

HV-F202SCL



Main Features

High resolution and color fidelity

The 1 / 1.8-inch 2,000,000 pixels square lattice progressive scan CCD and the dichroic prism for RGB color achieve a high resolution of UXGA (1600 (H) x 1200 (V)) picture and good color reproduction.

GigE Vision support

A maximum of 1Gbps high speed data transmit is available and suitable for image processing.

GenICam support

Development of camera control system is easy because industrial camera control API.

CameraLink support

The SCL version in medium configuration can operate at 30fps at maximum pixel clock rate, full resolution and maintain 36bit output.

Mini CameraLink

The SDR connector called mini CameraLink is adopted and two connectors are equipped in a small case. Additionally, when using with L type connection, it is arranged as cable collision does not occur.

Medium Configuration connection support

It supports Medium Configuration connection which enables the rich gradation expression of each color of 10 bit or 12 bit.

Digital processing for various picture quality enhancements

- Independent six colors masking is the Hitachi innovation for optimizing color balance. The saturation and the hue of 6 colors (Red, blue, green, cyan, magenta and yellow) are adjusted independently to deliver the best color in image capture, microscope and other applications.
- It is equipped with the in out gradation control function using LUT. Other than normal gamma 0.45 conversion, the function can set the conversion of in out gradation using look up table (LUT) as a user option.

C mount lens adapter

Auto shading correction (ASC)

Versatile CCD drive functions

- Video frame capture on demand using external trigger signal. See detailed specifications item 8.
- Long integration mode.
- Auto electric shutter (AES) mode for stabilized video level.

Versatile imaging functions

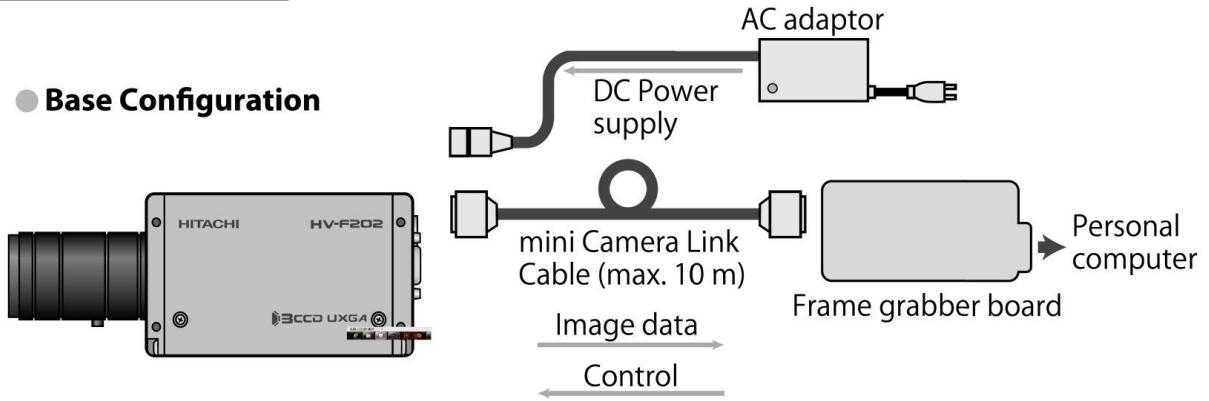
- Four application files.
- Scene color temperature is detected in dynamic for automatic white balance adjustment.
- AGC(Automatic gain control)and manual gain control are available to select.
- Master black, R / B black, and R / B gain are variable.

Specification

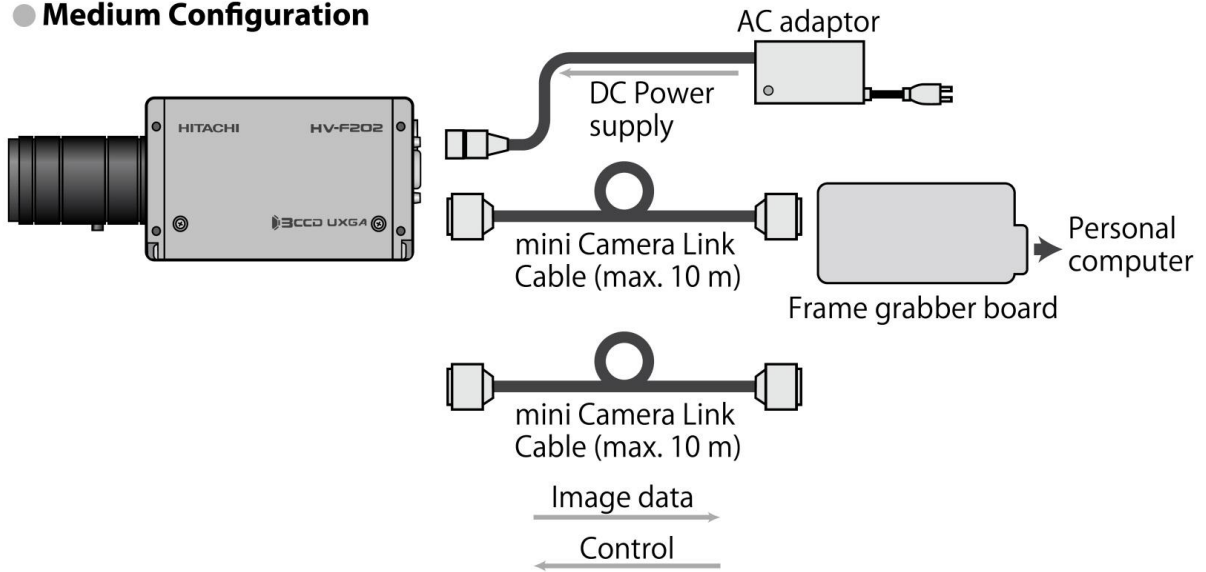
HV-F202SCL	
Imaging device	1 / 1.8-inch progressive scan interline CCD (R. G. B 3CCD)
Effective pixels	1600 (H) x 1200 (V)
Pixel size	4.4 μm (H) x 4.4 μm (V) (square lattice)
Optical system	1 / 1.inch F1.8 prism
Sensing area	7.04 mm (H) x 5.28 mm (V)
Scanning system	Progressive
Sync system	Internal / VD external
Lens mount	C mount
Video output	Camera Link support Base configuration / Medium configuration Base configuration : RGB 24 bit Medium configuration : RGB 30 bit / 36 bit
Frame rate	30 fps
Sensitivity	2000 lx, F5.6, 3200K (at 1 / 30 second shutter)
Electric shutter speed	OFF / Auto (AES) / Manual (Variable)
Variable	1 / 30 to 1 / 100,000 second
AES	1 / 30 to 1 / 100,000 second
Long time intergration	1 / 30 to approx. 4 second (1 frame step)
Electric trigger shutter	
Mode	Fixed shutter, One trigger, VD sync reset
AES	Via Gigabit Ethernet cable or DCIN / SYNC connector Via CameraLink cable (CC1) or DC IN / SYNC connector
Input level	5 Vp-p \pm 0.5 V
External sync signal (Strobe out)	VD output, Flash out
Registration	Full Screen : 0.05% (except lens characteristics)
Vertical Sharpness	2H
White balance	Manual / One-push auto / Continuous auto
Gain	Manual : 0 to +12 dB. AGC : 0 to +12 dB (with limit setting)
Gamma	0.45 / 1.0 / LUT (Look up table : user customizable)
Color masking	OFF / ON (6 color independent masking)
Sharpness	Sharpness (DTL) level. Sharpness (DTL) width.
Paint black	Adjustable
Black level	Adjustable
Knee	Adjustable (Knee point and knee slope)
Power supply voltage	DC + 12V \pm 1 VDC (from DCIN / SYNC connector)
Current consumption	Approx. 7.2 W (DC \pm 12V)
Ambient temperature	
Performance	0 to +40 $^{\circ}\text{C}$
Operation	10 to +40 $^{\circ}\text{C}$ (without dew condensation)
Storage	-20 to +60 $^{\circ}\text{C}$
Vibration endurance	10 to 200Hz (2.4.5 m / S ²)
Shock endurance	392 m / s ²
External dimensions	55 (W) x 55 (H) x 89 (D) mm (not including lens and protrusions)
Mass	Approx. 350 g (without lens)

System configuration

● Base Configuration



● Medium Configuration



Dimenson

