
- Body and lens caps
- Camera neck strap

# Phase One P+ Digital Back Technology

## Extreme equipment design

From rain to snow, hot to cold, no other digital back can withstand the conditions that P+ backs are designed to handle.

## Future-proof performance

Phase One is constantly pushing the limits of digital capture with new innovative solutions. Together with attractive upgrade paths to new products, you are guaranteed a secure investment now and in the future

## P+ key advantages

- Ultimate image quality
- Engineered for extreme use
- Intuitive, four button operation
- Sleeping architecture – instantly go from sleep to alert

## IIQ Raw files

The Phase One IIQ raw file technology implemented in P+ digital backs secures the finest detail in images while ensuring uninterrupted sessions.

- Lossless compression of RAW files
- Secure all details and true colors
- Unlimited burst rate

## 3S secure storage

The 3S technology ensures that your images are secure when shooting to CF cards.

- Integrity check of CF card
- Correction of corrupted files
- Shoot with peace of mind

# Sensor+ Technology (patent pending)

The P 65+ and P 40+ digital backs feature Sensor+ breakthrough innovation for unprecedented versatility in photography.

Choose 15 / 10 megapixel captures for faster workflow and higher sensitivity or 60.5 / 40 megapixel captures for extreme details. By adding pixels together on the CCD chip, larger pixels are created for increased sensitivity and smaller files. Sensor+ is unique by maintaining full sensor area and image quality while scaling.

## Your benefits from Sensor+

- No lens factor. True wide angle performance
- No crop. Full frame captures at 100% or 25% resolution
- 4 times higher sensitivity in Sensor+ capture mode



Sensor+ sample images. Full frame images at 100% and 25% resolution, using Sensor+ capture mode.



# XPose+ Technology

P 45+, P 30+ and P 25+ all feature exclusive Phase One XPose+ technology. XPose+ enables noise free exposures up to one hour, unlocking a world of creative options.

## Your benefits from XPose+

- One hour extreme exposures
- Limitless for interior, architecture and landscape photography
- Unique look and techniques, such as light painting
- Noise free images



# Ultimate Image Quality

Constant innovation by Phase One ensures that you will **always deliver the ultimate** in image quality to your clients. The following technologies are shared across all platforms.

## Lens+

Lens enhancement tools are provided through Capture One PRO software. Phase One digital lenses and other popular lenses are automatically enhanced, while Lens+ can be manually applied to other lenses.

- Removes lens distortion
- Corrects for light fall off
- Controls vignetting

## Focus+

Focus+ is another benefit from Capture One PRO, making images sharp and flawless.

- Ensures edge to edge sharpness
- Removes chromatic aberration
- Eliminates purple fringing

## Dynamic+

Phase One P+ backs offer an incredible dynamic range of up to 12.5 f-stops. Dynamic+ technology also features great low light performance.

- Up to 12.5 f-stops dynamic range
- Up to ISO 3200
- Less noise at all ISO settings

## Opticolor+

Opticolor+ is an exclusive Phase One technology that maintains color detail and accuracy in even the darkest shadows.

- Ensures perfect skin tones
- Maintains color accuracy
- Optimizes files for reproduction

# P 65+

## Capture redefined

Being the benchmark for reliability and image quality, the P 65+ ensures that you amaze your clients at every capture. The P 65+ offers the worlds first full frame 64.5 sensor, delivering astounding 60.5 megapixel captures. Patent pending Sensor+ technology allows you to switch between 60.5 and 15 megapixel captures.

## Key advantages include:

- Sensor+ technology solution.
- Switch between 60.5 megapixel captures with an astounding level of detail
- 15 megapixel captures for faster workflow and up to ISO 3200 sensitivity
- Extreme 12.5 f-stops dynamic range
- True wide angle performance
- 100% viewfinder area for best composition
- Up to 1.4 frame per second capture rate

# Specifications



Resolution	60.5 megapixels
Pixel size	6 x 6 microns
Live area	53.9mm x 40.4mm
ISO range	50, 100, 200, 400, 800
Dynamic range	12.5 f-stops
Bit depth	16 bit per color
IIQ small	40 MB RAW files
IIQ large	60 MB RAW files
<b>Sensor+ capture mode</b>	
Resolution	15 megapixels
Pixel size	12 x 12 microns
ISO range	200, 400, 800, 1600, 3200
IIQ small	10 MB RAW files
IIQ large	15 MB RAW files

# P 40+

## Capture revolution

The P 40+ is a capture revolution. With capture rates of up to 1.8 frames per second in Sensor+ mode and an ISO range from 50 to 3200, this digital back is truly revolutionary.

## Key advantages include:

- Sensor+ technology solution.
- Switch between 40 & 10 megapixel captures using Sensor+
- 40 megapixels for highest image quality and detail level
- 10 megapixels for higher sensitivity and faster workflow
- ISO range from 50 – 3200
- Fast capture rates – up to 1.8 fps.
- Extreme 12.5 f-stop dynamic range

# Specifications



Inset image © Phase One. Photo by Steen Trongsgaard & Kajsa Björnberg

Resolution	40 megapixels
Pixel size	6 x 6 microns
Live area	43.9mm x 32.9mm
ISO range	50, 100, 200, 400, 800
Dynamic range	12.5 f-stops
Bit depth	16 bit per color
IIQ small	26 MB RAW files
IIQ large	40 MB RAW files
<b>Sensor+ capture mode</b>	
Resolution	10 megapixels
Pixel size	12 x 12 microns
ISO range	200, 400, 800, 1600, 3200
IIQ small	7 MB RAW files
IIQ large	10 MB RAW files

# P 45+

# Specifications



Inset image © Torben Eskerod

## Creative genius

The P 45+ is a no-compromise choice. With XPose+ technology, you have unlimited creativity for using long exposures to create unique images. Capture cars, architecture, landscapes or commercial in high resolution with total confidence.

## Key advantages include:

- XPose+ technology solution
- Up to 1 hour noise free exposures
- Near full frame captures
- 39 megapixel captures
- Studio or location workhorse
- Perfect for interior and architecture

Resolution	39 megapixels
Lens factor	1.1x
Live area	49.1mm x 36.8mm
Active pixels	7216 x 5412
Pixel size	6.8 x 6.8 microns
ISO range	50 - 800
Dynamic range	12 f-stops
Bit depth	16 bit per color
IIQ small	27 MB RAW files
IIQ large	44 MB RAW files

# P 30+

# Specifications



Inset image © Charles Cramer

## Ultimate control

The fast capture rate and powerful moiré control makes the P 30+ an invaluable tool for high end fashion and people photographers. Combine this with 31 megapixel captures, great low light sensitivity and unfailing performance, and you have an incredible strong partner for any challenge.

## Key advantages include:

- ISO 100 to 1600 for great versatility
- 31 megapixels for large prints
- Up to 48 captures per minute
- Superior moiré control
- XPose+ technology solution

Resolution	31.6 megapixels
Lens factor	1.3x
Live area	44.2mm x 33.1mm
Active pixels	6496 x 4872
Pixel size	6.8 x 6.8 microns
ISO range	100 - 1600
Dynamic range	12 f-stops
Bit depth	16 bit per color
IIQ small	22 MB RAW files
IIQ large	35 MB RAW files

# P 25+

# Specifications



Inset image © Malcolm Dare

## Passionate vision

The P 25+ digital back gives your 22 megapixels, near full frame captures at an affordable price. The flexibility of the open platform allows you to mount the P+ backs on technical cameras, making the P 25+ a solid foundation for food, fine art or architectural photography.

## Key advantages include:

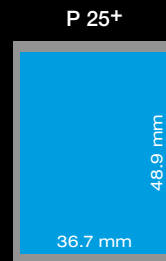
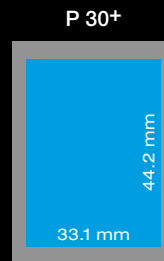
- Great entry solution for aspiring photographers
- Near full frame captures at 22 megapixels
- XPose+ technology solution
- Up to 1 hour noise free exposures
- Versatile, all-round digital back

Resolution	22 megapixels
Lens factor	1.1x
Live area	48.9mm x 36.7mm
Active pixels	5436 x 4080
Pixel size	9 x 9 microns
ISO range	50 - 800
Dynamic range	12 f-stops
Bit depth	16 bit per color
IIQ small	17 MB RAW files
IIQ large	22 MB RAW files

# P+ Product Range

	P 65+		P 40+	
Lens Factor	1.0		1.3	
CCD size effective (mm)	53.9 x 40.4		43.9 x 32.9	
Active pixels	8984 x 6732		7320 x 5484	
Pixel size (micron)	Full res. 6 x 6	Sensor+ 12 x 12	Full res. 6 x 6	Sensor+ 12 x 12
Resolution (megapixels)	60.5	15.0	40	10
Light sensitivity (ISO)	50-800	200-3200	50-800	200-3200
Exposure time	1/10,000 – 1 minute			
Image quality	16bit-OptiColor+, 12.5 f-stops Dynamic+ and Lens+ technology			
Capture time (Frames per second)	1.0	1.4	1.2	1.8
Battery Lifetime (captures/ hours)	2000 / 3		2500 / 4	
Image buffer	1.3 GB High Speed RAM			
Display	2.2" QVGA TFT with 230,000 pixels, high brightness and contrast both indoor and outdoor, very fine details			

	P 45+	P 30+	P 25+
Lens Factor	1.1	1.3	1.1
CCD size effective (mm)	49.1 x 36.8	44.2 x 33.1	48.9 x 36.7
Active pixels	7216 x 5412	6496 x 4872	5436 x 4080
Pixel size (micron)	6.8 x 6.8	6.8 x 6.8	9 x 9
Resolution (megapixels)	39	31.6	22
Light sensitivity (ISO)	50-800	100-1600	50-800
Exposure time	1/10,000 sec. up to one hour with XPose+ technology		
Image quality	16bit-OptiColor+, 12 f-stops Dynamic+ and Lens+ technology		
Capture time (Frames per second)	0.67	0.8	0.67
Battery Lifetime (captures/ hours)	2500 / 4	3000 / 4	4000 / 4
Image buffer	640 MB high speed RAM		
Display	2.2" QVGA TFT with 230,000 pixels, high brightness and contrast both indoor and outdoor, very fine details		



# Phase One 645DF Camera Body



The Phase One 645DF camera is designed to be a **seamless extension** of your creativity. Extraordinary capture becomes natural through ease of use and direct control.

Take advantage of the new Phase One leaf shutter lenses, focal plane digital lenses from Phase One or use your Mamiya 645 AF/AFD or Hasselblad V lenses for a **broader choice and easy upgrade path**.

Combined with some of the digital backs the 645DF camera offers the most versatile shutter speeds in the market, ranging from 1/4000s to 60 minutes.

Combined with the P 65+ / P 40+ and the new Phase One leaf shutter lenses the 645DF camera supports an unprecedented high flash sync speed of up to 1/1600s, opening new **creative windows for photographers**.

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 buttons.

# Phase One 645DF Camera Body

Other key advantages include:

## Open platform for maximum choice and compatibility:

- You can use other brand digital back on the Phase One camera body
- You can use lenses from 3rd party using the multi mount adaptors

## Durable, proven platform for secure operation:

- In Value-Added configuration, guaranteed up to 300.000 captures or 3 years

## Instant capture feedback:

- Highly improved capture responsiveness
- New tactile shutter button ensures good focusing and capture control
- 30% faster autofocus (than in 645AF model)



## Improved ergonomics:

- Completely sealed eye-cup eliminating ambient light
- Improved viewfinder masks
- New AF lever for better handling

## User defined photography:

- 3 custom shooting modes. Easily configurable using combination of camera settings and features.
- Enhanced mirror up, bracketing and timing features

# Phase One 645DF Specifications



<b>Camera type</b>	Modular 645DF SLR body
<b>Lenses</b>	Phase One Digital (focal plane and leaf shutter lenses) and Mamiya 645 AFD Compatible with Hasselblad V lenses
<b>Backs</b>	Open platform digital back mount
<b>Auto focus</b>	TTL phase-difference AF with 3 focus points Focus confirmation in manual mode Infrared AF assist for unfailing focus Auto focus lock for swift AF/ M shift
<b>Shutter</b>	1/4000s to 60 minutes Up to 120 frames per minute Shutter speed bracketing
<b>Flash sync</b>	Up to 1/1600s
<b>Light Metering</b>	TTL metering (average, spot and auto) Programmeable AEL button Exposure compensation: +/- 5EV
<b>Mirror-up</b>	Electronically-activated by switch on grip

<b>Viewfinder</b>	Fixed prism viewfinder Exchangeable diopter from -5 to +3 LCD panel with full exposure information
<b>Focusing screen</b>	Interchangeable focus screens Laser engraved mask for digital back Matte, Grid, Checker, Microprism
<b>Selftimer</b>	Selftimer from 2 to 60 sec
<b>Remote</b>	Screw in cable release on shutter button Terminal for electronic triggering devices
<b>Stop down preview</b>	Stop down button in front of camera
<b>Tripod socket</b>	1/4 inch and 3/8 inch included
<b>Power requirements</b>	6 AA batteries (standard or rechargeable) External battery pack - 6 AA batteries External AC adapter
<b>User configuration</b>	3 user presets for capture settings 36 custom settings Customizeable dials and buttons
<b>Size</b>	W,H,D // 6,5,7.2" // 153, 128, 184mm
<b>Weight</b>	61oz. / 1730g. w/o batteries

## Phase One Digital Lenses



The Phase One digital lenses are designed for ultimate image quality and freedom of choice. Their world class optical performance combined with unique lens enhancement features in Capture One guarantees perfect captures.

## The Schneider Kreuznach Digital Leaf Shutter Lenses



The Schneider Kreuznach Leaf Shutter Lenses offer extreme versatility and ultimate image quality. Unprecedented high flash sync speeds of up to 1/1600s\* is opening new creative windows for professional photographers.

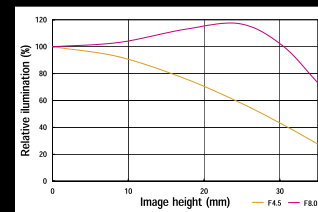
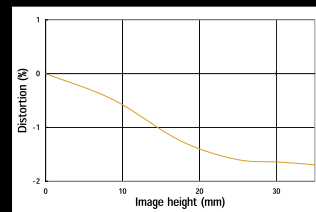
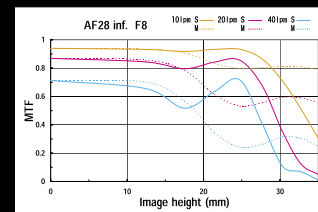
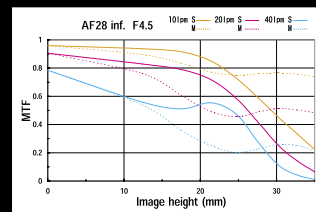
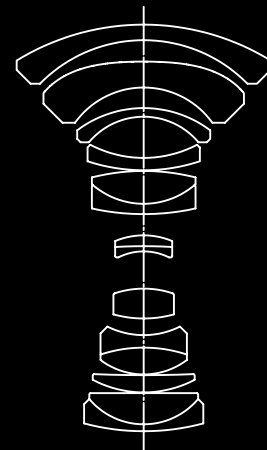
Available initially as 55mm, 80mm and 110mm, the Schneider Kreuznach leaf shutter lenses are manufactured with precision, designed for performance and durability.

# Phase One Digital AF 28mm f/4.5 Aspherical

Superb extreme wide angle lens for film and full format digital.  
Perfect for landscape, architecture and creative looks.

- Edge to edge sharpness
- Digital and film
- Perfect for landscape and architecture

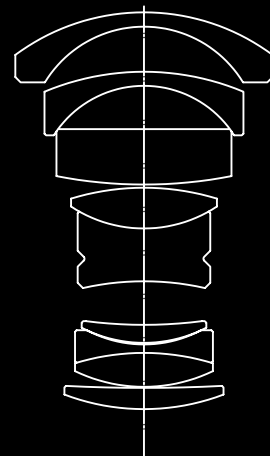
Optical construction	14 elements, 10 groups
Angle of view	102°
Aperture range	f/4.5 – f/32
Diaphragm	Automatic
Focusing system	Auto Focus / Manual
Minimum focusing distance	35 cm / 1.15 ft. /
Maximum magnification ratio	0.15x
Area covered	372 x 276mm / 14.6 x 10.8"
Equivalent 35mm focal length	17mm
Filter	Sheet filter on the rear mount
Lens hood	Built-in
Dimensions	136 x 90mm / 5.35 x 3.54"
Weight	886 g. / 31.01 oz. 1.9 lbs.



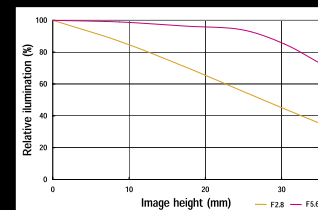
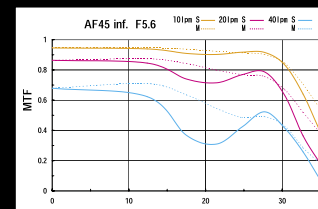
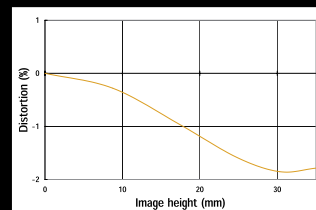
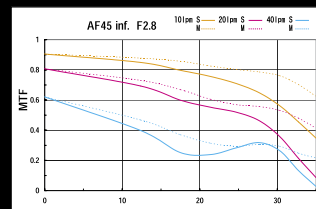
# Phase One Digital AF 45mm f/2.8

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

- Fast aperture for low light
- Compact size, perfect for traveling
- Attractive pricing



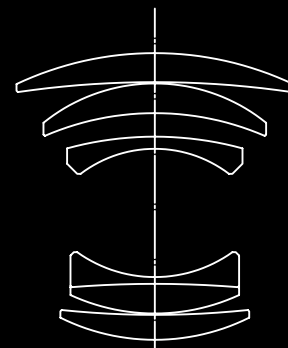
Optical construction	9 elements, 7 groups
Angle of view	74°
Aperture range	f2.8 – f/22
Diaphragm	Automatic
Focusing system	Auto Focus / Manual
Minimum focusing distance	45 cm / 1.4 ft.
Maximum magnification ratio	0.13x
Area covered	418 x 310mm / 16.4 x 12.2"
Equivalent 35mm focal length	29mm
Filter	67mm
Lens hood	Bayonet
Dimensions	49.5 x 77mm / 1.9 x 3"
Weight	492 g. / 1.1 lbs / 17.35 oz.



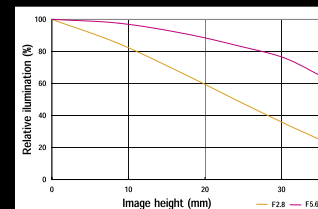
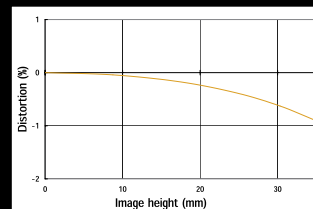
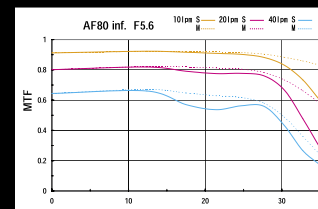
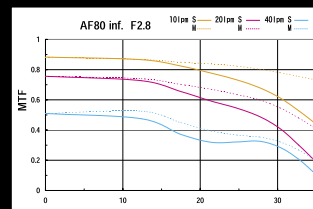
# Phase One Digital AF 80mm f/2.8

Great general purpose lens with outstanding optical performance.  
All scenes are captured with amazing details and accuracy.

- Outstanding optical performance
- Shallow depths of field
- Lightweight and compact



Optical construction	6 elements, 5 groups
Angle of view	47°
Aperture range	f/2,8 – 22
Diaphragm	Automatic
Focusing system	Auto Focus / Manual
Minimum focusing distance	70 cm / 2.3 ft.
Maximum magnification ratio	0.15x
Area covered	377 x 279mm / 14.8 x 1.0"
Equivalent 35mm focal length	50mm
Filter	67mm
Lens hood	Bayonet
Dimensions	51.5 x 80.5mm / 2 x 3.2"
Weight	330 g. / 0.7 lbs / 11.6 oz

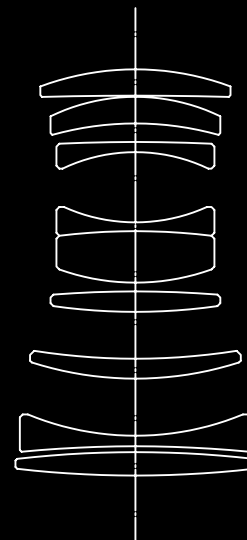


# Phase One Digital MF 120mm f/4 Macro

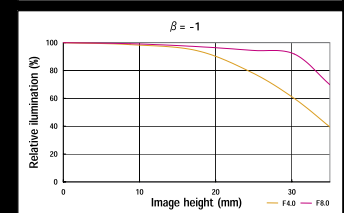
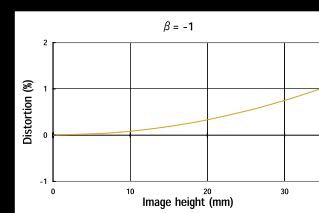
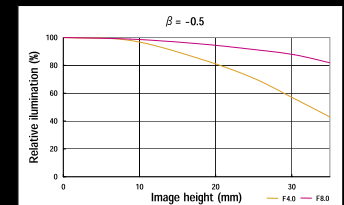
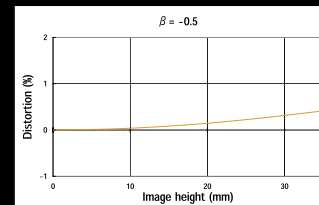
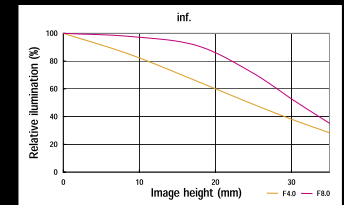
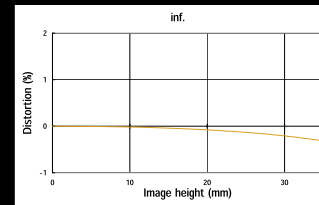
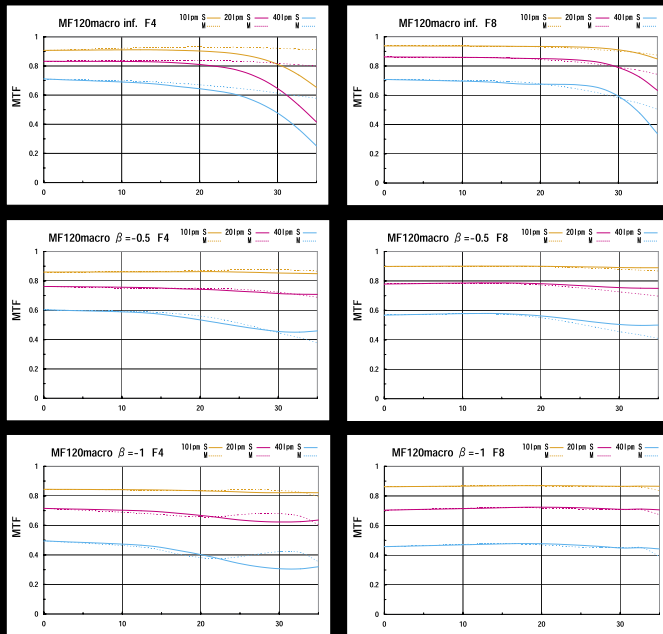
For beauty, portraits and close-up macro work,  
this lens will deliver amazing results.

- 1:1 magnification
- Precise manual focus
- Film or digital

Optical construction	9 elements, 8 groups
Angle of view	33°
Aperture range	f/4 – f/32
Diaphragm	Automatic
Focusing system	Manual (digital focus confirmation)
Minimum focusing distance	40 cm / 1.3 ft. /
Maximum magnification ratio	1.00x
Area covered	56 x 42 mm / 2.2 x 1.6"
Equivalent 35mm focal length	73mm
Filter	67mm
Lens hood	Bayonet
Dimensions	111 x 83mm / 4.4 x 3.25"
Weight	835 g. / 1.8 lbs / 29.2 oz.



# Phase One Digital MF 120mm f/4 Macro

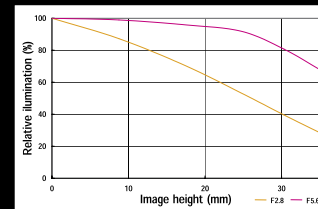
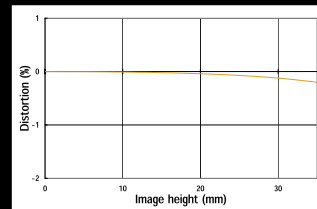
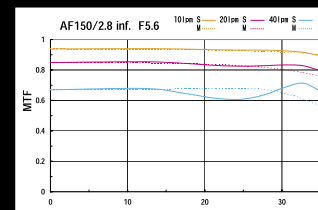
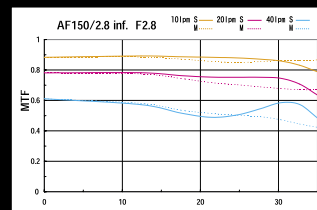
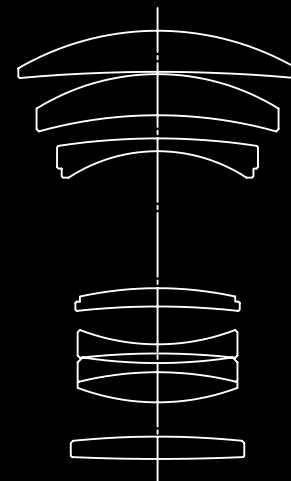


# Phase One Digital AF 150mm f/2.8 IF

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

- Amazing sharp edge to edge at wide open
- Great low light performance
- Push-pull AF lock

Optical construction	8 elements, 7 groups
Angle of view	26°
Aperture range	f/2.8 – f/22
Diaphragm	Automatic
Focusing system	Auto Focus / Manual
Minimum focusing distance	100cm / 3.3 ft.
Maximum magnification ratio	0.19 x
Area covered	295 x 218mm / 11.6 x 8.5"
Equivalent 35mm focal length	93mm
Filter	72mm
Lens hood	Bayonet
Dimensions	120 x 85mm / 4.7 x 3.3"
Weight	780g / 1.7 lbs / 27.03 oz.

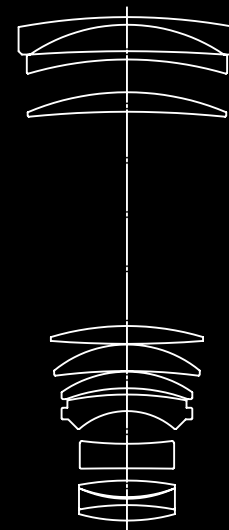


# Phase One Digital Zoom AF 75-150mm f/4.5

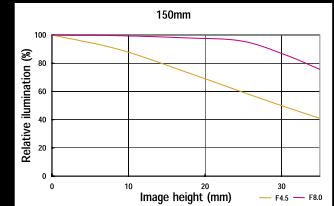
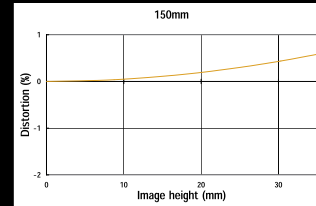
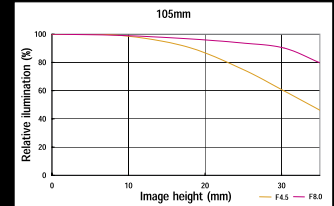
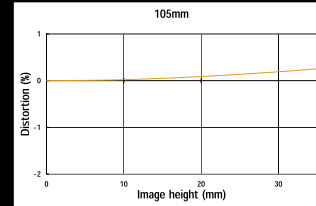
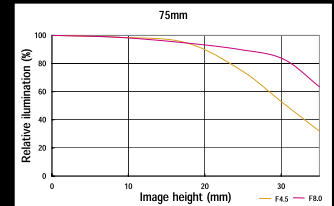
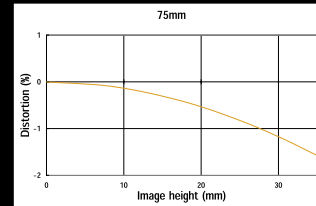
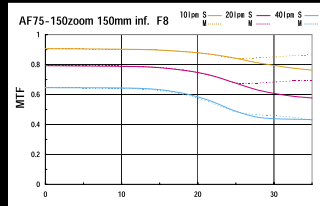
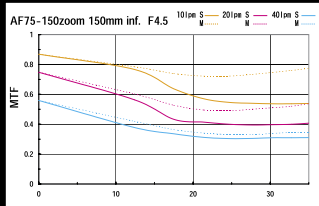
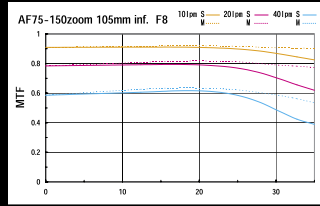
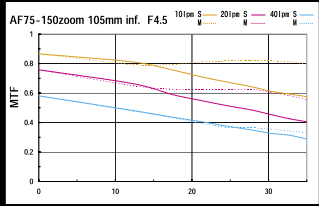
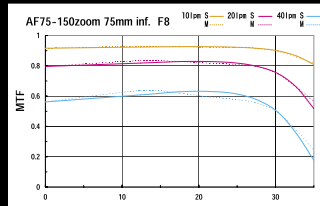
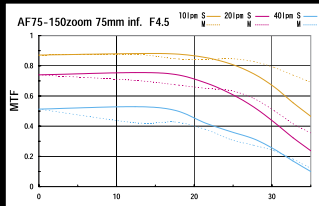
The versatility of this lens makes it a preferred choice for on location fashion photographers, securing great image quality at all focal lengths.

- Prime lens image quality
- Push-pull AF lock
- Compact zoom lens

Optical construction	11 elements, 10 groups
Angle of view	50° - 26°
Aperture range	f/4.5 – f/32
Diaphragm	Automatic
Focusing system	Auto Focus / Manual
Minimum focusing distance	100cm / 3.3 ft.
Maximum magnification ratio	0.09 ~ 0.16x
Area covered	545 x 409mm (at 75mm); 293 x 220mm (at 150mm)
Equivalent 35mm focal length	47 - 93mm
Filter	77mm
Lens hood	Bayonet
Dimensions	145 x 86mm / 5.7 x 3.4"
Weight	1114g / 2.5 lbs. / 38.99 oz.



# Phase One Digital Zoom AF 75-150mm f/4.5



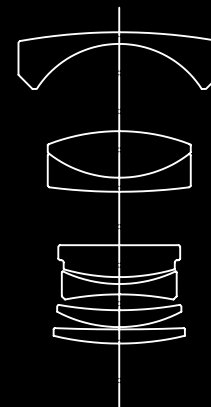
# Leaf Shutter AF 55mm f/2.8



Flash sync up to 1/1600th of a second. Minimal distortion wide angle design, provides a normal look, great for editorial portraits and on location lifestyle photography.

- Fast aperture, shallow depth of field
- Wide viewing angle
- Easily balance daylight and flash

Optical construction	7 elements, 6 groups
Angle of view	64°
Aperture range	f/2.8 – f/22
Diaphragm	Automatic
Focusing system	Auto Focus / Manual
Minimum focusing distance	45cm / 1.47 ft.
Maximum magnification ratio	0.18x
Area covered	310 x 230mm / 12.2 x 9"
Equivalent 35mm focal length	34mm
Filter	72mm
Lens hood	Bayonet
Dimensions	77.6 x 86.5mm / 3 x 3.4"
Weight	600g / 1.3 lbs. / 21.15 oz.



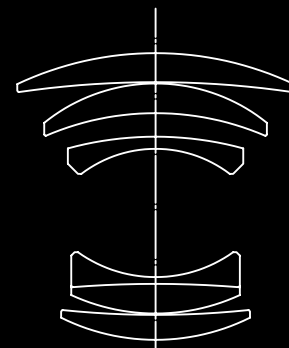
# Leaf Shutter AF 80mm f/2.8



This is the standard focal length lens with the most versatility. Flash sync up to 1/1600th of a second. A preferred choice for on location fashion photographers using fill in flash.

- Easily balance daylight and flash
- Fast aperture, shallow depth of field
- Extreme optical performance

Optical construction	6 elements, 5 groups
Angle of view	47°
Aperture range	f/2.8– f/22
Diaphragm	Automatic
Focusing system	Auto Focus / Manual
Minimum focusing distance	70cm / 2.3 ft.
Maximum magnification ratio	0.15x
Area covered	279 x 377mm / 11 x 14.8"
Equivalent 35mm focal length	50mm
Filter	67mm
Lens hood	Bayonet
Dimensions	64.4 x 86.5mm / 2.5 x 3.4"
Weight	500g / 1.1 lbs. / 17.6 oz.



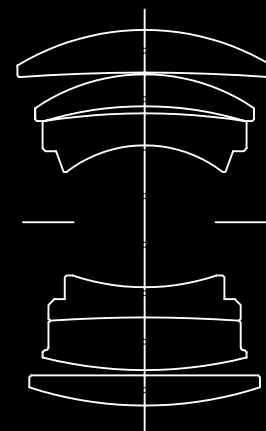
# Leaf Shutter AF 110mm f/2.8



A longer focal length with just enough optical compression for full length fashion, beauty and portraiture. The preferred lens for on location portraits with a very shallow depth of field.

- Synchronize flash to 1/1600th of a second
- Fast lens with a shallow depth of field
- Extreme anti-flare optical design

Optical construction	6 elements, 5 groups
Angle of view	29°
Aperture range	f/2.8 – f/22
Diaphragm	Automatic
Focusing system	Auto Focus / Manual
Minimum focusing distance	90cm / 2.9 ft.
Maximum magnification ratio	0.16x
Area covered	310 x 230mm / 12.2 x 9"
Equivalent 35mm focal length	68mm
Filter	77mm
Lens hood	Bayonet
Dimensions	83.3 x 86.5mm / 3.2 x 3.4"
Weight	700g / 1.5 lbs. / 24.69 oz.



# Capture One 5 PRO



Capture your creativity and deliver superior image quality. Capture One 5 PRO provides you with the tools you need to add a creative edge to your personal style.

Reduce the time and effort required to deliver stunning, ready-to-use images via excellent out-of-the box image appearance, precision adjustment tools and a powerful processing engine. Workflow and tool tabs are customizable, adapting to a photographer's needs.

## Capture One 5

Capture One 5 is your simple way to superior image quality. By converting your RAW files in Capture One 5, you can be sure to get the most out of your images. Spend more time concentrating on photography instead of post-production.

## Selected feature overview Capture One 5 and Capture One 5 PRO

Feature/function	PRO	5
Supports most popular DSLRs, Phase One digital backs and selected Leaf digital backs	√	√
Out-of-the-box world class image quality	√	√
Perform nondestructive adjustments on RAW, TIFF and JPEG image files	√	√
Shoot tethered directly into Capture One	√	
Compose shots from your monitor with Live Preview	√	
Get an instant, true view of image sharpness with the Focus tool	√	√
Accelerate your image selection by using the Focus Mask for fast verification of image sharpness	√	
Expand your workspace with multiple monitor support	√	
Customize your workspace and tool tabs to suit your personal workflow and preferences	√	
Access and edit a comprehensive set of metadata fields	√	√
Be creative with your image files and use the Styles tool to apply your custom looks	√	
Achieve perfect colors through selective color adjustment with the Color Editor tool	√	
Recover shadow or highlight detail with the High Dynamic Range tool	√	√
Adjust individual color channels easily with RGB Levels and Curves	√	
Achieve perfect, smooth and soft appearing skin tones with the Skin Tone Enhancer	√	
Erase dust and spots with a single click	√	
Adjust camera lens distortion with the powerful Lens Correction tools	√	
Copy and apply individual image adjustments to other images and save time	√	√
Create web galleries with the customizable Web Contact Sheet	√	√
Continue to work while you process high-volume shoots with unique recipes in the background	√	√
Enhance image rights protection and watermark your images	√	

\*For an updated list of supported cameras, please visit [www.phaseone.com/5](http://www.phaseone.com/5)

# Phase One Accessories

Phase One offers a wide range of accessories to complete the photographic solution, ensuring that you have the right tools available for the job.

In addition to the accessories offered by Phase One directly, you will find many more accessories as well as complete solutions available through the Phase One professional partner network. Examples include adapters for Fuji 680, Mamiya RZII D and complete solutions like copy stands and aerial solutions – all taking advantage of the image quality and reliability of the Phase One digital backs.

Contact your local Phase One partner to get a complete overview of available solutions and accessories. Your local partner is listed at [www.phaseone.com/partners](http://www.phaseone.com/partners)



## Phase One Digital Back Accessories:

- Phase One Flex Adaptor for 4 x 5" Cameras
- LCC Calibration Solution
- CCD cleaning kit

## Phase One 645DF Camera Accessories:

- Phase One Camera Stroller Case with laptop insert and dividers
- Multimount for Hasselblad V lenses
- 3 sizes Auto extension rings
- L-bracket with handstrap for fast change from vertical to horizontal orientation on tripod
- 1M and 5M Electromagnetic release cable
- Phase One Camera neck strap
- Phase One 645 extra battery module
- Phase One 645 body front and back cap
- Phase One lens wrapping
- Lens cleaning cloth

## Phase One 645DF Camera – Focus screens with laser engraved masks:

- Focus screen for P 21+ and P 30+
- Focus screen for P 25+ and P 45+
- Focus screen for P 65+ (Full frame – no engraved mask)

# Technical Camera Solutions



## FlexAdapter

- Universal design using view camera lens boards
- Quick insert plates allow for fast platform switch
- Viewfinder includes pop-up magnifier
- Supported view cameras: Arca-Swiss, Cambo, Horseman, Linhof, Sinar, Toyo
- Orientation support: Horizontal and vertical depending upon camera model and movements required
- Included items: FlexAdapter, specific View Camera mounted plate, focusing screen, removable viewfinder with pop-up magnifier, wake-up sync cable
- Simple to operate, requiring no external power supplies
- Easy to operate with electronic or mechanical shutter systems



## 3rd party camera solutions

- Several vendors offer technical camera solutions designed specifically for use with the Phase One digital backs – please ask your Phase One partner for more information.

### Among the vendors are:

- Alpa
- Arca-Swiss
- Cambo
- Horseman
- Linhof



# Phase One Warranty and Support Program

Phase One equipment is **made to last**. Combine this with the extended support and warranty program and be assured that **your investment is safe**.

Amongst many other benefits of the Value Added warranty, we offer you a digital back loan unit during repair of your digital back, free of charge. This means you are secured **maximum uptime**. The loan unit will be supplied within 24 hours of filing the case at Phase One.

# Value Added Warranty

Value added warranty and services	Digital Back	645 Body	Lenses	Leaf shutter lenses
Warranty period	3 years	3 years	3 years	1 year
Free repair of manufacturing defects	Yes	Yes	Yes	Yes
Shutter actuations covered	Unlimited	300.000	Unlimited	100.000
Product defect within first month	New product	New product	New product	New product
Free loan unit during repair	Yes	No	No	No
Free camera platform exchange	Yes	No	No	No
24/7 online support forum and access to knowledge base articles	Yes	Yes	Yes	Yes
Guaranteed upgrade program	Yes	Yes	No	No

# Phase One Warranty and Support Program

Before shipping, all Phase One Camera Systems undergo a thorough manual inspection and control procedure for absolute peace of mind:

- Sensor focus adjustment
- Luma/Chroma calibration & verification
- Illumination invariance verification
- Surface inspection
- Mechanical parts verification
- Usability testing & capturing of images
- Visual inspection of images
- User interface testing
- Assembly and functional test
- Final test cycle

# Classic Warranty

Classic warranty and services	Digital Back	645 Body	Focal plan Lenses	Leaf shutter lenses
Warranty period	1 year	1 year	1 year	1 year
Free repair of manufacturing defects	Yes	Yes	Yes	Yes
Shutter actuations covered	Unlimited	100.000	Unlimited	100.000
Product defect within first month	Repair	Repair	Repair	Repair
Free loan unit during repair	No	No	No	No
Free camera platform exchange	No	No	No	No
24/7 online support forum and access to knowledge base articles	Yes	Yes	Yes	Yes
Guaranteed upgrade program	Yes	Yes	No	No

# General Phase One services

## 24/7 Knowledge Base and online Support Forum

Phase One's searchable Knowledge Base at <http://support.phaseone.com> provides you with detailed answers to most questions that you might have. In addition, Phase One's official support forum lets you easily share your experiences and get assistance from others.

## Access to worldwide service network

The Phase One partners serve as your direct contact in more than 80 countries and their 24 hour access to the Phase One support team ensures full technical support no matter when and where you need it.

## Attractive upgrade path to new products

Leading innovation in digital capture over a decade, Phase One will always push the limits of photographic equipment. By offering you an attractive upgrade path to new products, you will always stay updated while securing the value of your original investment.

# Additional resources

## Phase One website

- Complete product range overview
- Software and Hardware tutorial videos
- In Action articles and case studies
- Download 30 day free trial of Capture One
- Purchase from Phase One online store
- Sign up for a demo
- Phase One partner locator
- Phase One rental locator
- Photographers web gallery
- User forum

## Phase One newsletter

- Feature articles about photographers, techniques and the photographic industry
- Updates and announcements for software and hardware
- Software "How to" articles and video links
- Software and hardware user reviews
- Sign up via [www.phaseone.com](http://www.phaseone.com)

“Freedom of choice is the freedom to use the right creative tool for the job. Phase One is committed to equipping photographers with what they need to surpass even their most passionate visions and enjoy the process”

Henrik Håkonsson, CEO, Phase One

[www.phaseone.com](http://www.phaseone.com)

PHASE**ONE**

what the world's best photography is made of