



PicSight.com

G43B-Smartx02-AR

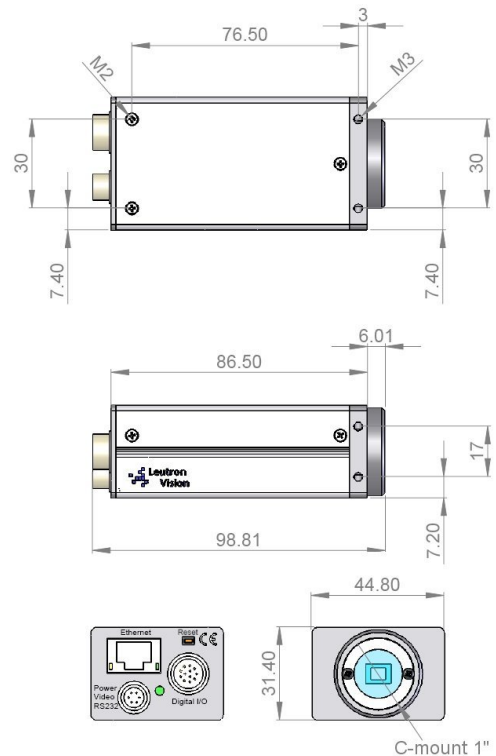
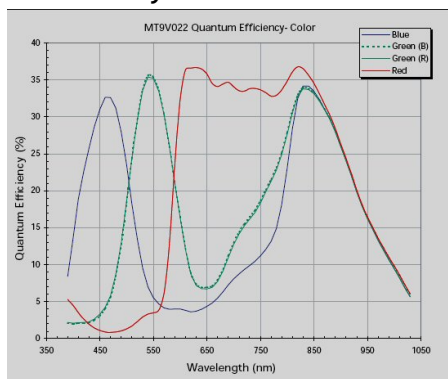
Smart GigE color camera

- 1/3 inch progressive scan CMOS
- 752 × 480 square pixels
- 64 fps, 10-bit image data
- high quality bayer decoder
- async reset, full frame shutter
- trigger in, strobe out, video out (CVBS)
- 32-bit RISC processor
- real-time operating system





<b>1/3" CMOS Sensor</b>	<b>Micron MT9V022</b>
<b>Readout</b>	parallel readout
<b>Sensor size (H×V)</b>	4.51 × 2.88 mm
<b>Output image resolution (H×V)</b>	752 × 480 pixels
<b>Pixel size</b>	6 × 6 μm
<b>Color</b>	bayer pattern
<b>Scan</b>	progressive
<b>Frame rate</b>	64 frames/sec
<b>Shutter</b>	global
<b>Max. shutter time</b>	20 ms
<b>Min. shutter time</b>	29 μs
<b>Lens mount</b>	C-mount
<b>Optional lens mount</b>	90-degree C-mount
<b>Spectral sensitivity</b>	



<b>Interface</b>	
<b>Ethernet</b>	10/100/1000 Mbit/sec
<b>Processor — G43B-Smart502-AR</b>	PNX0192/300MHz 64MB RAM, 32MB Flash
<b>Processor — G43B-Smart702-AR</b>	PNX1702/500MHz, Hardware FPU 256MB RAM, 64MB Flash
<b>Digital input</b>	2× Optocoupler, 1× TTL
<b>Digital output</b>	3× Optocoupler, 1× TTL
<b>Power req. 12 V/6W</b>	G43B-Smart (old version)
<b>Power req. 10-26V/5W</b>	G43B-Smartx02-AR
<b>Weight</b>	145 g
<b>Operating temperature</b>	0–50 °C
<b>Realtime function</b>	
<b>FPGA XC3S500E</b>	Bayer decoder, Look up table
<b>Embedded software</b>	
<b>Compiler/OS</b>	C, C++/Real-time OS
<b>Host (PC) software</b>	
<b>GigE Vision</b>	Any GigE Vision API
<b>API LV-SDS</b>	C, C++, OCX, .Net
<b>Configuration</b>	Web interface
<b>Application upload</b>	FTP

Hirose 12-pin connector, male, HR10A-10R-12PB-71		Hirose 6-pin connector, male, HR10A-7R-6PB-73	
<b>Pin</b>	<b>Signal</b>	<b>Pin</b>	<b>Signal</b>
1	Opto Output Tap	1	TXD Output
2	Opto Output Common Emitter	2	RXD Input
3	Opto Output Collector 0	3	Ground
4	Opto Output Collector 1	4	Video Out (CVBS)
5	Opto Output Collector 2	5	Ground
6	G43B-Smart-Ax: TTL output, G43B-Smart: Opto Output Collector 3	6	Power Input
7	Power Input		
8	Opto Input 1		
9	Opto Input 0		
10	Opto Input Common		
11	Trigger Input TTL		
12	Ground		

<b>Ordering numbers</b>		
<b>Number</b>	<b>Product name</b>	<b>Option</b>
411650	PicSight G43B-Smart702-AR	
411651	PicSight G43B-Smart702-AR-H	90° lens mount
100600	PicSight G43B-Smart502-AR	
100601	PicSight G43B-Smart502-AR-H	90° lens mount
999010	Mounting plate	For GigE/Smart cameras
999020	Mounting plate	For GigE-H/Smart-H cameras
16028	LV-SDS	Software API

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