

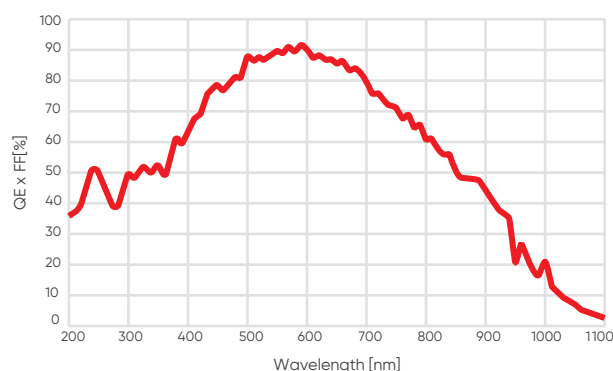
# Ultra-large sCMOS Camera

## Dhyana 4040BSI

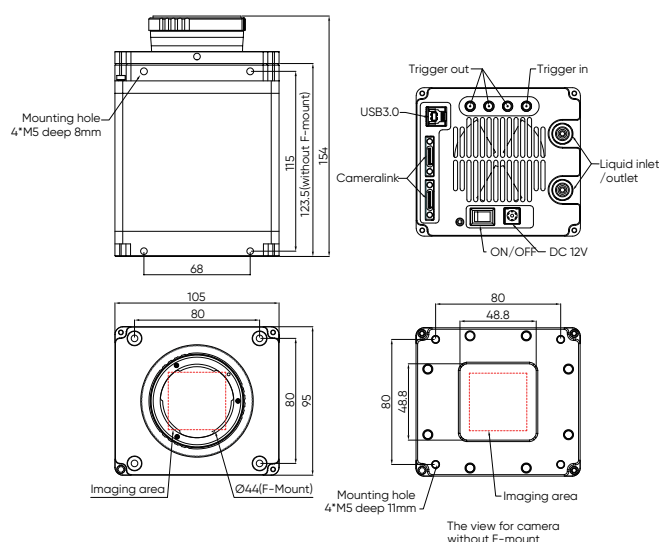


### Product Advantages

- 3.2 inch ultra-large area array
- 4096\*4096 high resolution
- 9 $\mu$ m x 9 $\mu$ m large pixel
- Long exposure time supported
- 39ke- High full well capacity
- Excellent cooling performance



### Product Structure



### Specifications

Model	Dhyana 4040BSI
Sensor model	BSI sCMOS
Shutter type	Rolling
Color/Mono	Mono
Effective area	36.9mm x 36.9mm
Resolution	4096(H)x4096(V)
Pixel size	9 $\mu$ m x 9 $\mu$ m
QE	90%@550nm
Full-Well capacity	39ke-
Dynamic Range	85 dB
Frame rate	16.5fps@CameraLink; 9.7fps@USB3.0
Readout noise	2.3e-
Exposure time	10 $\mu$ s~300s
DSNU	0.5 e-
PRNU	0.2%
Cooling Method	Air & Liquid
Max. Cooling	Air: -35°C; Liquid: -45°C
Cooling temperature	Air: (Ambient at +20):-20°C; Liquid: -30°C@20°C
Dark current	Air: 0.2e-/pixel/s; Liquid: 0.1e-/pixel/s
Binning	2x2/4x4
ROI	Support
TimeStamp accuracy	1 $\mu$ s accuracy
GPS TimeStamp	8 ns accuracy
Trigger Mode	Hardware & Software
Output Trigger Signals	Exposure, Global, Readout, High level, Low level
Trigger Interface	SMA & CC1
Data Interface	USB3.0 & CameraLink
Data Bit Depth	12bit & 16bit
Optical Interface	Optional F-Mount/User-customization
Power Supply	12V/8A
Power Consumption	<45W
Dimensions	105mm x 95mm x 123.5mm
Weight	~2kg
Software	Mosaic1.6/Samplepro/MaximDL/Labview/Matlab
SDK	C/C++/C#
Operating System	Windows/Linux
Operating Environment	Working: Temperature -25~45°C/Humidity 0~95% Storage: Temperature -35 ~ 60°C/Humidity 0~95%