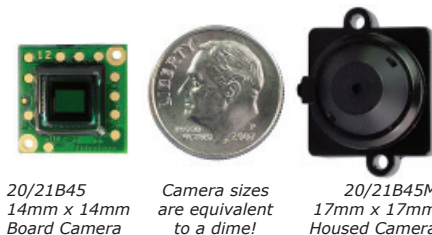
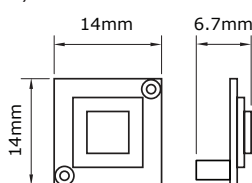


Product Features

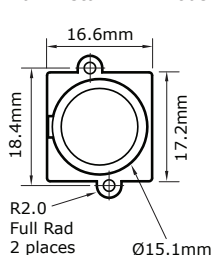
- Sizes available
 - 14mm x 14mm board camera
 - 17mm x 17mm housed camera
- Low power 1/4" CMOS sensor with ultra wide temperature & vibration spec.
- Image sensor has twice the sensitivity of 1/3" Sony Ex-View®
- NTSC/PAL (true two field) analog composite video output
- Computer controllable via I²C
- Day/Night
- Optional models
 - 5VDC dual board
 - Balanced Video Out



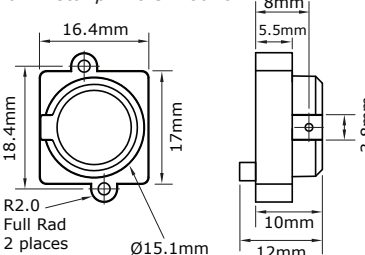
20/21B45



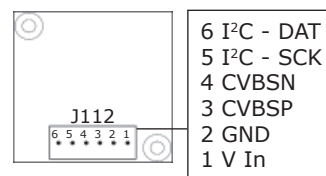
20/21B45M-12
Small metal M-12 housing



20/21B45M
Small metal pinhole mount



Pin out diagram of J112



Technical Specifications

	20B45X Series NTSC	21B45X Series PAL
Electrical		
Image Sensor	1/4" CMOS	
Active Pixels	640 x 480	640 x 576
Pixel Size	5.6µm x 5.6µm	
Resolution	420TVL	
Sensitivity	0.025 lux (50 IRE) F1.2 3200°K	
Signal To Noise Ratio	46dB (AGC On)	
Gamma	0.45 default	
Gain	Automatic 36 dB (default)	
Synchronization	Internal	
Back Light Compensation	Default Off	
White Balance	AWB (default) / Fixed (selectable via software)	
Shutter Mode	Electronic rolling shutter	
Shutter Speed	Auto exposure or Fixed	
Scan Mode	Interlaced	
Contour Enhancement	Default on	
Mirror Mode	Yes (selectable via software)	
Horizontal Flip	Yes (selectable via software)	
Dynamic Range	73.4 dB	
Iris Controls	Electronic (No DC signal)	
Video Output	CVBS (75 Ohms) Balanced video output (optional)	
Power Input	3V - 3.3V (max)	
Power Consumption	< 150mA	
Communication Control	Serial I²C	

Environmental

Operating Temperature	-40°C ~ 70°C (-40°F ~ 158°F) @ 3.3V
Storage Temperature	-40°C ~ 90°C (-40°F ~ 194°F)
Operating Humidity	20% - 93% RH
Storage Humidity	Up to 98% RH

Mechanical

Dimensions W x H x D (w/ connector)	20/21B45	14mm x 14mm x 6.7mm (0.55" x 0.55" x 0.26")
	20/21B45M	16.4mm x 17mm x 12mm (0.64" x 0.67" x 0.47")
	20/21B45M-12	16.6mm x 17.2mm x 18mm (0.65" x 0.68" x 0.63")
Weight	20/21B45	0.5g (0.01 oz)
	20/21B45M	6.4g (0.23 oz)
	20/21B45M-12	6.9g (0.24 oz)
Lens Mount	20/21B45	No lens mount
	20/21B45M	M-12 pinhole board mount
	20/21B45M-12	M-12 board mount

Please refer to Videology's board mount lens guide for options

I²C Communication Kit (Optional)

60B5	I²C board, program cable, DB25 serial cable, camera control software
60B5-U (USB version) (in development)	I²C board, program cable, USB cable, camera control software

Accessories

Included	60C1039 - 6 pin JST connector w/ flying leads
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Optional Models

20/21B45-D	Dual board camera w/ 5V power supply, no lens
20/21B45-B	Balanced video output, no mount

Standards

	RoHS
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