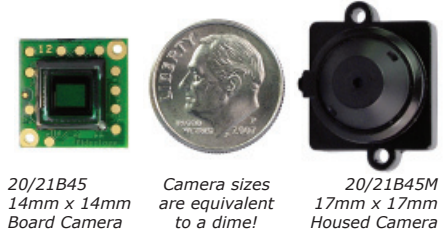


Product Features

- 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

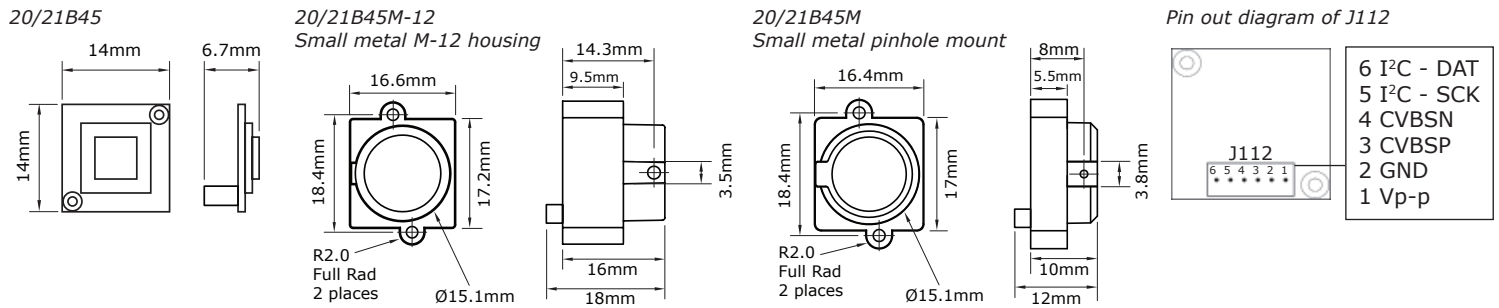
- Optional models
- Computer controllable via I²C
 - 5VDC dual board



20/21B45
14mm x 14mm
Board Camera

Camera sizes
are equivalent
to a dime!

20/21B45M
17mm x 17mm
Housed Camera



Technical Specifications

	20B45 20B45M 20B45M-12 NTSC	21B45 21B45M 21B45M-12 PAL
Electrical		
Image Sensor	1/4" CMOS	
Active Pixels	640 x 480, 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 I ² C	

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	Software control I ² C program kit includes:
60B5-U (USB version in development)	I ² C board, program cable, DB25 serial cable (or USB cable), camera control software

Accessories

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

Optional Models

20/21B45B	Board camera w/ balanced video output
20/21B45-5VDC	Dual board camera w/ 5V power supply, balanced video output, no lens
20/21B45M-12/5VDC	Housed camera w/ M-12 board mount, 5V power supply, no lens

Standards

	RoHS
--	------