# MICAPS
# SV3SCMOS SERIES

## C-mount USB3.0 CMOS Cameras  SONY Exmor CMOS Sensor

SV3SCMOS series is USB3.0 interface color Camera for industrial applications, having built-in hardware ISP to ensure color reproduction and higher video speed. The resolution coverage is from 0.5MP to 20MP;.

### Features

- Sony Exmor back-illuminated CMOS sensor
- Two-step noise reduction technology
- Ultra-high sensitivity and low noise
- USB 3.0 data transmission interface compatible with USB2.0 protocol
- Provides advanced video and image processing application software MicroView
- Supports external triggering, digital I/O and free-running modes
- Supports ROI, flip, bit-depth switching and other features

### Applications

- Scientific research, education (teaching, demonstration and academic exchanges) Digital laboratory, medical research
- Industrial visual (PCB examination, IC quality control)
- Medical treatment (pathological observation)
- Food (microbial colony observation and counting)
- Aerospace, military (high sophisticated weapons)

| Model No. | Sensor & Size(mm) | Pixel(μm) | G Sensitivity<br>Dark Signal | FPS/Resolution | Binning | Exposure |
|---|---|---|---|---|---|---|
| **SVS3 with 33mmx33mmx33mm housing** | | | | | | |
| SV3SCMOS500CA | 0.5M/IMX433LQJ(C,GS)<br>1/1.7“ (7.31x5.58) | 9.0x9.0 | 4910mv with 1/30s<br>0.3mv with 1/30s | 166.5fps@812x620 | 1x1 | 6us~15s |
| SV3SCMOS1500CA | 1.5M/IMX273LQR(C,GS)<br>1/2.9“ (4.97x3.73) | 3.45x3.45 | 1146mv with 1/30s<br>0.15mv with 1/30s | 227.2fps@1440x1080<br>382.7fps@720x540 | 1x1<br>1x1 | 15us~15s |
| SV3SCMOS2300CA | 2.3M/IMX174LQJ(C,GS)<br>1/1.2“ (11.25x7.03) | 5.86x5.86 | 1016mv with 1/30s<br>0.15mv with 1/30s | 164.5fps@1920x1200 | 1x1 | 15us~15s |
| SV3SCMOS2300CB | 2.3M/IMX249LQJ(C,GS)<br>1/1.2“(11.25x7.03) | 5.86x5.86 | 1016mv with 1/30s<br>0.15mv with 1/30s | 30fps@1920x1200 | 1x1 | 42us~15s |
| SV3SCMOS3100CA | 3.1M/IMX252LQR(C,GS)<br>1/1.8“ (7.07x5.30) | 3.45x3.45 | 1146mv with 1/30s<br>0.15mv with 1/30s | 115fps@2048x1536<br>230.3fps@1024x768 | 1x1<br>1x1 | 15us~15s |
| SV3SCMOS3100CB | 3.1M/IMX265LQR(C,GS)<br>1/1.8“ (7.07x5.30) | 3.45x3.45 | 1146mv with 1/30s<br>0.15mv with 1/30s | 55.4fps@2048x1536<br>115.1fps@1024x768 | 1x1<br>1x1 | 15us~15s |
| SVS3CMOS5000CA | 5.0M/IMX250LQR(C,GS)<br>2/3“ (8.45x7.07) | 3.45x3.45 | 1146mv with 1/30s<br>0.15mv with 1/30s | 71.2fps@2448x2048<br>175.2fps@1224x1024 | 1x1<br>1x1 | 15us~15s |
| SVS3CMOS5000CB | 5.0M/IMX264LQR(C,GS)<br>2/3“ (8.45x7.07) | 3.45x3.45 | 1146mv with 1/30s<br>0.15mv with 1/30s | 35.6fps@2448x1536<br>87.6fps@1224x1024 | 1x1<br>1x1 | 15us~15s |
| SV3SCMOS6300CA | 6.3M/IMX178LQJ(M, RS)<br>1/1.8“ (7.37x4.92) | 2.4x2.4 | 425mv with 1/30s<br>0.15mv with 1/30s | 58.7fps@3072x2048<br>59.5fps@1536x1024 | 1x1<br>2x2 | 17us~15s |
| SV3SCMOS12000CA | 12M/IMX226CQJ(C), RS)<br>1/1.7“(7.52x5.64) | 1.85x1.85 | 3637mv with 1/30s<br>0.15mv with 1/30s | 29.97fps@4064x3046<br>59.94fps@2048x1080 | 1x1<br>2x2 | 400us~15s |
| SV3SCMOS12000CB | 12M/IMX676-AACR(C, RS)<br>1/1.6“(7.07x7.07) | 2.0x2.0 | 280mv with 1/30s<br>0.1mv with 1/30s | 27.7fps@3536x3536<br>65.8fps@1760x1760 | 1x1<br>2x2 | 13us~15s |

C: Color, M: Monochrome, GS: Global Shutter, RS: Rolling Shutter

## SVS3 with 38mmx38mmx33mm housing

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|---|---|---|---|---|---|---|
| SV3S01700CA | 1.7M/IMX432LQJ(C,GS)<br>1.1“ (14.4x9.9) | 9.0x9.0 | 4910mv with 1/30s<br>0.3mv with 1/30s | 98.6fps@1600×1100 | 1x1 | 6us~15s<br>38mm |
| SV3S01700CB | 1.7M/IMX425LQJ(C,GS)<br>1.1“ (14.4x9.9) | 9.0x9.0 | 4910mv with 1/30s<br>0.3mv with 1/30s | 210fps@1600×1100 | 1x1 | 6us~15s<br>38mm |
| SV3S02000CA | 2.0M/IMX430LQJ(C), GS)<br>1/1.7“(7.31x5.58) | 4.5x4.5 | 2058mv with 1/30s<br>0.15mv with 1/30s | 132fps@1624×1240 | 1x1 | 6us~15s |
| SV3S02800CA | 2.8M/IMX421LQJ(C,GS)<br>2/3“ (8.71x6.59) | 4.5x4.5 | 2058mv with 1/30s<br>0.15mv with 1/30s | 121fps@1936×1464<br>425fps@968×732 | 1x1<br>1x1 | 6us~15s<br>38mm |
| SV3S07100CA | 7.1M/IMX428LQJ(C,GS)<br>1.1“ (14.4x9.9) | 4.5x4.5 | 2058mv with 1/30s<br>0.15mv with 1/30s | 51.4fps@3200×2200<br>133.8fps@1584×1100 | 1x1<br>1x1 | 6us~15s<br>38mm |
| SV3S12300CA | 12.3M/IMX304LQR-C(C,GS)<br>1.1“(14.13x10.35) | 3.45x3.45 | 1146mv with 1/30s<br>0.15mv with 1/30s | 23.4fps@4096x3000<br>46.3fps@2048x1500<br>46.3fps@1024x750 | 1x1<br>2x2<br>4x4 | 30us~15s<br>38mm |

## General Specification

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|---|---|
| Power supply | Power with USB3.0 |
| Power consumption | <3.0W |
| Temperature | Working temperature -10~50°C, storage temperature 30~70°C |
| Platform and architecture | Win32/WinRT/Linux/macOS/Android；X86/X64/armhf/armel/arm64 |
| Size | 33mmx33mmx33mm, 38mmx38mmx33mm |
| Weight | 227g |
| Lens mount | C-mount |
| Humidity | 20%-80%, no condensation |
| Certification | CE, FCC |

**LABLINK INSTRUMENTS**

- Plot no. 337, Sector 2, HSIIDC Saha, Saha, Ambala (Haryana) India - 133104.
- Plot no 3-6-164/2, 2nd Street,Hyderguda Himayatnagar, Hyderabad (Telangana )India - 500029.

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