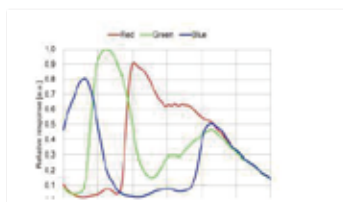


# microscope camera

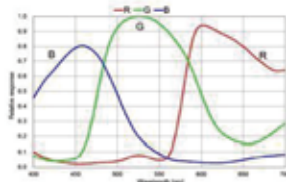


[innerview.kr](http://innerview.kr)

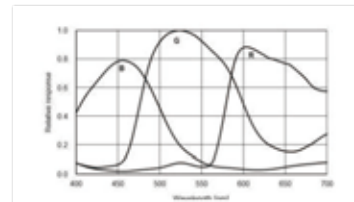
|                             |                                                                                   |                                                                                    |                                                                                      |
|-----------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
|                             |  |  |   |
| <b>Feature</b>              | <b>VC501</b>                                                                      | <b>VC600</b>                                                                       | <b>VC1200</b>                                                                        |
| <b>Sensor</b>               | Sony IMX335                                                                       | Sony IMX178                                                                        | Sony IMX226                                                                          |
| <b>Sensor Size</b>          | 1/2.8"                                                                            | 1/1.8"                                                                             | 1/1.7"                                                                               |
| <b>Resolution</b>           | 2560×1920                                                                         | 3072×2048                                                                          | 4000×3000                                                                            |
| <b>Pixel Size</b>           | 2.0 μm × 2.0 μm                                                                   | 2.40 μm × 2.40 μm                                                                  | 1.85 μm × 1.85 μm                                                                    |
| <b>Exposure Time</b>        | 50 μs - 10 s                                                                      | 50 μs - 10 s                                                                       | 50 μs - 10 s                                                                         |
| <b>Exposure Mode</b>        | Auto/Manual/Regional                                                              | Auto/Manual/Regional                                                               | Auto/Manual/Regional                                                                 |
| <b>Gain</b>                 | 1× - 10×                                                                          | 1× - 10×                                                                           | 1× - 10×                                                                             |
| <b>White Balance</b>        | Auto/Manual                                                                       | Auto/Manual                                                                        | Auto/Manual                                                                          |
| <b>Shutter</b>              | Rolling Shutter                                                                   | Rolling Shutter                                                                    | Rolling Shutter                                                                      |
| <b>Color/Mono</b>           | Color                                                                             | Color                                                                              | Color                                                                                |
| <b>Binning Mode</b>         | 1×1                                                                               | 1×1, 2×2, 3×3                                                                      | 1×1, 2×2, 3×3                                                                        |
| <b>Frame Rate</b>           | 15 FPS @ 2560×1920                                                                | 30 FPS @ 3072×2048                                                                 | See details below:<br>20 FPS @ 4000×3000<br>40 FPS @ 2000×1500<br>70 FPS @ 1328×1000 |
| <b>A/D Transfer</b>         | 12-bit                                                                            | 12-bit                                                                             | 12-bit                                                                               |
| <b>Built-in Image Cache</b> | -                                                                                 | 1 Gb                                                                               | 1 Gb                                                                                 |
| <b>Read-out Noise</b>       | 2.8 e-                                                                            | 2.5 e-                                                                             | 2.5 e-                                                                               |
| <b>Full Well</b>            | 10 ke-                                                                            | 15 ke-                                                                             | 12 ke-                                                                               |
| <b>Dynamic Range</b>        | 71 dB, 3600:1                                                                     | 76 dB, 6000:1                                                                      | 74 dB, 4800:1                                                                        |
| <b>Quantum Efficiency</b>   | 69%                                                                               | 67%                                                                                | 67%                                                                                  |
| <b>Lens Mount</b>           | C-mount                                                                           | C-mount                                                                            | C-mount                                                                              |
| <b>Data Interface</b>       | USB 3.0                                                                           | USB 3.0                                                                            | USB 3.0                                                                              |
| <b>Power Supply</b>         | USB 3.0 Cable                                                                     | USB 3.0 Cable                                                                      | USB 3.0 Cable                                                                        |
| <b>Power Consumption</b>    | < 1.8 W                                                                           | < 1.8 W                                                                            | < 1.8 W                                                                              |
| <b>Dimensions (L×W×H)</b>   | 62 mm × 62 mm × 45 mm                                                             | 80 mm × 62 mm × 39 mm                                                              | 80 mm × 62 mm × 39 mm                                                                |
| <b>Weight</b>               | 300 g                                                                             | 300 g                                                                              | 300 g                                                                                |
| <b>Image Format</b>         | RAW/JPG/BMP/PNG/TIF                                                               | RAW/JPG/BMP/PNG/TIF                                                                | RAW/JPG/BMP/PNG/TIF                                                                  |
| <b>Software Interface</b>   | DirectShow/TWAIN/ImageJ/μ Manager/MATLAB/LabVIEW                                  | Same                                                                               | Same                                                                                 |
| <b>Software Matched</b>     | ImageStudio                                                                       | ImageStudio                                                                        | ImageStudio                                                                          |
| <b>Package</b>              | Box, Camera, USB 3.0 Cable, CD                                                    | Box, Camera, USB 3.0 Cable, CD                                                     | Box, Camera, USB 3.0 Cable, CD                                                       |



VC501

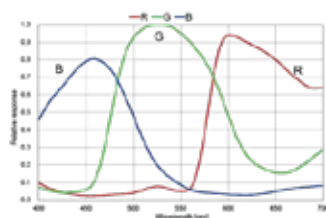


VC600

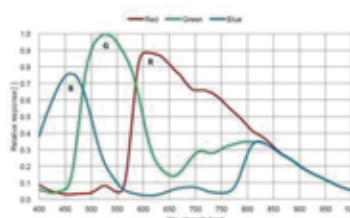


VC1200

|                             |                                                                                   |                                                                                    |                                                                                     |
|-----------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|                             |  |  |  |
| <b>Feature</b>              | <b>VC2000</b>                                                                     | <b>VC230AC</b>                                                                     | <b>VC230BC</b>                                                                      |
| <b>Sensor</b>               | Sony IMX183                                                                       | Sony IMX174                                                                        | Sony IMX174                                                                         |
| <b>Sensor Size</b>          | 1"                                                                                | 1/1.2"                                                                             | 1/1.2"                                                                              |
| <b>Resolution</b>           | 5472×3648                                                                         | 1920×1200                                                                          | 1920×1200                                                                           |
| <b>Pixel Size</b>           | 2.40 μm × 2.40 μm                                                                 | 5.86 μm × 5.86 μm                                                                  | 5.86 μm × 5.86 μm                                                                   |
| <b>Exposure Time</b>        | 50 μs - 10 s                                                                      | 50 μs - 10 s                                                                       | 50 μs - 10 s                                                                        |
| <b>Exposure Mode</b>        | Auto/Manual/Regional                                                              | Auto/Manual/Regional                                                               | Auto/Manual/Regional                                                                |
| <b>Gain</b>                 | 1× - 10×                                                                          | 1× - 32×                                                                           | 1× - 32×                                                                            |
| <b>White Balance</b>        | Auto/Manual                                                                       | Auto/Manual                                                                        | Auto/Manual                                                                         |
| <b>Shutter</b>              | Rolling Shutter                                                                   | Global Shutter                                                                     | Global Shutter                                                                      |
| <b>Color/Mono</b>           | Color                                                                             | Color                                                                              | Color                                                                               |
| <b>Binning Mode</b>         | 1×1, 2×2, 3×3                                                                     | 1×1                                                                                | 1×1                                                                                 |
| <b>Frame Rate</b>           | See details below:<br>12.5 FPS @ 5472×3648                                        | See details below:<br>40 FPS @ 1920×1200<br>100 FPS @ 1920×1200                    | See details below:<br>38 FPS @ 2736×1824<br>47 FPS @ 1824×1216                      |
| <b>A/D Transfer</b>         | 12-bit                                                                            | 12-bit                                                                             | 12-bit                                                                              |
| <b>Built-in Image Cache</b> | 1 Gb                                                                              | 1 Gb                                                                               | 1 Gb                                                                                |
| <b>Read-out Noise</b>       | 2.7 e-                                                                            | 3.5 e-                                                                             | 3.5 e-                                                                              |
| <b>Full Well</b>            | 15 ke-                                                                            | 32 ke-                                                                             | 32 ke-                                                                              |
| <b>Dynamic Range</b>        | 75 dB, 5600:1                                                                     | 79 dB, 9100:1                                                                      | 79 dB, 9100:1                                                                       |
| <b>Quantum Efficiency</b>   | 69%                                                                               | 74%                                                                                | 74%                                                                                 |
| <b>Lens Mount</b>           | C-mount                                                                           | C-mount                                                                            | C-mount                                                                             |
| <b>Data Interface</b>       | USB 3.0                                                                           | USB 3.0                                                                            | USB 3.0                                                                             |
| <b>Power Supply</b>         | USB 3.0 Cable                                                                     | USB 3.0 Cable                                                                      | USB 3.0 Cable                                                                       |
| <b>Power Consumption</b>    | < 1.8 W                                                                           | < 1.8 W                                                                            | < 1.8 W                                                                             |
| <b>Dimensions (L×W×H)</b>   | 80 mm × 62 mm × 39 mm                                                             | 80 mm × 62 mm × 39 mm                                                              | 80 mm × 62 mm × 39 mm                                                               |
| <b>Weight</b>               | 300 g                                                                             | 300 g                                                                              | 300 g                                                                               |
| <b>Image Format</b>         | RAW/JPG/BMP/PNG/TIF                                                               | RAW/JPG/BMP/PNG/TIF                                                                | RAW/JPG/BMP/PNG/TIF                                                                 |
| <b>Software Interface</b>   | DirectShow/TWAIN/ImageJ/μ Manager/MATLAB/LabVIEW                                  | Same                                                                               | Same                                                                                |
| <b>Software Matched</b>     | ImageStudio                                                                       | ImageStudio                                                                        | ImageStudio                                                                         |
| <b>Package</b>              | Box, Camera, USB 3.0 Cable, CD                                                    | Box, Camera, USB 3.0 Cable, CD                                                     | Box, Camera, USB 3.0 Cable, CD                                                      |

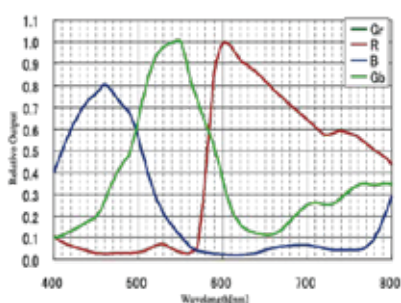


VC2000

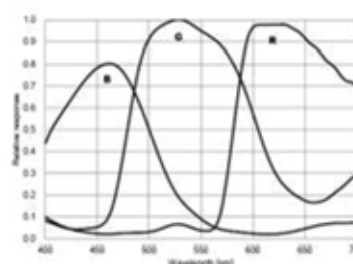


VC230AC/VC230BC

|                                |                                                                                   |                                                                                          |
|--------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|
|                                |  |       |
| <b>Feature</b>                 | <b>SD1600AC</b>                                                                   | <b>SD1000AC/AM</b>                                                                       |
| <b>Sensor</b>                  | Sony IMX294                                                                       | Sony IMX294                                                                              |
| <b>Sensor Size</b>             | 4/3"                                                                              | 4/3"                                                                                     |
| <b>Resolution</b>              | 4608×3456                                                                         | 3792×2824                                                                                |
| <b>Pixel Size</b>              | 3.80 μm × 3.80 μm                                                                 | 4.630 μm × 4.63 μm                                                                       |
| <b>Exposure Time</b>           | 50 μs - 120 s                                                                     | 50 μs - 120 s                                                                            |
| <b>Exposure Mode</b>           | Auto/Manual/Regional                                                              | Auto/Manual/Regional                                                                     |
| <b>Gain</b>                    | 1× - 16×                                                                          | 1× - 16×                                                                                 |
| <b>White Balance</b>           | Auto/Manual                                                                       | Auto/Manual White/Black                                                                  |
| <b>Shutter</b>                 | Rolling Shutter                                                                   | Rolling Shutter                                                                          |
| <b>Color/Mono</b>              | Color                                                                             | Color/Mono                                                                               |
| <b>Binning Mode</b>            | 1×1, 2×2, 3×3                                                                     | 1×1                                                                                      |
| <b>Frame Rate</b>              | See details below:<br>12.7 FPS @ 4608×3456                                        | See details below:<br>25 FPS @ 3792×2824<br>25.6 FPS @ 2604×1728<br>42.7 FPS @ 1536×1152 |
| <b>A/D Transfer</b>            | 12-bit                                                                            | 14-bit                                                                                   |
| <b>Built-in Image Cache</b>    | 1 Gb                                                                              | 2 Gb                                                                                     |
| <b>Read-out Noise</b>          | 1.6 e-                                                                            | 1.6 e-                                                                                   |
| <b>Full Well</b>               | 19 ke-                                                                            | 65 ke-                                                                                   |
| <b>Dynamic Range</b>           | 81 dB, 12000:1                                                                    | 94 dB, 50000:1                                                                           |
| <b>Quantum Efficiency (QE)</b> | 88%                                                                               | 88%                                                                                      |
| <b>Cooling</b>                 | Two-Stage TEC Cooling                                                             | Two-Stage TEC Cooling                                                                    |
| <b>Cooling Temperature</b>     | 40°C below ambient                                                                | 40°C below ambient                                                                       |
| <b>Data Interface</b>          | USB 3.0                                                                           | USB 3.0                                                                                  |
| <b>Lens Mount</b>              | C-mount                                                                           | C-mount                                                                                  |
| <b>Power Consumption</b>       | 25 W                                                                              | 25 W                                                                                     |
| <b>Power Requirement</b>       | 12 V                                                                              | 12 V                                                                                     |
| <b>Dimensions (L×W×H)</b>      | 80 mm × 80 mm × 110 mm                                                            | 80 mm × 80 mm × 110 mm                                                                   |
| <b>Weight</b>                  | 1000 g                                                                            | 1000 g                                                                                   |
| <b>Image Format</b>            | RAW/JPG/BMP/PNG/TIF                                                               | RAW/JPG/BMP/PNG/TIF                                                                      |
| <b>Software Interface</b>      | DirectShow/TWAIN/ImageJ/μ<br>Manager/MATLAB/LabVIEW                               | Same                                                                                     |
| <b>Software Matched</b>        | ImageStudio                                                                       | ImageStudio                                                                              |
| <b>Package</b>                 | Box, Camera, USB 3.0 Cable, CD                                                    | Box, Camera, USB 3.0 Cable, CD                                                           |



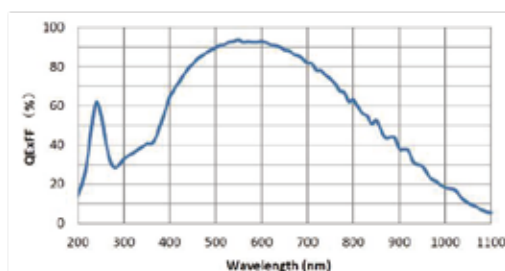
SD1600AC



SD1000AC/AM



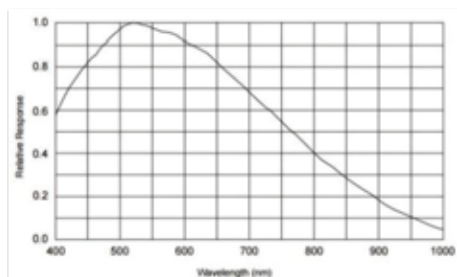
|                                |                                                  |
|--------------------------------|--------------------------------------------------|
|                                |                                                  |
| <b>Feature</b>                 | <b>SD400BM</b>                                   |
| <b>Sensor</b>                  | GSENSE2020BSI                                    |
| <b>Sensor Size</b>             | 1.2"                                             |
| <b>Resolution</b>              | 2048×2048                                        |
| <b>Pixel Size</b>              | 6.5 μm × 6.5 μm                                  |
| <b>Exposure</b>                | 50 μs - 120 s                                    |
| <b>Exposure Model</b>          | Manual/Auto/Regional                             |
| <b>Gain</b>                    | 1× - 64×                                         |
| <b>Black Balance</b>           | Auto/Regional                                    |
| <b>Shutter</b>                 | Rolling Shutter                                  |
| <b>Color</b>                   | Mono                                             |
| <b>Binning</b>                 | 1×1, 2×2, 4×4                                    |
| <b>Frame Rate</b>              | 38 FPS @ 2048×2048                               |
| <b>A/D</b>                     | 12-bit                                           |
| <b>Built-in Image Cache</b>    | 2 Gb                                             |
| <b>Read-out Noise</b>          | 1.2 e-                                           |
| <b>Full Well</b>               | 54 ke-                                           |
| <b>Dynamic Range</b>           | 93 dB, 45000:1                                   |
| <b>Quantum Efficiency (QE)</b> | 95%                                              |
| <b>Cooling</b>                 | Secondary TEC Refrigeration                      |
| <b>Cooling Temperature</b>     | Ambient temperature below 40°C                   |
| <b>Interface</b>               | USB 3.0                                          |
| <b>Lens</b>                    | C-mount                                          |
| <b>Power</b>                   | 25 W                                             |
| <b>Voltage</b>                 | 12 V                                             |
| <b>Camera Size (L×W×H)</b>     | 85 mm × 85 mm × 115 mm                           |
| <b>Weight</b>                  | 1000 g                                           |
| <b>Image Format</b>            | RAW/JPG/BMP/PNG/TIF                              |
| <b>Software Interface</b>      | DirectShow/TWAIN/ImageJ/μ Manager/MATLAB/LabVIEW |



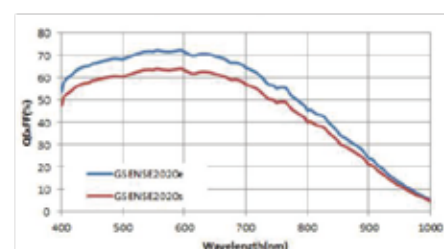
SD400BM



| Feature                 | IR300M                                                | IR400M                                |
|-------------------------|-------------------------------------------------------|---------------------------------------|
| Sensor                  | GSENSE2020e                                           | GSENSE2020e                           |
| Sensor Size             | 1/1.1"                                                | 1.2"                                  |
| Resolution              | 2240×1400                                             | 2048×2048                             |
| Pixel Size              | 5.48 $\mu\text{m}$ × 5.48 $\mu\text{m}$               | 6.5 $\mu\text{m}$ × 6.5 $\mu\text{m}$ |
| Spectral Response       | < 1100 nm                                             | < 1100 nm                             |
| Exposure                | 50 $\mu\text{s}$ - 10 s                               | 50 $\mu\text{s}$ - 120 s              |
| Exposure Model          | Manual/Auto/Regional                                  | Manual/Auto/Regional                  |
| Gain                    | 1× - 32×                                              | 1× - 64×                              |
| Black Balance           | Auto/Regional                                         | Auto/Regional                         |
| Shutter                 | Rolling Shutter                                       | Rolling Shutter                       |
| Color                   | Mono                                                  | Mono                                  |
| Binning                 | 1×1                                                   | 1×1, 2×2, 4×4                         |
| Frame Rate              | 38 FPS @ 2240×1400                                    | 41 FPS @ 2048×2048                    |
| A/D                     | 12-bit                                                | 12-bit                                |
| Built-in Image Cache    | 1 Gb                                                  | 2 Gb                                  |
| Read-out Noise          | 3.5 e-                                                | 2 e-                                  |
| Full Well               | 32 ke-                                                | 45 ke-                                |
| Dynamic Range           | 79 dB, 9100:1                                         | 87 dB, 22500:1                        |
| Quantum Efficiency (QE) | See details below:                                    | See details below:                    |
|                         | 74% @ general range                                   | 74% @ general range                   |
|                         | 45% @ 800 nm                                          | 45% @ 800 nm                          |
|                         | 24% @ 900 nm                                          | 24% @ 900 nm                          |
|                         | 5% @ 1000 nm                                          | 5% @ 1000 nm                          |
| Cooling                 | Secondary TEC Refrigeration                           | Secondary TEC Refrigeration           |
| Cooling Temperature     | Ambient temperature below 40°C                        | Ambient temperature below 40°C        |
| Interface               | USB 3.0                                               | USB 3.0                               |
| Lens                    | C-mount                                               | C-mount                               |
| Power                   | 25 W                                                  | 25 W                                  |
| Voltage                 | 12 V                                                  | 12 V                                  |
| Camera Size (L×W×H)     | 80 mm × 80 mm × 110 mm                                | 85 mm × 85 mm × 115 mm                |
| Weight                  | 1000 g                                                | 1000 g                                |
| Image Format            | RAW/JPG/BMP/PNG/TIF                                   | RAW/JPG/BMP/PNG/TIF                   |
| Software Interface      | DirectShow/TWAIN/ImageJ/ $\mu$ Manager/MATLAB/LabVIEW | Same                                  |



IR300

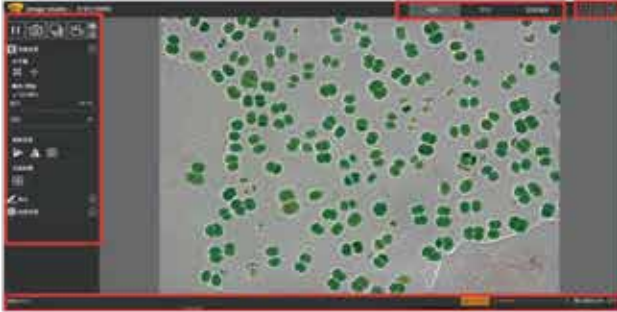


IR400



## User-friendly Interface

User-friendly interface enabling users to quickly get started without systematic learning, and users can customize the interface according to the applications



## Different application scenes for choose

You can choose suitable scenarios based on your actual use environment

## Diverse shooting / Measuring / Report output

Support single shooting / timing continuous shooting / camera record, calibration and various measurements, generate reports and export to Word / Excel documents, integrate all work flows, save operation time. If you have high requirements on image quality and do not need to take a large number of pictures in a short time, you can select the research-level option in the shooting Settings to take pictures. It takes several seconds to tens of seconds to take a picture in the research-level

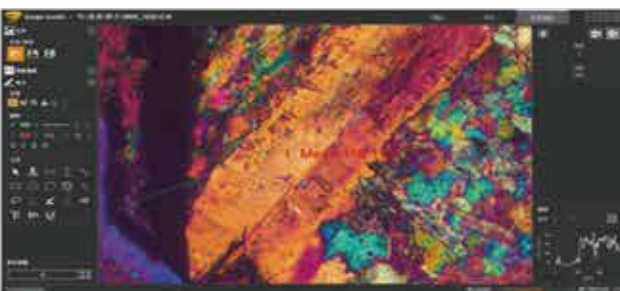
## White / Black balance

No cumbersome manual adjustment, the true one-key accurate color reduction. The image below shows a comparison of one-button white balance



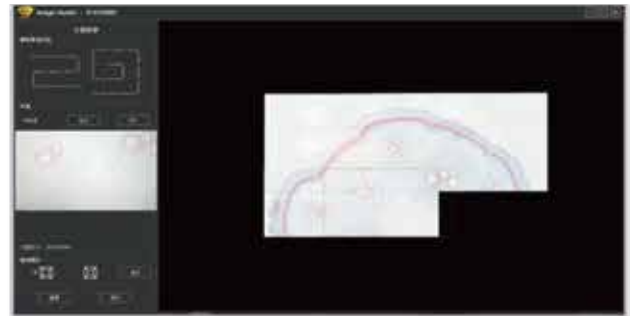
## Profile function

The profile function shows the trend of brightness changes in each line segment.



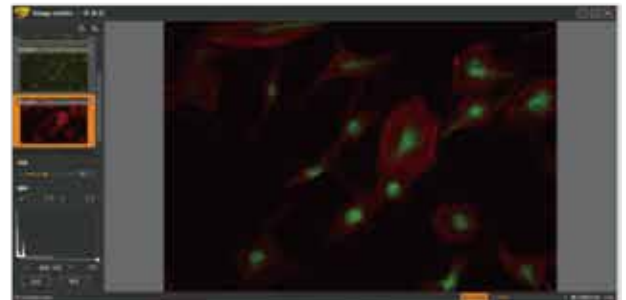
## Image Stitching

Only needs to move the loading platform to stitch images, largely expand the visual field.



## Fluorescence Overlay

Professional fluorescence multi-channel synthesis function, convenient for users to perform high quality and high efficiency fluorescence imaging and analysis



## Multi-focus

Multi-focus can synthesize multiple images that are partially blurred due to insufficient depth of field into a single clear image



## Auto Count

Automatic calculation of the image target object area, quantity, and other data

