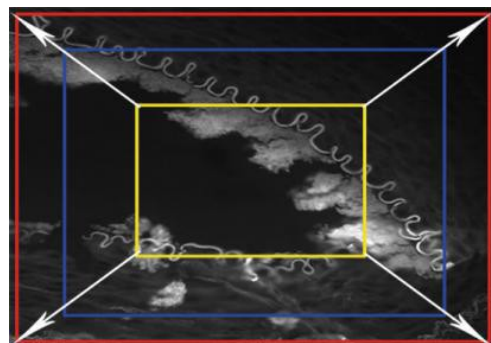
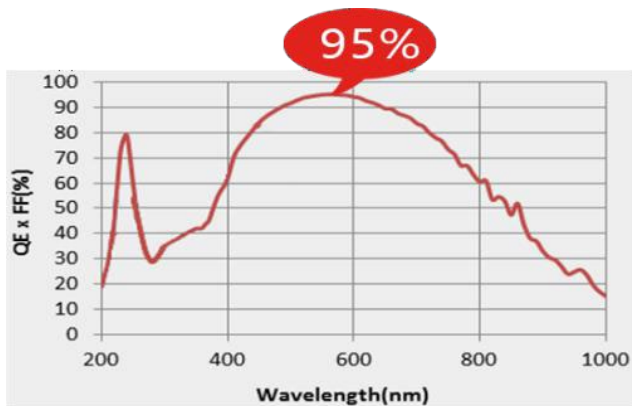


MSH20 - BACK ILLUMINATION CAMERA



MSH20 is a monochrome camera in super sensitivity, it has 95% QE quantum efficiency to get faster speed and excellent noise ratio, spectral response is from 200nm to 1300nm, optional with cooling, all the features make the camera is superior on microscope imaging, and outstanding when applied to life science, spectral analysis, astronomical observation, and other advanced technology research area.



2-inch sensor field view is super wide

FEATURES

- Semiconductor cooling mode
- 95% QE quantum efficiency
- Back illumination technology 2" Sony sensor
- Monochrome camera
- 4.2 megapixels
- Pixel size 11 $\mu\text{m} \times 11 \mu\text{m}$
- 22fps at full resolution, max 29fps
- Full well capacity 93Ke-
- Rolling shutter Dynamic range >93dB Read out noise 1.47e-
- Spectral range 200nm~1100nm
- Support DirectShow and Twain
- Can offer 16bit color image with software

APPLICATIONS

- ☐ Weak fluorescence
- ☐ Weak light signal capture
- ☐ Semiconductor
- ☐ UV light capture
- ☐ Live cell imaging
- ☐ Flow cytometry
- ☐ Chemiluminescence
- ☐ FRET
- ☐ FISH
- ☐ DIC
- ☐ NIR

SPECIFICATION

Item	MSH20
Type	Monochrome
Effective megapixels	4.2 megapixels
Sensor size	2"
Pixel size	11 μm $\times$ 11 μm
Frame rate	24 fps @2048 $\times$ 2048
Exposure time	0.021 ms ~ 20 s
Dynamic range	>93dB
Full well capacity	93ke-
Read out noise	1.47e-
Spectral wavelength	200 nm ~ 1100 nm
Shutter type	Electronic rolling Shutter
Cooling mode (optional)	Semiconductor cooling mode
Exposure function	Manual exposure / Auto exposure / Zone exposure
Image format	TIF, BMP, JPG, RAW
Software data	DirectShow / TWAIN
Operating system	Windows XP (32 Bit), Windows 7/8/10 (32 and 64 Bit)
Data port	USB3.0 B type port, 5Gbps
Camera port	Standard C mount
Power supply	USB 5V electrical supply
Working temperature	Working temperature: 0 ~ 50°C; Working humidity: 10% ~ 85%RH
Size	105 $\times$ 105 $\times$ 92 mm

