

# OPAL series

## High speed CCD cameras

TRUESENSE 5.5 image sensors



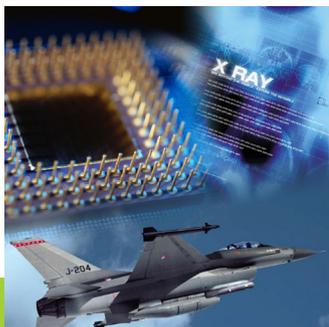
### Key specifications

- 1, 2, 4 and 8 Megapixel resolutions
- 4 channel image sensor readout for high frame rates
- 62 dB dynamic range
- Precise tap matching for high uniform images over full temperature range
- Available with Camera Link, GigE Vision or CoaXPress interface

### Description

The OPAL series is based on the TRUESENSE 5.5-micron Interline Transfer CCD image sensors allowing greater spatial resolution at high speeds. This state-of-the-art sensor technology combined with Adimec's advanced proprietary electronics provides excellent uniform images with high linear behaviour over the full dynamic range through optimized embedded video enhancement.

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



### 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 offer general purpose cameras, our products and support are focused to offer the benefits OEMs need to be ahead.

**Adimec**  
*Excellence in Imaging*

## SPECIFICATIONS

More detailed specifications are available in the OPAL series datasheet on [www.adimec.com](http://www.adimec.com)

	OPAL-1000	OPAL-1600	OPAL-2000	OPAL-4000	OPAL-8000
Resolution	1024 x 1024	1600 x 1200	1920 x 1080	2336 x 1752	3296 x 2472
Frame rate (Between brackets: GigE vision)	123 fps (60 fps)	70 fps (34 fps)	66 fps (32 fps)	32 fps (16 fps)	16 fps (8 fps)
Optical size	1/2"	2/3"	2/3"	1"	4/3"
Sensor technology	TRUESENSE 5.5 micron Interline Transfer CCD				
Pixel size	5.5 µm x 5.5 µm				
Dynamic range	62 dB				
Readout noise / full well	14 e <sup>-</sup> / 18 ke <sup>-</sup>				
Smear / blooming surpression	-100 dB / 300x				
Output resolution	8, 10 and 12 bit				
Interface	Camera Link, GigE Vision or Camera Link				
Triggering & external Sync.	Strobe signal and trigger signal (Programmable)				
Power input	10.2 - 27.6 Vdc				
Power dissipation	4.3 W	4.3 W	4.3 W	5 W	5 W
Weight	295 g (Incl. lensmount)				
Optical interface	C-Mount				
Operating temperature	-10°C to +50°C				
Reliability	MTBF > 75,000 h @ 40°C				
Compliance	CE, ROHS				
Testing	Every camera is 100% tested on all specifications				

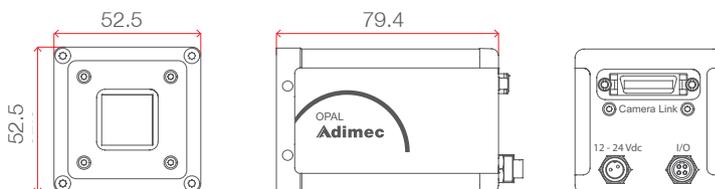
## FUNCTIONALITY

	█	■
Defect pixel correction	√	√
Mirroring	√	√
ROI	○	○
Binning (2x, 4x and 8x)	√	-
Auto Exposure Control	○	-
Contrast enhancement (VEM)	○	-
Pixel remap	√	√
Digital fine gain (32x)	√	√
Programmable I/O	√	√

√: Standard ○: Optional -: Not available

## DIMENSIONS

Sizes are in mm. Outline is based on Camera Link version. Dimensions are identical for all interface versions.



## CUSTOMIZATION

All models of the OPAL series are customizable to fit specific system outline, functionality or performance requirements.

Please contact us about your possibilities.

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

North America

Phone: (+1) 781-279-0770

Fax: (+1) 781-279-0771

E-mail: [salesus@adimec.com](mailto:salesus@adimec.com)

Europe

Phone: (+31) 40-2353920

Fax: (+31) 40-2353925

E-mail: [saleseu@adimec.com](mailto:saleseu@adimec.com)

Japan & Korea

Phone: (+81) 3-5968-8377

Fax: (+81) 3-5968-8388

E-mail: [salesjp@adimec.com](mailto:salesjp@adimec.com)

Asia - Pacific

Phone: (+65) 6334-1236

Fax: (+65) 6334-1436

E-mail: [salesap@adimec.com](mailto:salesap@adimec.com)

**Adimec**  
[www.adimec.com](http://www.adimec.com)