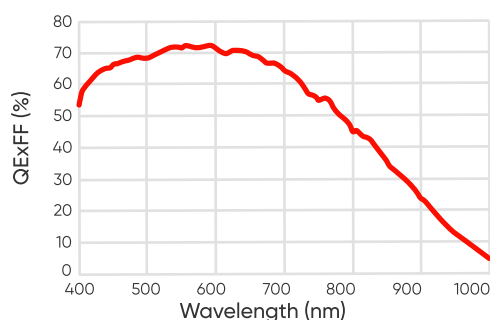


# Dhyana 400D

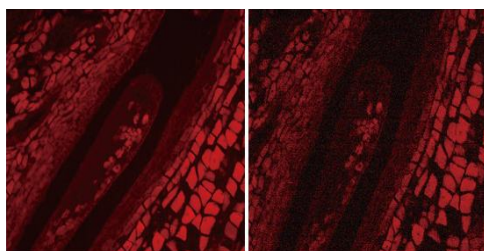
The Dhyana 400D features a front-illuminated sCMOS sensor with a peak quantum efficiency of 72% and a readout noise of only 2.0 e<sup>-</sup>. Combined with advanced cooling and noise reduction technology, it is suitable for most fluorescence imaging applications.



## Quantum Efficiency



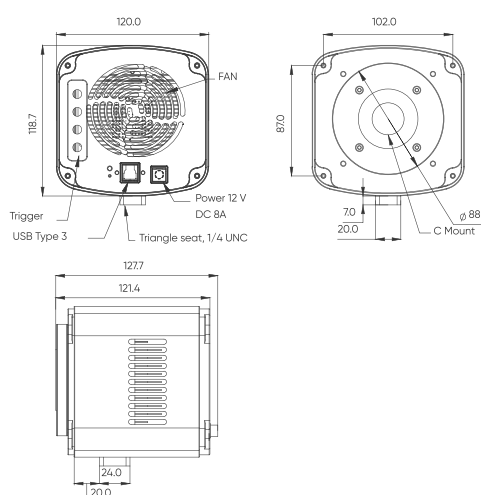
## Application Cases



Dhyana 400D, 40 ms

CCD, 40 ms

## Dimensions (Unit: mm)



## Specification

|                    |                                               |
|--------------------|-----------------------------------------------|
| Product Name       | Dhyana 400D                                   |
| Sensor Type        | FSI sCMOS                                     |
| Sensor Model       | Gpixel GSENSE2020                             |
| Peak QE            | 72%@595 nm                                    |
| Chrome             | Mono                                          |
| 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 <sup>-</sup>                   |
| Dynamic Range      | Typical: 86.6 dB                              |
| Frame Rate         | 35 fps@16 bit                                 |
| Readout Noise      | 2.1 e <sup>-</sup> @HG                        |
| Shutter Mode       | Rolling                                       |
| Exposure Time      | 13 μs~10 s                                    |
| Cooling Method     | Air Cooling                                   |
| Cooling Temp.      | 35°C below ambient                            |
| Dark Current       | 0.12 e <sup>-</sup> /p/s@-10°C                |
| Binning            | 2 x 2                                         |
| ROI                | Support                                       |
| Trigger Mode       | Hardware, Software                            |
| Trigger Output     | Exposure Start, Global Exposure, Readout End  |
| Trigger Interface  | SMA                                           |
| Data Interface     | USB 3.0                                       |
| Bit Depth          | 12 bit, 16 bit                                |
| Optical Interface  | C Mount                                       |
| Power Supply       | 12 V / 8 A                                    |
| Power Cons.        | 60 W                                          |
| Dimensions         | 120 mm (H) x 119 mm (W) x 121 mm (L)          |
| Weight             | 1853 g                                        |
| Software           | Mosaic V3, LabVIEW, MATLAB, Micro-Manager 2.0 |
| SDK                | C / C++ / C# / Python                         |
| Operating System   | Windows, Linux                                |
| Environment        | Working: Temp. 0°C~40°C, HUM 10%~85%          |

