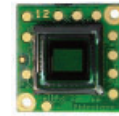




Product Features

- 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 standard IR-cut filter)
- Optional models
 - 5VDC dual board
 - Balanced video out



20/21B45
14mm x 14mm
Board Camera

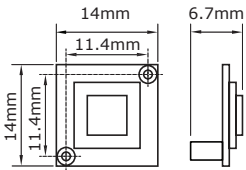


Camera sizes
are equivalent
to a dime!

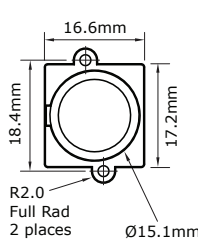


20/21B45M
17mm x 17mm
Housed Camera

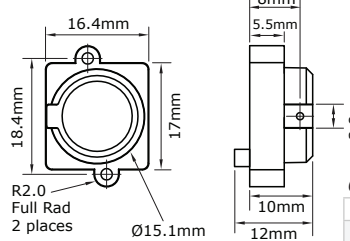
20/21B45
no lens mount



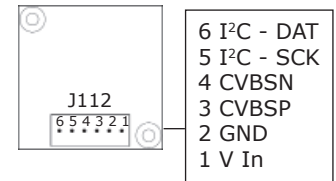
20/21B45M-12
Small metal M-12 housing



20/21B45M (3.4mm lens not shown)
Small metal pinhole mount



Pin out diagram of J112



Optional Power Cables

60PB12V-3.3V	5-16VDC to 3.3VDC w/ connector
60PB12V-3.3VFL	5-16VDC to 3.3VDC w/flying leads

Technical Specifications

Electrical	20B45X Series	21B45X Series
	NTSC	PAL
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 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

www.videologyinc.com

HEADQUARTERS LOCATION

Videology Industrial-Grade Cameras
35 Hampden Road
Mansfield, MA 02048 | United States

EUROPE LOCATION

Videology Industrial-Grade Cameras
High Tech Campus 5
5656 AE Eindhoven | The Netherlands

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 (w/3.3mm lens)
	20/21B45M-12	M-12 mount (lens not included)

See our lenses at www.videologyinc.com/lenses

I²C Communication Kit (Optional)

60B5-U	I ² C board, program cable, USB cable, camera control software
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Accessories

Included Cable	60C1039 - 6 pin JST connector w/flying leads
Optional Cable(s)	60PB12V-3.3V 5-16VDC input, 3.3VDC output



Optional Models*

20/21B45-D	Dual board camera w/5V power supply, no lens
20/21B45-B	Balanced video output, no mount
20/21B45-A	Standard IR-Cut filter (no day/night)

*Contact Videology for correct optional model numbers with lens mounts.

Standards

	RoHS
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Excellence.
Every day. Every time.