

# XF Camera Systems

Technical Specifications



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## Imaging Sensor

### Imaging Sensors



<b>Digital Back Options</b>	IQ3 50-80MP & IQ1 40-80MP with XF mounts (See specification for Digital Backs)
<b>Backwards Compatibility</b>	IQ1 & IQ2 with P mounts

## Controls & OS

### Camera OS



<b>User Interface</b>	OneTouch UI
<b>Screen layouts</b>	2 standard layouts
<b>Custom modes</b>	3 configurations
<b>Custom settings</b>	80+ settings
<b>User upgradeable via Back</b>	yes

## Focus & Autofocus

### HAP-1



<b>Autofocus Sensor</b>	HAP-1 1MP CMOS Sensor
<b>Autofocus Processor</b>	HAP-1 Processor with Floating Point Architecture
<b>Autofocus Assist light</b>	HAP-1 Precision White light
<b>Hyperfocal Point Focusing</b>	yes
<b>Upgradeable Autofocus configurations &amp; Patterns</b>	yes
<b>Autofocus modes</b>	Spot, Average, Hyperfocal
<b>Interchangeable focusing screens</b>	Matte (default), Split, Center prism

## Imaging software

### Software



<b>RAW converter</b>	Capture One PRO 8.3 or newer
<b>Tethered support</b>	yes
<b>Workflow options</b>	Sessions and Catalogues
<b>Lens Corrections</b>	Phase One Focal Plane lenses & Schneider Kreuznach Leaf Shutter lenses
<b>Imaging Tools</b>	25+
<b>Local adjustments</b>	Adjustment & Clone Layers
<b>Batch output</b>	yes, using recipes and multiple destinations
<b>Output formats</b>	8 & 16 bit TIFF-RGB, TIFF-CMYK, JPEG incl. XR/2000/QuickProof tm, DNG, PNG, PSD

## Viewfinder



90° Prism

Waist level

	90° Prism	Waist level
<b>Modular viewfinders</b>	Yes	
<b>Frame Coverage</b>	97%	97%
<b>Exchangeable diopter</b>	3 options	7 options
<b>Diopter range</b>	Range from -5 to +3	Range from -3 to +2
<b>Default diopter magnification</b>	-2,5 to +2,5	0
<b>Collapsible diopter</b>	no	yes
<b>Visible Exp. information</b>	yes	no

## Lenses & Shutters



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Lens Range

35mm Equivalent

	Lens Range	35mm Equivalent
<b>Focal Plane lenses</b>	8 lenses	
<b>Focal Length range</b>	28mm - 150mm	17mm - 93mm

<b>Leaf Shutter lenses</b>	12 lenses	
<b>Focal Length Range</b>	28mm - 240mm	17mm - 149mm

**Legacy Lens support** 60+ lenses

Shutter

<b>Integrated Focal Plane shutter</b>	yes
<b>Support for Leaf Shutters</b>	yes
<b>Shutter priority selection</b>	LS or FPS
<b>Longest shutter time (recommended)</b>	60 Minutes
<b>Fastest shutter speed</b>	1/4000s
<b>Flash sync speed focal plane shutters (max)</b>	1/125s
<b>Flash sync speed leaf shutters (max)</b>	1/1600s

## Capture & Light metering



Features

<b>Frames per second</b>	Variable following digital back			
<b>Capture Drive Modes</b>	Single yes	Continuous yes	Low vibration yes	Exposure bracketing 2-5 frames
<b>Toggle Mirror-up</b>	yes			
<b>Capture from liveview</b>	yes			
<b>TTL Light metering</b>	Average, spot and auto			
<b>HAP-1 Light Metering</b>	used with waist level finder			
<b>Viewfinder black-out time</b>	150ms (FPS), 400ms (LS)			
<b>AE Lock</b>	yes			
<b>Exposure compensation</b>	+/- 5 EV			

### What's in the box



#### XF IQ3 Camera System

#### XF IQ1 Camera System

	XF IQ3 Camera System	XF IQ1 Camera System
<b>Phase One XF Camera with Prism viewfinder</b>	yes	yes
<b>IQ Digital Back</b>	Choice of 50MP, 60MP, 80MP	Choice of 40MP, 50MP, 60MP, 80MP
<b>Waist level viewfinder</b>	optional	optional
<b>Schneider Kreuznach 80mm LS f/2.8</b>	yes	yes
<b>Capture One Pro 8</b>	yes	yes
<b>Pelican Storm Carry On Case</b>	yes	no
<b>F-stop Phase One flexible ICU</b>	yes	no
<b>F-stop Phase One Laptop Sunshade</b>	yes	no
<b>Charger for IQ3 and XF</b>	yes	yes
<b>3400 mAh Batteries</b>	4	2
<b>16 GB CF-Card and Reader</b>	yes	no
<b>Gray Cards &amp; LCC calibraton kit</b>	yes	yes
<b>Sensor Cleaning Kit</b>	yes	yes
<b>FW and USB cable</b>	yes	yes
<b>Focusing screen</b>	yes	yes

### Size & Weight



#### Dimensions (WxHxD)

#### Weight

	Dimensions (WxHxD)	Weight
<b>XF Camera System* w/ 90° Prism viewfinder</b>	152 x 135 x 160 (mm)	1390g
<b>XF Camera System* w/ Waist level finder</b>	152 X 173 X 160 (mm)	1020g
<b>XF Camera Body w/o battery</b>	152 x 108 x 85 (mm)	790g
<b>IQ3 Digital back</b>	98,5 x 88,5 x 62,3 (mm)	695g
<b>90° Prism Viewfinder</b>	68 x 52 x 152 (mm)	500g
<b>Waist level finder</b>	67 x 17 x 57mm (closed) 67 x 65 x 57 (open)	130g

\* without lens

### Battery

<b>Battery</b>	BP-911/914/915 3400 mAh
<b>Powershare</b>	IQ3 only
<b>Battery Charger</b>	Integrated
<b>Support for USB 3 Charging hub (1.5 A)</b>	IQ3 only
<b>High capacity back interface</b>	IQ3 only

### Flash

<b>Flash trigger</b>	Integrated Profoto wireless
<b>Wireless trigger range</b>	20m (outside)
<b>Back flash sync</b>	Yes
<b>Flash sync speed focal plane shutters (max)</b>	1/125s
<b>Flash sync speed leaf shutters (max)</b>	1/1600s

# IQ Digital Back range

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### IQ3



### IQ1



### IQ2



#### Specifications

	IQ3 80MP	IQ3 60MP	IQ3 50MP	IQ1 80MP	IQ1 60MP	IQ1 50MP	IQ1 40MP	IQ2 60MP Acromatic
<b>Resolution</b>	80 Megapixel	60 Megapixel	50 Megapixel	80 Megapixel	60 Megapixel	50 Megapixel	40 Megapixel	60 Megapixel
<b>Long exposure</b>	60 minutes	60 minutes	60 minutes	2 minutes	2 minutes	60 minutes	2 minutes	2 minutes
<b>16 bit Opticolor+</b>	yes	yes	no	yes	yes	no	yes	no
<b>Dynamic range</b>	13 f-stops	13 f-stops	14 f-stops	13 f-stops	13 f-stops	14 f-stops	13 f-stops	13 f-stops
<b>Sensitivity (ISO)</b>	50-800	50-800	100-6400	35-800	50-800	100-6400	50-800	200 - 3200
<b>Sensitivity (ISO) - Long Exp.</b>	200-3200	140-3200	100-6400	no	no	100-6400	no	no
<b>Sensor+ (ISO) - 1/2 res.</b>	200-3200	200-3200	no	140-3200	200-3200	no	200-3200	no
<b>Lens factor</b>	1	1	1,3	1	1	1,3	1,3	1
<b>Sensor type</b>	CCD	CCD	CMOS	CCD	CCD	CMOS	CCD	CCD
<b>Sensor Size</b>	53.7 x 40.4	53.9 x 40.4	44 x 33	53.7 x 40.4	53.9 x 40.4	44 x 33	43.9 x 32.9	53.7 x 40.3
<b>Active pixels</b>	10328 x 7760	8984 x 6732	8280 x 6208	10328 x 7760	8984 x 6732	8280 x 6208	7320 x 5484	8964 x 6716
<b>Pixel size (micron)</b>	5.2 x 5.2	6.0 x 6.0	5.3 x 5.3	5.2 x 5.2	6.0 x 6.0	5.3 x 5.3	6.0 x 6.0	6.0 x 6.0
<b>Output image dim. 300 DPI</b>	87.4 x 65.6 cm	76.1 x 57 cm	70.1 x 52.6 cm	87.4 x 65.6 cm	76.1 x 57 cm	70.1 x 52.6 cm	61.9 x 46.4 cm	76.1 x 57 cm
<b>Output image dim. 600 DPI</b>	43.7 x 32.8 cm	38 x 28.5 cm	35.0 x 26.3 cm	43.7 x 32.8 cm	38 x 28.5 cm	35.0 x 26.3 cm	30.1 x 23.2 cm	38 x 28.5 cm
<b>Mount options</b>	XF/H/V	XF (IQ2 available for H/V)	XF (IQ2 available for H/V)	P/H/V	P/H/V	P/H/V	P/H/V	P/M/H/V
<b>3.2" Touch Display</b>	yes	yes	yes	yes	yes	yes	yes	yes
<b>High Bandwith port</b>	yes	yes	yes	no	no	no	no	no
<b>XF Powershare</b>	yes	yes	yes	no	no	no	no	no
<b>Wi-Fi 802.11 n</b>	yes	yes	yes	no	no	no	no	yes

#### Captures per second

<b>Focal Plane (Full res.)</b>	0,8	0,9	1,8	0,8	0,9	1,8	1,2	0,9
<b>Focal Plane (Sensor+)</b>	1,1	1,2	n/a	1,1	1,2	n/a	1,7	n/a
<b>Leaf shutter (Full res.)</b>	0,7	0,8	1,4	0,7	0,8	1,4	1	0,8
<b>Leaf shutter (Sensor+)</b>	1	1,4	n/a	1	1,4	n/a	1,4	n/a

Images

IQ3 80MP © David LaChapelle

IQ3 60MP © Richard Thompson

IQ3 50MP © Anja Poulsen

# IQ Digital Back range

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## Camera Controls & One Touch UI

NEW FEATURES	XF IQ3 Camera System	XF IQ1 Camera System
<b>OneTouch UI including functionality from prev. generation systems</b>	Yes w/ high-bandwidth DB integration	Yes w/limited functionality
<b>Screen layouts</b>	Simple/Classic	Simple/Classic
<b>Custom setups</b>	3 configurations, 80+ settings	3 configurations, 80+ settings
<b>Wireless remote control with Capture Pilot</b>	yes	no
<b>Exposure Calculator</b>	yes	no
<b>Temperature graph tool</b>	yes	no
<b>Exposure zone tool</b>	yes	no
<b>Clip warning (supplement to highlight warning)</b>	yes	no
<b>Auto ISO &amp; ISO control</b>	yes	no
<b>Histogram on XF</b>	yes	no
<b>Virtual horizon on XF</b>	yes	no
<b>Prepared for future feature upgrades</b>	yes	no
<b>Camera Menu</b>	yes, advanced	yes, basic
<b>Vibration data in image file</b>	yes	yes
<b>Wake-up XF from Back</b>	yes	yes
<b>Focus Mask</b>	yes	yes
<b>Virtual Horizon</b>	yes	yes
<b>Black &amp; white Composition Display</b>	yes	yes
<b>Live View for instant focus</b>	yes	yes
<b>Tap, Pan and Browse</b>	yes	yes
<b>Tethered Capture in Capture One PRO</b>	yes	yes

## Storage & Connectivity

<b>Integrated Wi-Fi</b>	802.11 n
<b>USB 3</b>	Yes
<b>Firewire 800</b>	Yes
<b>Flash Sync port</b>	Yes, on Prism and Back
<b>High capacity back interface</b>	Yes
<b>Storage Media</b>	UDMA 7, CF-card slot with spring loaded cover
<b>Secure Storage System</b>	3S Technology
<b>Tripod socket</b>	1/4 inch & 3/8 inch
<b>Storage Engine</b>	1GB Image buffer

## Operating Requirements

<b>Temperature</b>	-10° to 50° C 14° to 122° F
<b>Humidity</b>	0 to 80 % (non-condensing)

## Battery

<b>Battery</b>	BP-911/914/915 3400 mAh
<b>XF Powershare</b>	IQ3 only
<b>Support for USB 3 Charging hub (1.5 A)</b>	IQ3 only

## Warranty

	XF IQ3 Camera System	XF IQ1 Camera System
<b>IQ3 digital back</b>	5 Years	1 Year
<b>XF camera body</b>	5 Years	1 Year
<b>Schneider Kreuznach lenses</b>	5 Years	1 Year
<b>Phase One Lenses</b>	5 Years	1 Year
<b>Viewfinders</b>	5 Years	1 Year
<b>Uptimate Guarantee incl. Loaners during repairs</b>	5 Years	1 year
<b>Access to world-wide service network</b>	yes	yes
<b>24/7 Knowledge Base &amp; Online Support Forum</b>	yes	yes

