

Grasshopper[®]2



- Sony progressive scan CCD image sensor, mono or color
- FireWire IEEE 1394b 800 Mbit/s interface
- Compact 44 x 29 x 58 mm case with C-mount lens holder
- Complies with IIDC 1.32

The fully redesigned Grasshopper2 camera series is the next generation version of the high performance Grasshopper. The Grasshopper2 uses the same form factor as the existing Grasshopper, and adds several new features, including enhanced opto-isolated general purpose I/O and improved imaging performance.



IEEE 1394b Models

GS2-FW-14S5M/C-C	1.4 MP	Sony ICX285 CCD, 2/3", 6.45 x 6.45 μ m	1384 x 1036 at 30 FPS
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FireWire

SPECIFICATIONS	GS2-FW-14S5M / C
Image Sensor Type	Sony progressive scan interline transfer CCD with square pixels and global shutter
Image Sensor Model	Sony ICX285 2/3"
Max Res and Max Frame Rate	1384 x 1036 at 30 FPS
Pixel Size	6.45 x 6.45 μ m
Analog-to-Digital Converter	Analog Devices 14-bit ADC
Video Data Output	8, 12, 16 and 24-bit digital data
Image Data Formats	Y8,Y16, Mono8, Mono12, Mono16, Raw16 (all models) RGB,YUV411,YUV422,YUV444, Raw8, Raw12, Raw16 (color model)
Digital Interface	IEEE 1394b 800 Mbit/s interface with screw locks for camera control, data, and power
Partial Image Modes	Pixel binning and region of interest modes available via Format_7
General Purpose I/O Ports	8-pin GPIO connector for power; trigger; strobe; PWM, and serial I/O 1 opto-isolated input, 1 opto-isolated output, 2 bi-directional I/O pins
Gain Control	automatic / manual / one-push gain modes, programmable via software, -3.6dB to 24dB
Shutter Speed	automatic / manual / one-push modes, programmable via software, 0.03ms to 330s (extended shutter mode)
Synchronization	via external trigger; software trigger (on same bus) or free running
External Trigger Modes	External hardware or software trigger Multiple exposure, bulb shutter, multi-shot, and overlapped trigger modes
Voltage / Power	Voltage: 8-30 V Power: less than 2.5 W
Dimensions (W x H x L)	44mm x 29mm x 58mm (not including lens holder and GPIO connector)
Mass	104 grams (without optics)
Memory Storage	32MB frame buffer; 512 KB non-volatile data flash
Memory Channels	2 memory channels for custom camera settings
Camera Specification	Complies with IIDC 1.32
Lens Mount	C-mount
Emissions Compliance	CE, FCC, RoHS
Operating Temperature	0° to 45°C
Storage Temperature	-30° to 60°C
Vibration Resistance	10 G (14 Hz to 200 Hz)
Status Monitoring	Bi-color LED that can be red, green, or yellow
Warranty	2 Years