

Scientific CMOS Camera

Dhyana 400D (Cooled Scientific CMOS Camera)



Applications

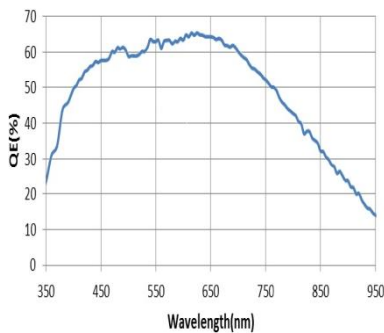
Primarily used for low light imaging, fluorescence imaging etc.

Product Advantages

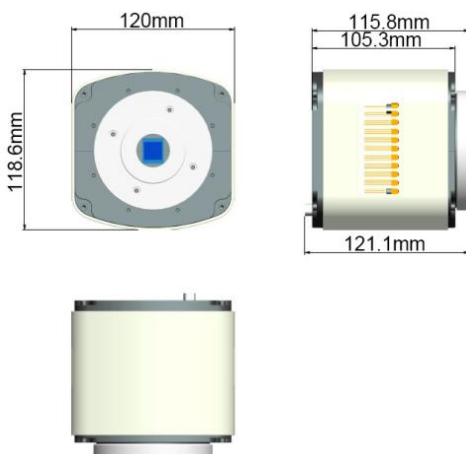
1. Low readout noise (1.8e⁻)
2. 48,000e⁻ full well capacity
3. 85 dB dynamic range
4. -25°C cooling
5. 4MP, 35fps high frame rate preview
6. USB3.0 output with multiple trigger functions

Data Graphics

1. QE curve of Dhyana 400D



2. Dimensions of Dhyana 400D



Technical Specification

Imaging Sensor	
Type	sCMOS sensor
Size	1.2"
Model	G2020
Color/Monochrome	Monochrome
Active Pixels	4 MP
Image Resolution	2048x2048
Pixel Size	6.5µm x 6.5µm
Performance parameters	
QE	65%@650nm
Readout Noise	1.8e ⁻
Sensitivity Threshold	3p ⁻
Full Well Capacity	48000e ⁻
DSNU	0.06%
PRNU	0.02%
Linearity	0.998
Image Acquisition	
Dynamic Range	85dB
Shutter Type	Rolling Shutter
Exposure Control	
Exposure Mode	Manual
Exposure time	0.02ms-10min
Image Processing	
Image Processor	Built-in image processor
Image Transfer Control	High Speed FPGA + High Speed DDR
Parameter Settings	Gamma, Contrast, ROI, External trigger, Mirroring
Scan Mode	Progressive
A/D	16bit
Cooling	Peltier Class II(-25°C)
Preview	
Frame Rate	35fps (2048x2048)
Data Transfer	USB3.0
Data Cable	1.8 meters USB3.0 cable
Software/ Compatible System	
Windows Software	ISCapture/Image J/Matlab
Compatible System	Window/Linux/Mac
Interface	
Optical Interface	C-Mount
Data Interface	USB3.0, 5Gb/s
Power Interface	12V/8A power supply
Operating Environment	
Operating Temperature	0-60°C
Operating Humidity	45%-85%
Storage Temperature	-20-70°C