0.3M Pixel Endoscope Camera Module

Key Properties

Resolution: 0.3M, 640 x 480 @30FPS, YUY2 Format
Lenses Type -Standard: FOV(D)60°
Depth Of Field: 30mm ~ 50mm
USB UVC Compliant

Application

Toys / Home Repairs / Machinery Maintenance / Electronics inspection / Pipe and Tube inspection

Feature

- A lighting system with six adjustable LEDs for optimal illumination of inner cavities
- High-quality imaging system that transmits video from the CMOS sensor to host via USB 2.0 interface
- Flexible lens options to support different field-of-view(FOV) applications
- Available in two configurations: bare board type or IP67 waterproof encapsulated type
- Plug-and-Play UVC compliance for seamless compatibility with Windows, Linux, Android and OSX

Introduction

The SCM03M30D5.5U is a high-performance VGA (640x480) USB 2.0 camera module designed for low-cost, compact camera applications. Featuring a 1/10” BF20A6 sensor, it delivers smooth video at 30 frames per second (YUV format), making it ideal for small-screen and portable device applications.

The SCM03M30D5.5U is equipped with six built-in LEDs that provide excellent illumination for interior views. An optional adjustment wheel allows users to conveniently control the lighting intensity, ensuring optimal visibility in various environments.

For added versatility, the camera module supports multiple lens options, catering to different field-of-view (FOV) requirements. This flexibility allows users to customize the lens to suit specific use cases.

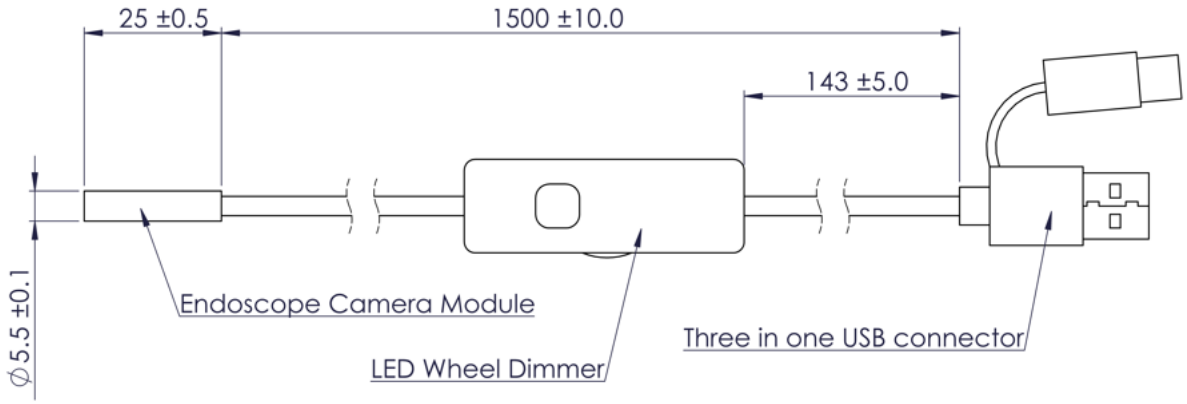
The camera also features a three-in-one USB connector, supporting USB Type-A, USB Type-C, and Micro USB interfaces, ensuring broad compatibility with a wide range of devices including laptops, tablets, and smartphones.

As a Plug-and-Play device, the SCM03M30D5.5U is fully UVC compliant, ensuring seamless compatibility with major operating systems, including Windows, Linux, Android, and Mac OSX.

Whether for portable devices or specialized applications requiring compact and efficient imaging, the SCM03M30D5.5U is a reliable and versatile choice

Specifications

Model	SCM03M30D5.5U
Sensor	BF20A6
Image Size	1/10 inch
Pixel Size	2.25 µm
Image Area	1440 µm x 1080 µm
Image Pixels & Resolution	640(H) x 480(V)
Output Formats	YUV2 (YUYV)
Image Transfer Rate	VGA (640x480): 30 fps QVGA (320x240): 30 fps
Max S/N Ratio	36dB
Dynamic Range	68dB
Sensitivity	600mV/lux-sec@550nm
Mini illumination	0.1 lux
Shutter Type	Electronic rolling shutter
Lens Parameters	Standard: FOV(D)60°, Focus Fixed
Power Supply	USB Power
Operating Voltage	DC 5V
Operating Current	100mA
Operating Temperature	-30 ~ 70°C
Stable Image Temperature	0 ~ 50°C
Operating System	WinXP/Vista/Win7/Win8.1/Win10/Linux with UVC/Android 4.0 or above with UVC
Cable Length	150cm
Cable Type	USB Type-A, Type-C and Micro USB, Three-in-one USB connector

Specifications are subject to change without notice.

Sensor Board Drawings