



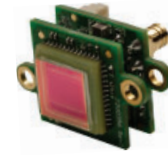
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**1080p Mini CMOS
 Color Camera Series**
 24C46-2 Series

Preliminary

Product Features

- Sizes available
 - 15mm x 15mm board camera
 - 17.2mm x 16.6mm housed camera
- Low power 1/3" CMOS color sensor
- Computer controllable via I²C
- Lens mount compatibility
 - M-12 mount/CS Mount
- 1080p @30fps or 25fps. Please specify in model ordering
 - Twisted pair output length to 300m (950ft)
 - Coaxial output 500m (1600ft)



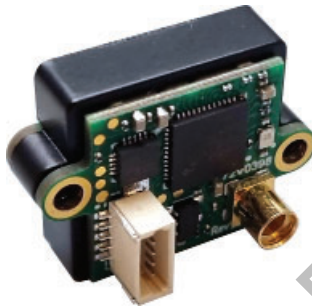
24C46XTNC-2
 Double Board Camera
 Shown



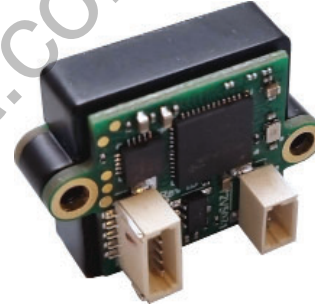
24C465TND-2
 Housed Camera
 with Optional Lens Shown

see page 2 for model number options

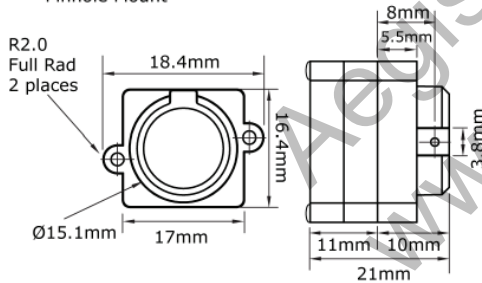
Coaxial Output



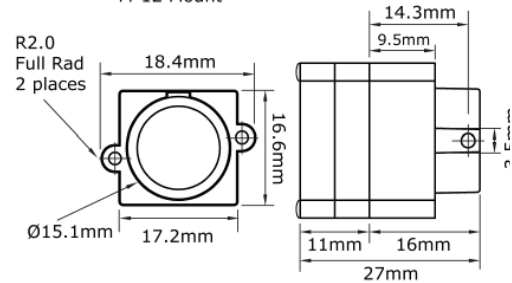
Twisted Pair Output



Pinhole Mount

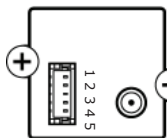


M-12 Mount



Power and I²C

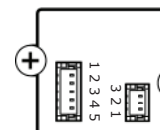
- 1 PWR (4-5.5V)
- 2 GND
- 3 GPIO
- 4 I²C SDA
- 5 I²C SCL



Coaxial Connector

Power and I²C

- 1 PWR (4-5.5V)
- 2 GND
- 3 GPIO
- 4 I²C SDA
- 5 I²C SCL



Twisted Pair
 1 Video+
 2 Video-
 3 GND



Technical Specifications

Electrical	24C46-2 Series
Image Sensor	1/3" CMOS 2.1MP
Active Pixels	1920 x 1080
Aspect Ratio	16:9
Pixel Size / Image Size	2.8µm x 2.8µm / 5.42mm x 3.068mm
Scanning System	Progressive
Resolution / Frame Rate	2.1 MP (1920x1080) 30/25 fps
Pixel clock rate	74.25MHz
Sensitivity	< 0.5 Lux 3.6 V/lux-sec
Gamma	0.45 default
Gain	Automatic: 1 – 64x / Manual: 1 – 128x
Synchronization	Internal
Dynamic range	60.0 dB
Signal to Noise ratio	42.0 dB
Automatic Gain Control	Automatic / manual
Mirror / Flip	Horizontal & Vertical On/Off
Video output interfaces	Coaxial: AHD or TVI Twisted-pair: AHD or TVI
Supplied Voltage	4.0 – 5.5 V
Current drawn @5V	Typical: 180mA Max: 220mA
Power consumption	0.9W (max 1.1W)

Communication

Interface	Serial I ² C
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HD Transmission Distance

TVI/AHD Coaxial	>500m (1,600ft)
TVI/AHD Twisted pair	>300m (950ft)

* Camera characterization in process, specification to be updated upon completion

Mechanical

Dimensions WxHxD (w/ connector)	24C46XBCD-2	15mm x 15mm x 13mm (0.59" x 0.59" x 0.26")
	24C465BCD-2 M-12 mount	17.2mm x 16.6mm x 27mm (0.67" x 0.65" x 1.06")
Connectors	Analog TVI/ AHD Coaxial	MMCX 50Ω type (75Ω Cable is advised)
	Power/GPIO 5-pin	Würth WR-WTB 1.0mm (665 305 124 022)
	Video ADH/TVI 3-pin	Würth WR-WTB 1.0mm (665 303 124 022) (100Ω Cable is advised)

Environmental

Operating Temp.	-30°C ~ 60°C (-22°F ~ 140°F)
Storage Temp.	-40°C ~ 105°C (-40°F ~ 221°F)
Operating Humidity	20% ~ 90% RH
Storage Humidity	94% RH

I²C Communication Kit (Optional)

60C5-A	I ² C board (72V5054), program cable (60C5013), camera control software (SFT-20411)
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Optional Models

Part number: 24C46 ABCD-2	
A 24C46 5	X = no housing (1 spacer-ring) 0 = no Lens mount, 1 spacer ring 1 = Pin Hole Lens mount, 1 spacer ring 2 = Pin Hole Lens mount, 2 spacer-rings + backplate 3 = M12 Lens Mount, 1 spacer ring 5 = M12 Lens Mount, 2 spacer-rings + backplate 6 = CS mount, 1 spacer ring 7 = CS mount, 2 spacer-rings + backplate
B 24C46 5A	T = TVI output, A = AHD output
C 24C46 5AN	N = 30fps, P = 25fps
D 24C46 5ANC	C = Coaxial, D = Twisted Pair
-2 24C46 5ANC-2	Revision 2

