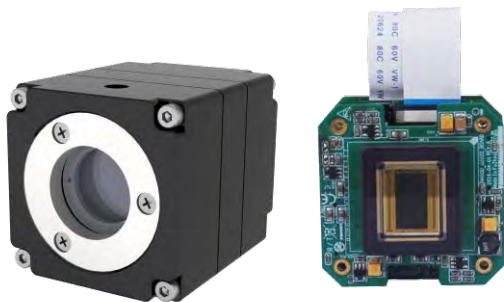


# High Sensitivity Low Light USB Camera

## Technical Specification



### Typical Applications

Short exposure time low light imaging

Fluorescence imaging

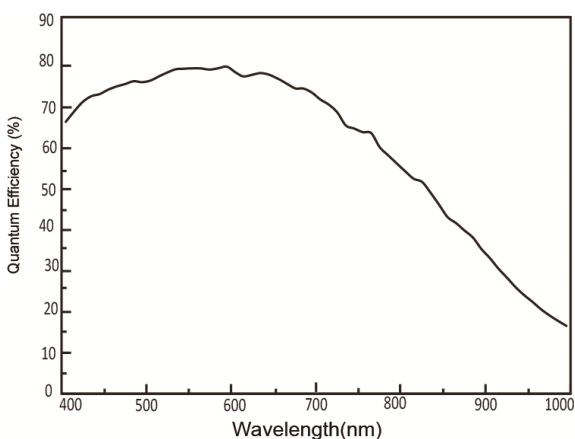
Industrial detection

### Product Advantage

1. Low readout noise(1.8e<sup>-</sup>)
2. 48000e<sup>-</sup> 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

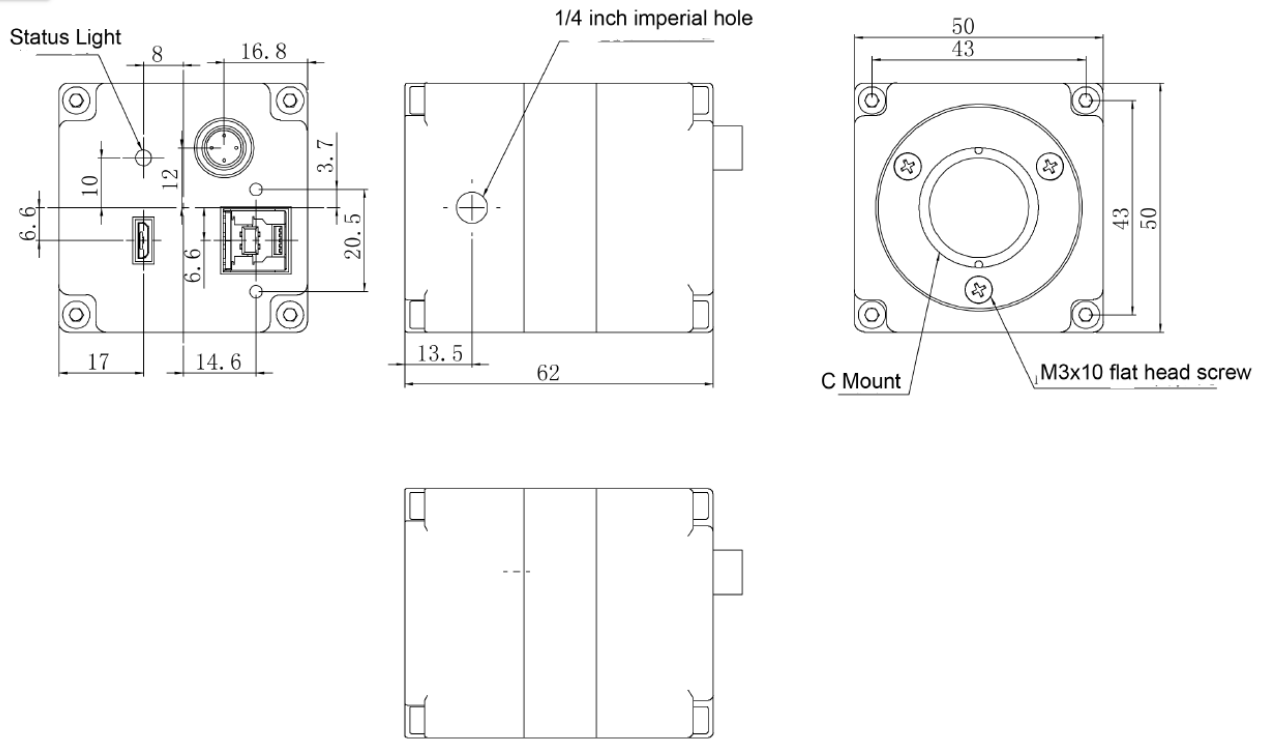
functions

### Spectral Respond

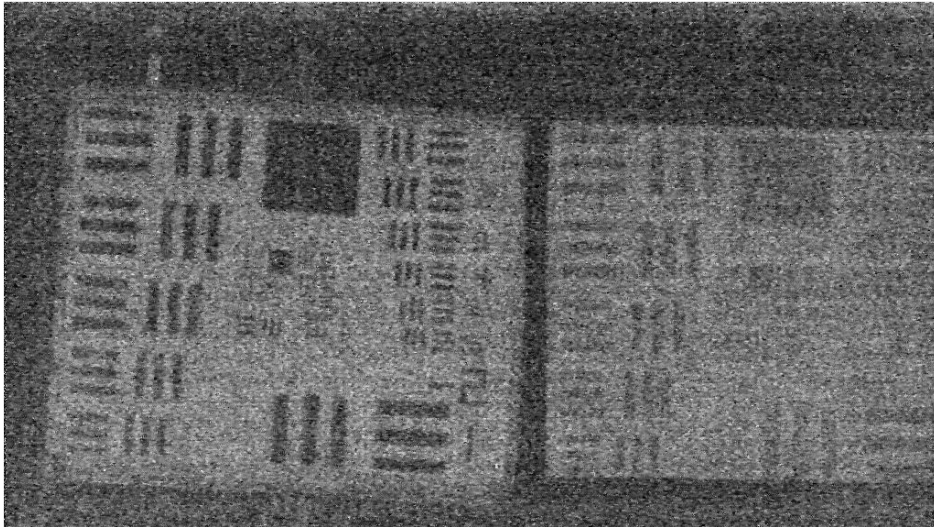


Product model	Camera	S-200-M-R-U	S-400-M-R-U
	Module	S-201-M-R-U	S-401-M-R-U
<b>Image Sensor</b>			
Type	sCMOS		sCMOS
Size	1 inch		1.2 inch
Color Mode	Monochrome		
Active Pixels	2MP		4MP
Image Resolution	2048x1152		2048x2048
Pixel Size	6.5µm x 6.5µm		
<b>Performance Parameters</b>			
QE	80%@625nm		
Readout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