

Phase One Aerial Cameras — Opening Angles

Focal length	Pixel size	Pixels (long side)	Pixels (short side)	Angle (long side)	Angle (short side)
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iXU-RS 1900

90mm	4.6	16,470	11,540	45.7°	9.5°
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iXM-RS150F/ iXM-RS150F Achromatic

32mm	3.76	14,204	10,652	77.8°	62.3°
40mm				65°	51°
50mm				54.6°	42.3°
70mm				41.8°	31.9°
90mm				33.0°	25.1°
110mm				27.6°	20.9°
150mm MK II				20.2°	15.2°
180mm				16.9°	12.7°
300mm AF				10.2°	7.6°

iXM-RS100F/ iXM-RS100F Achromatic

32mm	4.6	11,608	8,708	77.8°	62.3°
40mm				65°	51°
50mm				54.6°	42.3°
70mm				41.8°	31.9°
90mm				33.0°	25.1°
110mm				27.6°	20.9°
150mm MK II				20.2°	15.2°
180mm				16.9°	12.7°
300mm AF				10.2°	7.6°

iXM-100

35mm	3.76	11,664	8,750	63.0°	49.4°
80mm				30.4°	23.0°
80mm AF				30.4°	23.0°
150mm AF				17.1°	12.9°
300mm AF				8.4°	6.3°

iXM-50

35mm	5.3	8,280	6,208	63.0°	49.4°
80mm				30.4°	23.0°
80mm AF				30.4°	23.0°
150mm AF				17.1°	12.9°
300mm AF				8.4°	6.3°



Phase One
Aerial Cameras

Camera Models and
Lens Opening Angles

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Camera Comparisons

iXU-RS 1900



iXM-RS series



iXM series



					
Model	iXU-RS 1900	iXM-RS150F iXM-RS150F Achromatic	iXM-RS100F iXM-RS100F Achromatic	iXM-100	iXM-50
Lens system	RS Lenses/RSM 300 mm			RSM Lenses	
Flight altitude for 5 cm GSD (feet)	3200	3925 (for 90mm focal length)	3200 (for 90mm focal length)	3490 (for 80mm focal length)	2475 (for 80mm focal length)
Frame width for 5 cm GSD (m)	824	710	580	583	414
Minimal Exposure (sec)	1/2000	1/2500			
Resolution	16,470 x 11,540 190MP	14,204 x 10,652 150MP	11,608 x 8708 100MP	11,664 x 8,750 100MP	8,280 x 6,208 50MP
Pixel size (μm)	4.6	3.76	4.6	3.76	5.3
Light sensitivity (ISO)	50 - 6400*			50 - 6400	100 - 6400
Camera type	Large format for aerial imaging	Medium format for aerial imaging			
Camera rate (fps)	1.6	2	1.6	3	2
RAW file compression (approx.)	IIQ large: 2 x 100 MB IIQ small: 2 x 65 MB	IIQ large: 150 MB IIQ small: 100 MB	IIQ large: 100 MB IIQ small: 65 MB	IIQ large: 100 MB IIQ small: 65 MB	IIQ large: 50MB IIQ small: 33 MB
Output formats	Phase One RAW, TIFF, JPG, CIR, NDVI with optional 4-Band kit			Phase One RAW, TIFF, JPG	
Data interfaces	USB 3.0	USB 3.0, Ethernet 10G			
I/O interfaces	Trigger; Mid-exposure, Ready, Serial				
HDMI	-	1920 x 1080 60p			
Max. power consumption (W)	20	16			14
Power input	12 – 30 VDC				
Dynamic range (dB)	84	83	84	83	84
GPS/IMU support	Applanix, NovAtel, IGI, NMEA, GGS, OXTS, VectorNav Devices				
Synchronization speed in multiple camera configuration (μsec)	100	50			
Temperature (°C)	-10 to 40				
Humidity (%)	15 to 80 (non-condensing)				
Weight without lens (g)	4.700 with dual 90mm lens	1000		630	

* iXM-RS150F Achromatic 200-25600/ iXM-RS100F Achromatic 200-12800