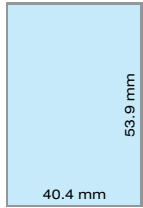
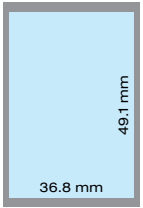
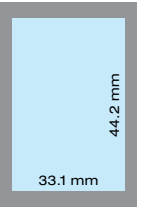



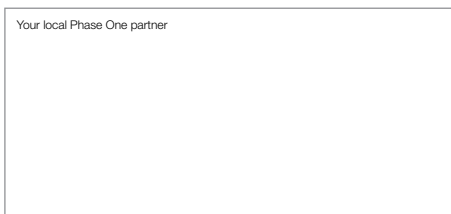
# P+ Digital Back Overview

	P 65+	P 45+	P 30+	P 25+	
<b>Description</b>	World's first full frame medium format digital back, featuring <b>Sensor+</b> with a choice of 60.5 mega pixels for finest resolution or scaled full frame captures for fast workflow and low light versatility.	High resolution shooter with unlimited burst sequences and optimized for large format photography with live preview functionality for easy composition and focus checking.	The top quality fast fashion shooter with ISO 1600, with superior moiré control and well suited for harsh environments.	All-round shooter with unlimited burst sequences and optimized for large format photography with live preview functionality for easy composition and focus checking.	
<b>Sensors</b>					
<b>Lens Factor</b>	1.0	1.1	1.3	1.1	
<b>CCD size effective (mm)</b>	53.9 x 40.4	49.1 x 36.8	44.2 x 33.1	48.9 x 36.7	
<b>Active pixels</b>	8984 x 6732	7216 x 5412	6496 x 4872	5436 x 4080	
<b>Pixel size (micron)</b>	<b>Full res.</b> 6 x 6	<b>Sensor+</b> 12 x 12	6.8 x 6.8	6.8 x 6.8	9 x 9
<b>Resolution (mega pixels)</b>	60.5	15.0	39	31.6	22
<b>Light sensitivity (ISO)</b>	50-800	200-3200	50-800	100-1600	50-800
<b>Exposure time</b>	1/10.000 – 1 minute	1/10.000 sec. up to one hour with XPose+ technology			
<b>Image quality</b>	16bit-OptiColor+, 12 f-stops Dynamic+ and Lens+ technology				
<b>Capture time (frames per sec**)</b>	1.0	1.4	0.67	0.8	0.67
<b>Battery Lifetime (up to captures/up to stand-by time*)</b>	2000 / 3		2500 / 4	3000 / 4	4000 / 4
<b>Image buffer</b>	1.3 GB High Speed RAM		640 MB high speed RAM		
<b>Display</b>	2.2" QVGA TFT with 230,000 pixels, high brightness and contrast both indoor and outdoor, very fine details				

All testfigures are "maximum to be expected" made at Phase One test department "all things being equal". Battery used for test is new 2500mAh Li+.

\*) standby Time will vary a lot depending on temperature, usage of battery and state of the back e.g. Zero Latency will increase power consumption significantly

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



www.phaseone.com

# P 45+ Camera System



Inset image © Torben Eskerod

## Redefines the limits of creativity

The Phase One P 45+ Camera System is designed to be a seamless extension of your creativity. Extraordinary capture becomes natural through ease of use and direct control. Shoot digital or film with no lens or back restrictions. Take advantage of the Phase One digital lenses or use your Mamiya 645 AF/ AFD or Hasselblad V lenses for an even broader choice.

The P 45+ Camera System is the no-compromise choice. With 39 mega pixel and virtually full frame, you capture every detail. Even finer than you are able to see with the naked eye. XPose+ technology offers unlimited creative freedom to use long exposures and create unique images. Capture cars, architecture, landscape or commercial in high resolution with total confidence.

PHASEONE

what the world's best photography is made of

# P 45+ Digital Back Specifications



Inset image © Torben Eskerod

- XPose+ technology solution
- Up to 1 hour noise free exposures
- Near full frame captures
- 39 mega pixel captures for maximum resolution and fine details
- Studio or location workhorse
- Perfect for interior and architecture

Imaging technology	
CCD	Full frame CCD
Lens Factor	1.1
Resolution	39 mega pixels
Active pixels	7216 x 5412 pixels
CCD size effective	49.1 x 36.8 mm
Pixel size	6.8 x 6.8 micron
Image ratio	4:3
Antiblooming	10 f-stops
Dynamic range	12 f-stops
Output files	
Color depth	16 bit per color
Image file formats	TIFF-RGB, TIFF-CMYK, JPEG
Color management	RGB, Embedded ICC profile, CMYK
Sensitivity	
ISO	50, 100, 200, 400, 800
LCD screen	
Size	2.2"
Resolution	230,400 pixels
Viewing angle	160°
Operating conditions	
Temperature	0° to 40°C (32° to 122°F)
Humidity	15 to 80% RH (non-condensing)
Lighting	
Supports all photographic lights: Flash, tungsten, daylight, fluorescent, HMI	

Computer minimum requirements	
Mac	G4, 1 GB RAM, FireWire® interface, Mac OS X 10.3.9 or later
PC	Pentium III, 1 GB RAM, IEEE 1394 interface, Windows XP/2000
P+ back mounts	
Phase One/Mamiya	Phase One 645 AF, Mamiya 645AFDII/ AFDIII, Mamiya RZ67 PRO IID via adaptor
Phase One H101	Hasselblad H1 and H2
Hasselblad V	Hasselblad 555ELD, 533ELX, 503CW and 501CM Via adaptor: Mamiya RZ67 Pro II Mamiya RB67
Contax 645	Contaxt 645 AFD
Wide angle & technical cameras	
Possible via the Phase One FlexAdaptor & third party adaptors. Arca Swiss, Cambo, Horseman, 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.	
IIQ small: 27 MB IIQ large: 44 MB	
Software	
Capture One DB or Capture One Pro	
Certifications	
CE	

# 645 AF 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 AFD lenses or Hasselblad V lenses
- Guaranteed up to 300.000 captures or 3 years (VA)
- Exposures from 1/4000s to 60 minutes
- Prepared for use with leaf shutter lenses

Shutter speed from 1/4000s to 60 minutes, B and X modes can match the extreme long exposure capability of the P+ digital backs or stop action with fast shutter speed or flash.

The mirror and viewfinder of the Phase One 645 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 645 camera is extremely easy to use. All settings important to the exposure are easily controlled by manual dials and soft buttons.

<b>Camera type</b>	Modular 645 AF DSLR body
<b>Lenses</b>	Phase One digital and Mamiya 645 AFD Compatible with Hasselblad V lenses Ready for leaf shutter lenses
<b>Backs</b>	Digital back and film ready Open platform back mount
<b>Auto focus</b>	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
<b>Shutter</b>	1/4000s to 60 minutes Up to 2 FPS Shutter speed bracketing
<b>Flash</b>	Focal plane shutter: Up to 1/125s Leaf shutter lenses: Up to 1/800s' 1 <sup>st</sup> and 2 <sup>nd</sup> curtain flash synchronization X sync terminal and support for TTL flash
<b>Light Metering</b>	TTL metering (average, spot and auto) Programmable 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 full exposure information
<b>Focusing Screen</b>	Interchangeable focus screens Laser engraved mask for digital back Matte, Grid, Checker, Microprism
<b>Selftimer</b>	Self-timer 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 preview button on 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 Customizable dials and buttons
<b>Size</b>	W, H, D // 6, 5, 7.2" // 153, 128, 184mm
<b>Weight</b>	61oz. / 1730g. w/o batteries