



## VGA Small USB Camera Module GC0307

### Key Properties

GC0307 Image Sensor

YUY2 Format

Frame Rate: 30fps for VGA(640(H)x480(V))

S-mount M5 Lens Holder

Lenses Type -Standard: 50° (FL2.7mm M5 Camera Lens Module)



### Application

Portable Media / Robot Vision Camera/ Laser Sensing

Toys / Monitoring

### Feature

- ♦ VGA(640x480) image sensor GC0307
  - Low illumination and high dynamic range sensor
- ♦ Megapixel M5 lenses optional
  - Standard: 50° M5 Camera Lens Module (FL2.7mm)
- ♦ YUY2 format output support
- ♦ UVC support, plug and play for Windows and Linux



### Introduction

CM03M30M5S is a VGA(640x480) USB camera board using 1/7" GC0307 designed for low cost and small camera device applications. CM03M30M5S is an ideal solution of small USB camera module for basic video camera or sensor monitoring function. It has S-mount (M5) lens holder for enabling the users to choose the lens and any spectral filter as per their requirements. It is a Plug-and-Play camera (UVC compliant) for Windows, Linux, Android and Mac OSX .



## Specifications

|                             |                                                                                                         |
|-----------------------------|---------------------------------------------------------------------------------------------------------|
| Model                       | CM03M30M5S                                                                                              |
| Sensor                      | GC0307                                                                                                  |
| Image Size                  | 1/7 inch                                                                                                |
| Pixel Size                  | 3.2 $\mu\text{m}$                                                                                       |
| Image Area                  | 2048 $\mu\text{m}$ x 1536 $\mu\text{m}$                                                                 |
| Image Pixels & Resolution   | VGA / 640(H) x 480(V)                                                                                   |
| Image Formats               | YUY2 (YUYV)                                                                                             |
| Image Transfer Rate         | 160x120 @30fps / 176x144 @30fps / 320x240 @30fps<br>352x288 @30fps / 640x480 @30fps                     |
| Max S/N Ratio               | 42dB                                                                                                    |
| Connecting Port             | USB2.0                                                                                                  |
| Plug & Play                 | UVC(USB Video Class) Compliant support                                                                  |
| Auto Exposure Control (AEC) | Support                                                                                                 |
| Auto White Balance (AWB)    | Support                                                                                                 |
| Adjustable Parameters       | Brightness, Contrast, Hue, Saturation, Sharpness, Gamma,<br>White Balance, Backlight Contrast, Exposure |
| Lens Parameters             | Standard: 50° M5 Camera Lens Module                                                                     |
| Lens Holder                 | Standard FL2.7mm M5 lens holder                                                                         |
| Power Supply                | USB BUS POWER 4P-1.0mm Socket                                                                           |
| Operating Voltage           | DC 5V                                                                                                   |
| Operating Current           | < 120mA                                                                                                 |
| Operating Temperature       | -20 ~ 70°C                                                                                              |
| Storage Temperature         | -20 ~ 85°C                                                                                              |
| PCBA Dimensions             | 8mm x 25mm                                                                                              |
| Weight                      | ~20g                                                                                                    |
| Cable Length                | Standard 40cm                                                                                           |
| Operating System Request    | WinXP/Win7/Win8/Win10<br>Linux / Android / MAC OSX                                                      |

Specifications are subject to change without notice.



## Sensor Board Drawings

