

# IQ Digital Back Range

## Technical Specifications

PHASEONE

what the world's best photography is made of

### IQ3



### IQ1



#### Specifications

|                                      | IQ3 100MP<br>Trichromatic | IQ3 100MP      | IQ3 100MP<br>Achromatic | IQ3 80MP       | IQ3 50MP       | IQ1 100MP      | IQ1 50MP       |
|--------------------------------------|---------------------------|----------------|-------------------------|----------------|----------------|----------------|----------------|
| <b>Resolution</b>                    | 101 Megapixel             | 101 Megapixel  | 101 Megapixel           | 80 Megapixel   | 51 Megapixel   | 101 Megapixel  | 51 Megapixel   |
| <b>Long exposure</b>                 | 60 minutes                | 60 minutes     | 60 minutes              | 60 minutes     | 60 minutes     | 60 minutes     | 60 minutes     |
| <b>16 bit Opticolor+</b>             | Yes                       | Yes            | Yes                     | Yes            | n/a            | Yes            | n/a            |
| <b>Dynamic range</b>                 | 15 f-stops                | 15 f-stops     | 15 f-stops              | 13 f-stops     | 14 f-stops     | 15 f-stops     | 14 f-stops     |
| <b>Sensitivity (ISO)</b>             | 35 - 12800                | 50 - 12800     | 200 - 51200             | 50 - 800       | 100 - 6400     | 50 - 12800     | 100 - 6400     |
| <b>Sensitivity (ISO) - long exp.</b> | 35 - 12800                | 50 - 12800     | 200 - 51200             | 200 - 3200     | 100 - 6400     | 50 - 12800     | 100 - 6400     |
| <b>Sensor+ (ISO) - 1/4 res.</b>      | n/a                       | n/a            | n/a                     | 200 - 3200     | n/a            | n/a            | n/a            |
| <b>Lens factor</b>                   | 1                         | 1              | 1                       | 1              | 1.3            | 1              | 1.3            |
| <b>Sensor type</b>                   | CMOS                      | CMOS           | CMOS                    | CCD            | CMOS           | CMOS           | CMOS           |
| <b>Sensor size</b>                   | 53.4 x 40.1               | 53.4 x 40.1    | 53.4 x 40.1             | 53.7 x 40.4    | 44.0 x 33.0    | 53.4 x 40.1    | 44.0 x 33.0    |
| <b>Active pixels</b>                 | 11608 x 8708              | 11608 x 8708   | 11608 x 8708            | 10328 x 7760   | 8280 x 6208    | 11608 x 8708   | 8280 x 6208    |
| <b>Pixel size (micron)</b>           | 4.6 x 4.6                 | 4.6 x 4.6      | 4.6 x 4.6               | 5.2 x 5.2      | 5.3 x 5.3      | 4.6 x 4.6      | 5.3 x 5.3      |
| <b>Output image dim. 300 DPI</b>     | 98.3 x 73.2 cm            | 98.3 x 73.2 cm | 98.3 x 73.2 cm          | 87.4 x 65.6 cm | 70.1 x 52.6 cm | 98.3 x 73.2 cm | 70.1 x 52.6 cm |
| <b>Output image dim. 600 DPI</b>     | 49.1 x 36.9 cm            | 49.1 x 36.9 cm | 49.1 x 36.9 cm          | 43.7 x 32.8 cm | 35.0 x 26.3 cm | 49.1 x 36.9 cm | 35.0 x 26.3 cm |
| <b>Mount options*</b>                | XF                        | XF, H          | XF                      | XF, H, V       | XF             | XF, H          | XF, H, V       |
| <b>3.2" touch display</b>            | Yes                       | Yes            | Yes                     | Yes            | Yes            | Yes            | Yes            |
| <b>High bandwidth interface</b>      | Yes                       | Yes            | Yes                     | Yes            | Yes            | n/a            | n/a            |
| <b>XF Powershare</b>                 | Yes                       | Yes            | Yes                     | Yes            | Yes            | n/a            | n/a            |
| <b>Wi-Fi 802.11 n</b>                | Yes                       | Yes            | Yes                     | Yes            | Yes            | n/a            | n/a            |

#### Captures per second

|                                 | 14-bit |     | 16-bit |     | 14-bit |     | 16-bit |     | 14-bit |     | 16-bit |  |
|---------------------------------|--------|-----|--------|-----|--------|-----|--------|-----|--------|-----|--------|--|
| <b>Focal plane (full res.)</b>  | 1.4    | 0.7 | 1.4    | 0.7 | 1.1    | 0.6 | 0.8    | 1.8 | 1.4    | 0.7 | 1.8    |  |
| <b>Focal plane (Sensor+)</b>    | n/a    |     | n/a    |     | n/a    |     | 1.1    | n/a | n/a    |     | n/a    |  |
| <b>Leaf shutter (full res.)</b> | 1.2    | 0.7 | 1.2    | 0.7 | 0.9    | 0.5 | 0.7    | 1.4 | 1.2    | 0.7 | 1.4    |  |
| <b>Leaf shutter (Sensor+)</b>   | n/a    |     | n/a    |     | n/a    |     | 1.0    | n/a | n/a    |     | n/a    |  |

# XF Camera System

## Feature Differentiation

## Sensor Choices

| XF Camera System<br>Feature Differences | XF IQ3<br>Camera System                                 | XF IQ1<br>Camera System |
|---|---|-------------------------|
| <b>CMOS range</b>                       | 100MP<br>100MP Achromatic<br>100MP Trichromatic<br>50MP | 100MP<br>50MP           |
| <b>CCD range</b>                        | 80MP  | -                       |

## Sensor Core Technology

|                                |   |       |
|--------------------------------|---|-------|
| <b>IIQ L 16 Bit</b>            | 100MP<br>100MP Achromatic<br>100MP Trichromatic<br>80MP | 100MP |
| <b>Long exposure</b>           | Yes   | -     |
| <b>HDMI</b>                    | 100MP<br>100MP Achromatic<br>100MP Trichromatic         | No    |
| <b>Electronic Shutter (ES)</b> | 100MP<br>100MP Achromatic<br>100MP Trichromatic         | No    |

## Tools & Features

|  |     |     |
|--|-----|-----|
| <b>Capture from live view</b>                          | Yes | No  |
| <b>Exposure calculator</b>                             | Yes | No  |
| <b>XF camera controls from home screen</b>             | Yes | Yes |
| <b>XF camera controls from tool view (inside play)</b> | Yes | No  |
| <b>XF camera controls from camera menu</b>             | Yes | No  |
| <b>XF camera menu with settings for XF</b>             | Yes | No  |
| <b>Exposure zone tool</b>                              | Yes | No  |
| <b>Clip warning tool</b>                               | Yes | No  |
| <b>Auto ISO and ISO control</b>                        | Yes | No  |

## Storage & Connectivity

|                                     | XF IQ3<br>Camera System                       | XF IQ1<br>Camera System |
|-------------------------------------|---|-------------------------|
| <b>Integrated Wi-Fi</b>             | 802.11n                                       | No                      |
| <b>USB 3</b>                        | Yes   | Yes                     |
| <b>Firewire 800</b>                 | Yes   | Yes                     |
| <b>Flash sync port</b>              | Back and prism                                |                         |
| <b>High capacity back interface</b> | Yes   | No                      |
| <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                              |                         |

## Flash

|  |                                 |
|--|---------------------------------|
| <b>Flash trigger</b>                               | Integrated Profoto Air 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                         |
| <b>Flash remote control</b>                        | Profoto Air up to 6 groups      |

## Focus & Autofocus

### HAP-2

|  |  |
|--|--|
| <b>Autofocus Sensor</b>                                    | HAP-2 1MP CMOS Sensor                            |
| <b>Autofocus Processor</b>                                 | HAP-2 Processor with Floating Point Architecture |
| <b>Autofocus Assist light</b>                              | HAP 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>                    | Yes  |

## Warranty

| Warranty:                             | XF IQ3<br>Camera System | XF IQ1<br>Camera System |
|---------------------------------------|-------------------------|-------------------------|
| <b>5 year warranty</b>                | Yes                     | No                      |
| <b>5 year uptime guarantee</b>        | Yes                     | No                      |
| <b>Free lens choice upon purchase</b> | Yes                     | No                      |

## Packaging

|   |     |    |
|---|-----|----|
| <b>Pelican Storm Case (Watercase with handle and wheels)</b>      | Yes | No |
| <b>Modular Phase One camera bag insert</b>                        | Yes | No |
| <b>Laptop compartment with built in sunshade (tether station)</b> | Yes | No |
| <b>Card reader and CF card</b>                                    | Yes | No |
| <b>Lens calibration plate</b>                                     | Yes | No |
| <b>3400 mAh Batteries</b>   | 4   | 2  |
| <b>Tech camera sync cable</b>                                     | Yes | No |

## Operating Requirements

|                    |                               |
|--------------------|-------------------------------|
| <b>Temperature</b> | 0° to 40° C<br>32° to 104° F  |
| <b>Humidity</b>    | 0 to 80 %<br>(non-condensing) |

## Power

|   |     |    |
|---|-----|----|
| <b>Power share with hot pluggable batteries</b> | Yes | No |
| <b>Full system power via XF power supply</b>    | Yes | No |
| <b>Advanced battery status indicators</b>       | Yes | No |
| <b>USB3 charging from hub (1500mA)</b>          | Yes | No |