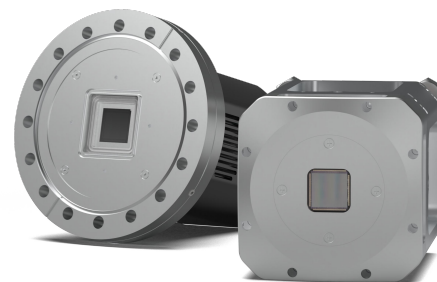
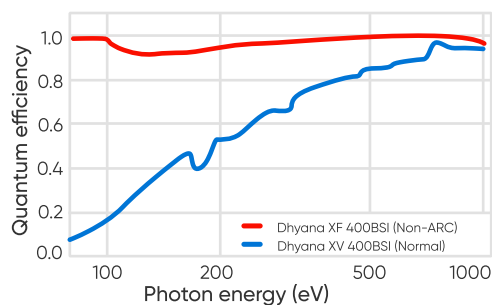


Dhyana XF / XV400BSI

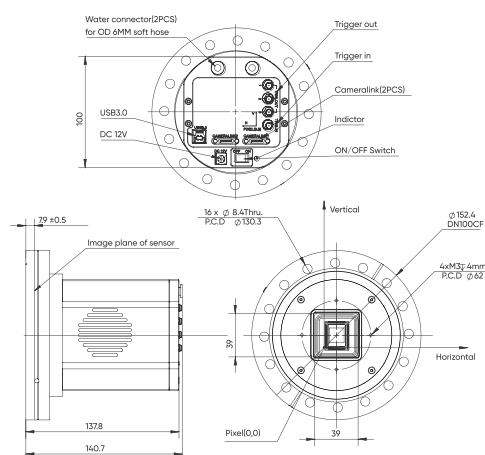
The Dhyana XF / XV 400BSI series soft X-ray camera offers high-precision imaging with 6.5 μm pixels, balancing high SNR and resolution. Its 45 Ke⁻ full well capacity ensures a wide dynamic range, handling both strong and weak signals. This delivers key advantages in soft X-ray experiments like scattering studies.



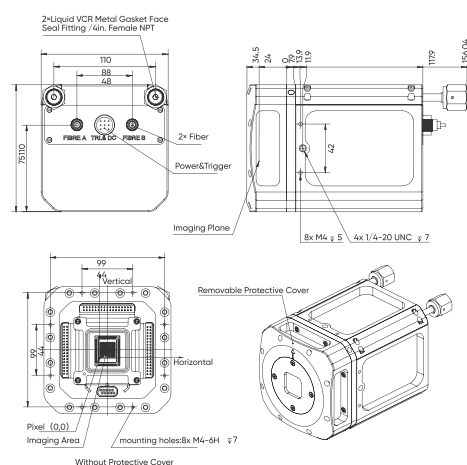
Quantum Efficiency



Dimensions (Unit: mm)



Dhyana XF 400BSI (Open-Front)



Dhyana XV 400BSI (In-Vacuum)

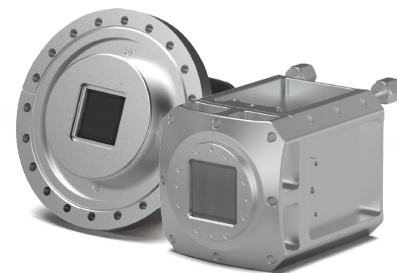
Specification

Product Name	Dhyana XF400BSI	Dhyana XV400BSI
Model	XF400BSI	XV400BSI
Sensor Type	Non Anti-Reflection Coating / Standard BSI sCMOS	
Peak QE	~100%	
Array Diagonal	18.8 mm	
Effective Area	13.3 mm x 13.3 mm	
Resolution	2048 (H) x 2048 (V)	
Pixel Size	6.5 μm x 6.5 μm	
Full Well Capacity	Typical: 45 Ke ⁻	
Dynamic Range	90 dB	
Spectral Range	80~1000 eV / 200~1100 nm	
Frame Rate	40 fps@USB 3.0, 100 fps@Camera Link	40 fps@USB 3.0
Readout Noise	Typical: 1.1 e ⁻ (Median)@CMS	
Shutter Mode	Rolling, Global Reset	
Exposure Time	6.6 μs ~300 s	
Linearity	> 99%	
DSNU	0.2 e ⁻	
PRNU	0.3%	
Bit Depth	11 bit, 12 bit, 16 bit	
Cooling Method	Liquid Cooling, Air Cooling	Liquid Cooling
Cooling Temp.	60°C below ambient	
Dark Current	0.5 e ⁻ /p/s@-40°C chip temp.	
Vac. Compatibility	10 ⁻⁷ Pa (Max)	10 ⁻⁶ Pa (Max)
Binning	2 x 2, 4 x 4	
ROI	Support	
Timestamp Acc.	1 μs	
Trigger Interface	SMA	Hirose
Data Interface	CameraLink, USB 3.0	USB 3.0
Flange Size	DN100CF	Feedthrough DN100CF
Power Supply	12 V / 8 A	AC Power
Power Cons.	≤ 65 W	
Weight	~3900 g	~2600 g
Software	Mosaic V3, Sample Pro, LabVIEW,	
SDK	C / C++ / C# / Python (XV Series only)	

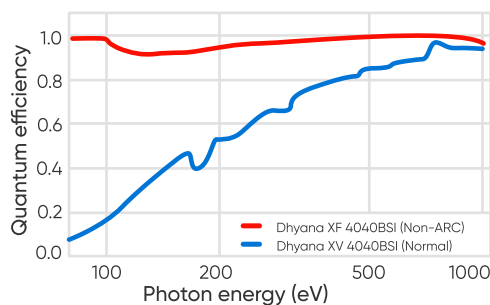


Dhyana XF/ XV4040BSI

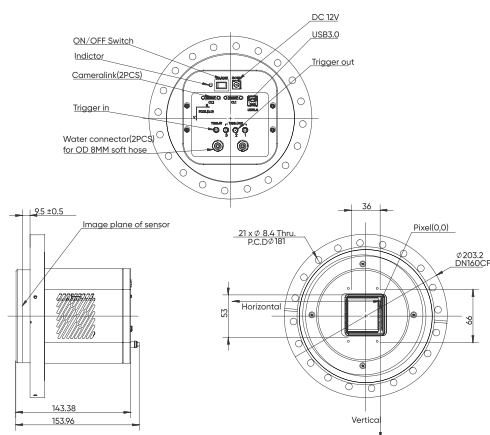
The Dhyana XF / XV 4040BSI series soft X-ray camera features a large-area sensor for high-precision, high-resolution, and wide-field research. It captures larger areas in a single shot, minimizing stitching errors, making it ideal for materials science, nanotechnology, and semiconductor inspection.



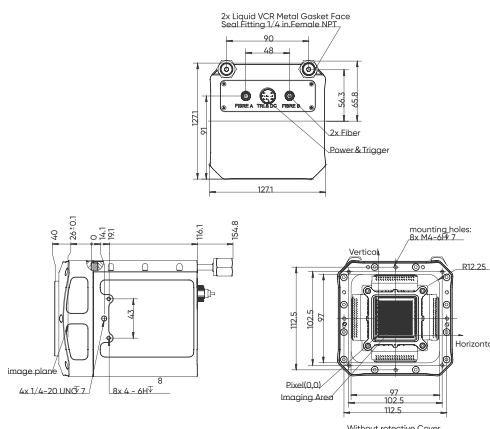
Quantum Efficiency



Dimensions (Unit: mm)



Dhyana XF 4040BSI (Open-Front)



Dhyana XV 4040BSI (In-Vacuum)

Specification

Product Name	Dhyana XF4040BSI	Dhyana XV4040BSI
Model	XF4040BSI	XV4040BSI
Sensor Type	Non Anti-Reflection Coating / Standard BSI sCMOS	
Peak QE	~100%	
Array Diagonal	52.1 mm	
Effective Area	36.9 mm x 36.9 mm	
Resolution	4096 (H) x 4096 (V)	
Pixel Size	9 μm x 9 μm	
Full Well Capacity	Typical: 37 Ke-	
Dynamic Range	80 dB	
Spectral Range	80~1000 eV / 200~1100 nm	
Frame Rate	16.5 fps@Camera Link, 9.7 fps@USB 3.0	9.7 fps@USB 3.0
Readout Noise	Typical: 2.8 e- (Median)	
Shutter Mode	Rolling	
Exposure Time	10 μs~3600 s	
Linearity	> 99%	
DSNU	0.5 e-	
PRNU	0.2%	
Bit Depth	12 bit, 16 bit	
Cooling Method	Liquid Cooling, Air Cooling	Liquid Cooling
Cooling Temp.	60°C below ambient	
Dark Current	0.02 e-/p/s@-40°C	0.01 e-/p/s@-45°C
Vac. Compatibility	10 ⁻⁷ Pa (Max)	10 ⁻⁶ Pa (Max)
Binning	2 x 2, 4 x 4	
ROI	Support	
Timestamp Acc.	1 μs	
Trigger Interface	SMA	
Data Interface	CameraLink, USB 3.0	Hirose, USB 3.0
Flange Size	DN160CF	Feedthrough DN100CF
	Customization	Customization
Power Supply	12 V / 8 A	AC Power
Power Cons.	≤ 95W	≤ 63 W
Weight	~4300 g	~3100 g
Software	Mosaic V3, Sample Pro, LabVIEW, MATLAB, EPICS	
SDK	C / C++ / C# / Python (XV Series only)	

