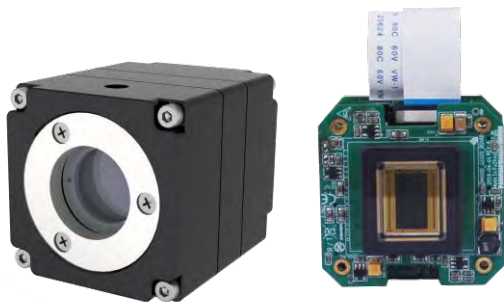


High Sensitivity Low Light USB Camera

Technical Specification



Typical Applications

Short exposure time low light imaging

Fluorescence imaging

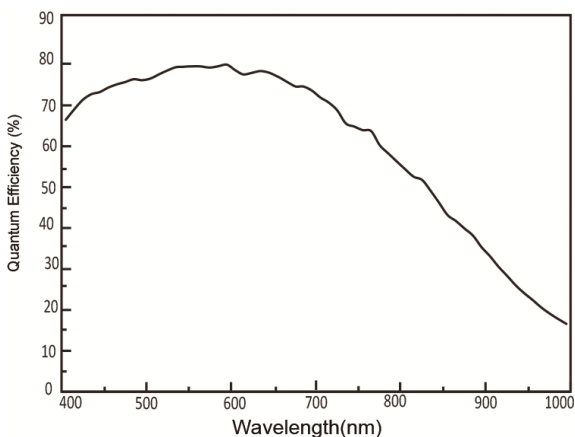
Industrial detection

Product Advantage

1. Low readout noise(1.8e⁻)
2. 48000e⁻ full well capacity
3. 85dB dynamic range
4. 80 %@625 nm high quantum efficiency
5. 2MP, 64fps high frame rate preview
6. USB 3.0 power supply
7. USB3.0 output with hardware trigger functions

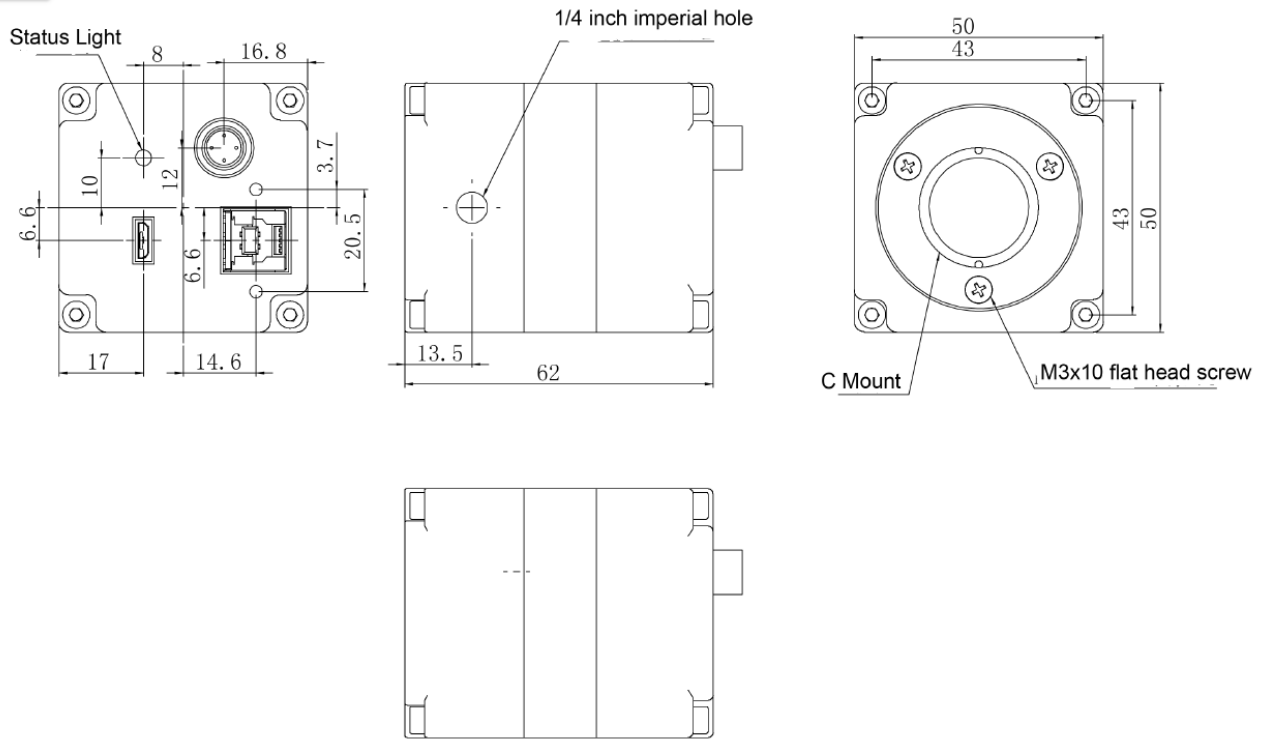
functions

Spectral Respond

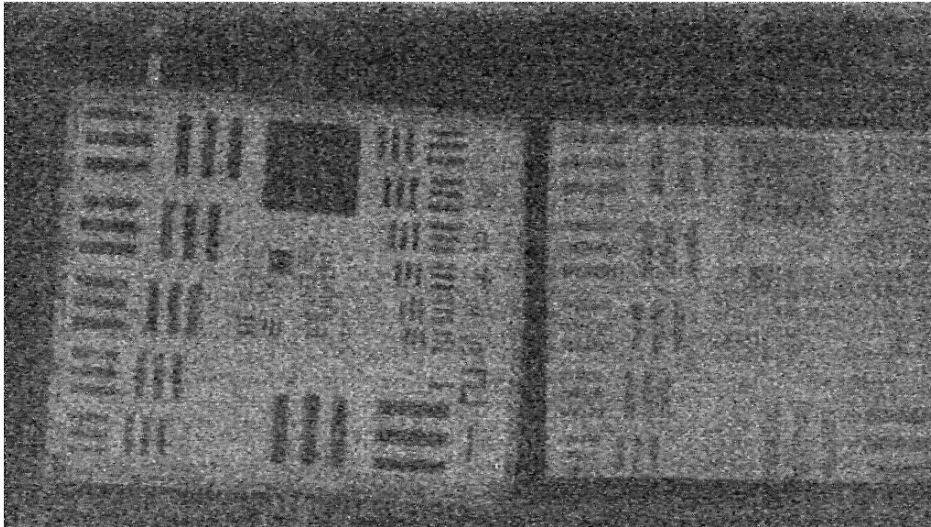


Product model	Camera	S-200-M-R-U	S-400-M-R-U
	Module	S-201-M-R-U	S-401-M-R-U
Image Sensor			
Type	sCMOS		sCMOS
Size	1 inch		1.2 inch
Color Mode	Monochrome		
Active Pixels	2MP		4MP
Image Resolution	2048x1152		2048x2048
Pixel Size	6.5µm x 6.5µm		
Performance Parameters			
QE	80%@625nm		
Readout Noise	1.8e ⁻		
Sensitivity Threshold	3p ⁻		
Full Well Capacity	48000e ⁻		
Lowest Illumination	0.001 lux (@25ms)		
Dynamic Range	85dB		
Shutter Type	Rolling shutter		
Exposure Control			
Exposure Mode	Manual/Auto/Trigger		
Exposure Time	0.02ms~10min		
Trigger Mode	Standard, Synchronize, Global, Software Trigger		
Image Processing			
Parameter Setting	ROI, Gamma, Contrast, External trigger, Gain, etc.		
Scan Mode	Progressive		
A/D	16bit		
Cooling	N/A		
Preview			
Frame Rate	64fps	36fps	
Data Transmission	USB3.0		
Date Cabal	1.8meter USB3.0 cabal		
Interface			
Optical Interface	C mount		
Date Interface	USB3.0 5Gb/s		
Power Interface	USB 3.0 Micro USB 2.0(optional)		
Others			
Power consumption	1.2W (Low-power),2.5W (Full function)		
Dimension(mm)	Camera: 50×50×62		
	Module: 44×44×29		
Weight(g)	Camera: 260		
	Module: 53		
Operating temp.	-40°C~60°C		
Storage temp.	-55°C~70°C		

Dimensions



Applications Case



Low light imaging (illumination 0.001lux , T_{exp} 20ms, aperture F1.2 ,test distance 20 m)