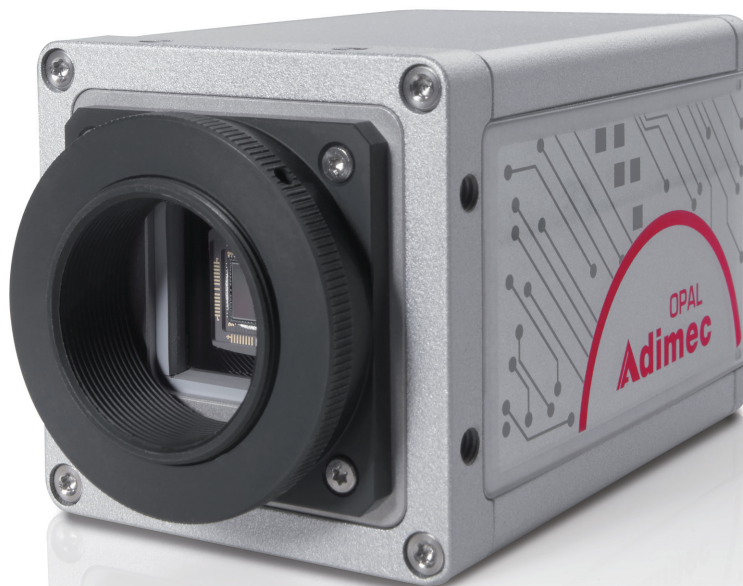




Monochrome and color

Ultra fast Megapixel Camera Solutions

Superior image quality at increased frame speeds



OPAL family



Description

The OPAL family of CCD cameras uses new Kodak KAI sensors allowing greater spatial resolution at high speeds. Using the platform approach to provide standard electrical, optical, and mechanical interfaces, easy upscaling can be achieved while having the ability to make the internal firmware unique and tailored to fit your applications. The state-of-the-art sensor technology combined with Adimec's advanced proprietary electronics provide excellent linearity over the full dynamic range through optimized embedded video processing.

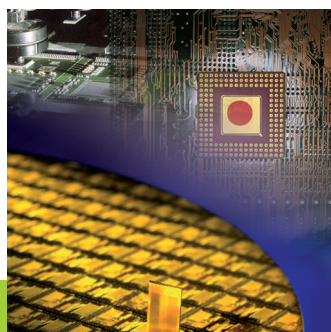
The OPAL family will allow high-end OEM customers meet their needs to be leading in throughput, precision and ingenuity.

Key specifications

- 1 and 2 Megapixel resolutions at exceeding frame speeds, higher resolutions planned
- 62 dB dynamic range with exceptional linearity over full range
- Exceeding frame speeds with comparable CCD sensors
- Quality interfacing via Camera Link
- Unparalleled image quality with industry-leading channel matching
- Unrivalled image quality over full temperature range
- World-class accuracy and repeatability

Applications

- Semiconductor manufacturing
- Electronics manufacturing
- Metrology



Adimec

Adimec designs and manufactures cameras for OEM customers with demanding applications whose goal is to be a product leader in their market. Unlike competitors who are offering general-purpose cameras, our products and support are focused to offer the benefits the OEMs need to be ahead.

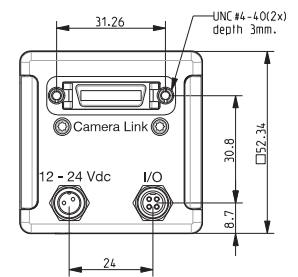
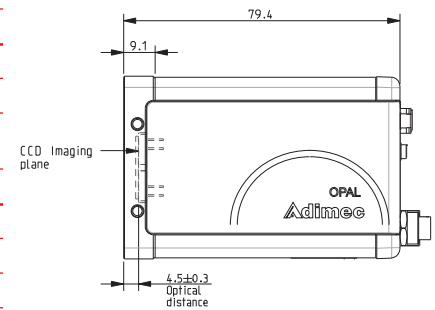
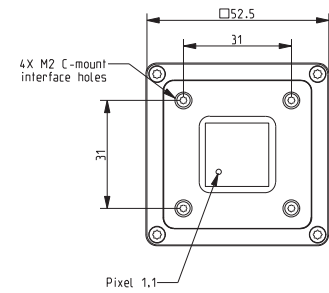
Adimec

www.adimec.com

Superior image quality with megapixel resolution at 120 fps

Specifications OPAL family

	OPAL-1000	OPAL-1600	OPAL-2000
Sensor	1/2" Interline CCD	2/3" Interline CCD	
Pixel size	5.5 µm square pixels		
Resolution	1024 x 1024 (1M)	1600 x 1200 (2M)	1920 x 1080 (2M)
Frame Rate	120 fps @ full resolution	68 fps @ full resolution	64 fps @ full resolution
Sensitivity	5.6 Lux (Mono.), 12.6 Lux (Color) @ 33 ms Integration time, 1 x gain		
Readout Noise / Full Well Capacity	14 e ⁻ / 18 ke ⁻		
Dynamic Range	62 dB		
Defect Pixel Correction	Selectable on/off		
Blooming Protection	300x		
Smear	-100 dB		
Electronic Shutter	Global		
Gain	Selectable between 1x and 32x in steps of 0.01		
Image Acquisition	Continuous - Control Delayed Transfer* - Double Transfer* - Delayed Double Transfer*		
Vertical Binning	2x, 4x* and 8x*		
Video Output	Camera Link, Base		
Monochrome/ Color	Available in Monochrome and color (Bayer RGB)		
Output Clock Speed	80 MHz		
Output Resolution	Selectable 8, 10 and 12 bit		
I/O Interface	Programmable strobe output and trigger input		
Power Input	10.2 - 27.6 Vdc		
Power Dissipation	4.3 W @ 12 Vdc	< 6 W @ 12 Vdc	
Operating Temperature	-10°C to +50°C		
EMC / EMI	EN61000-6-3 and EN61000-6-2		
Sensor Position	Factory aligned and robust over time		
Testing	100% Factory test on all specifications		
Reliability	MTBF > 75,000 h		
Compliance	CE, RoHS		



All specifications are typical at 25°C - Subject to change without notice - Detailed information on request.
* Optional

Unique Camera feature

- Member of camera product platform
- 14 bit ADC and channel matching down to sub LSB level
- Extremely low read noise
- Selectable channel remapping in camera
- Horizontal and vertical image flip
- Tight tolerances combined with 100% factory test
- Excellent anti-blooming and smear

System Benefits

- Allows tailored solutions for qualified OEMs
- Highest image quality under all challenging conditions
- Higher accuracy at lower light levels
- Easier and more cost-effective interfacing
- Increased flexibility in camera orientation
- Provides greater reliability, easier OEM integration and improves OEM system matching
- Reliable image capturing, even with bright light sources

Adimec

Adimec is a leading worldwide supplier of high performance, innovative, and reliable camera products for use in:

- Machine Vision
- Medical Imaging
- Military Targeting and Observation

Adimec's mission is to serve leading OEMs around the world who value quality and reliability as essential to their success.

The OPAL family is an extension of Adimec's successful portfolio of high performance 1-4 megapixel CCD cameras going strong from 2001.

Adimec has the ability to offer additional camera functionality and create customer special cameras for qualified OEM programs.

Contact us today to find out why top corporations rely on Adimec.

For maximum image quality, performance, and reliability in demanding applications - Choose Adimec

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