

Megapixel Cameras for Fast Machine Vision

Monochrome and color



Description

Because accuracy, throughput, and up-time are key success factors for machine vision OEMs, the Adimec-1000 family of cameras offers superior image quality, higher frame rates, and greater durability than other machine vision cameras.

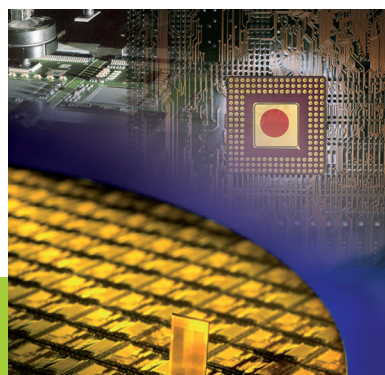
The color cameras in the Adimec-1000 family utilize one CCD sensor with a Bayer color filter, which complements host-based color processing that is available with most high-end frame grabbers.

The Adimec-1000 family of digital megapixel cameras was created for OEMs worldwide with demanding machine vision applications who require a camera that will make a difference in their system. Adimec combined select sensors with proprietary electronics to produce cameras with unequalled performance.

Specifications

- 1, 2, and 4 megapixel resolution
- Continuous or asynchronous operation
- Small outline & low power consumption
- Unparalleled image quality
- Camera Link interface
- For host-based color processing (color cameras only)

Adimec-1000 family



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 are developed with the specific needs of OEMs and their applications in mind.

Adimec

www.adimec.com

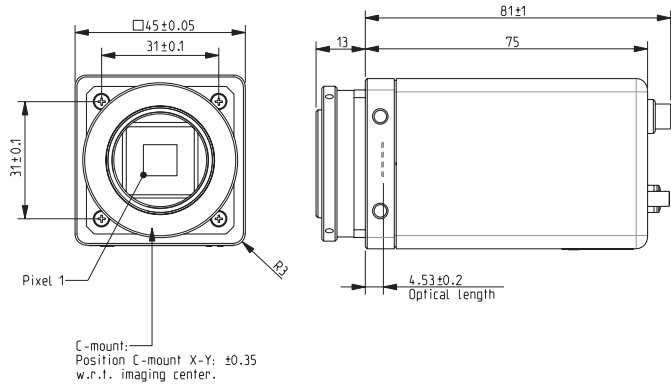


Monochrome	Adimec-1000m	Adimec-1600m	Adimec-1620m	Adimec-2000m	Adimec-4000m	Adimec-4020m
Resolution	1004 x 1004 (1M)	1600 x 1200 (2M)	1600 x 1200 (2M)	1920 x 1080 (HDTV)	2048 x 2048 (4M)	2048 x 2048 (4M)
Sensitivity @ 33 ms integration, 100 % video, 1x gain	5.5 Lux	4.5 Lux	2.25 Lux	6 Lux	4.9 Lux	2.7 Lux
Frame rate @ full resolution	50 fps (Dual) 30 fps (Single)	34 fps (Dual) 18 fps (Single)	34 fps (Dual) 18 fps (Single)	32 fps (Dual) 17 fps (Single)	16 fps (Dual) 8 fps (Single)	16 fps (Dual) 8 fps (Single)
Sensor & pixel size	Interline CCD with 7.4 μm square pixels					
Dynamic range	60 dB	62 dB	60 dB	62 dB	63 dB	62 dB
Full well capacity	40 ke ⁻					
Video output	8, 10, or 12 bit					
Lensmount	C-Mount					
Size	45 x 45 x 75 mm	52.5 x 52.5 x 79.4 mm				
Weight	185 g	250 g				
Operating temp.	-10°C to +40°C					
MTBF	75,000 h @ 40°C					
Features	Electronic Pixel Correction • Vertical binning • Continuous and controlled operation					
Compliance	CE • RoHS					

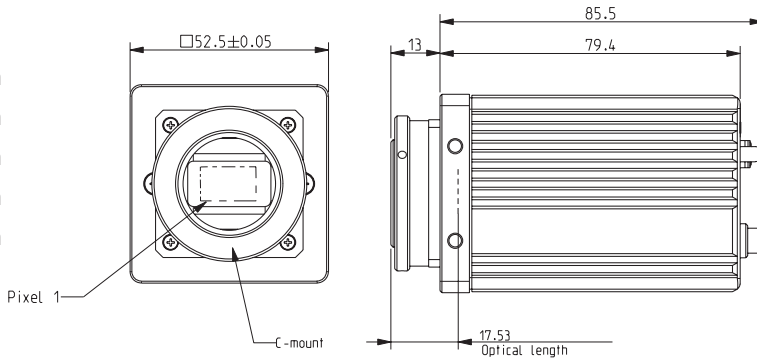


Color	Adimec-1000c	Adimec-1600c	Adimec-1620c	Adimec-2000c	Adimec-4020c
Resolution	1004 x 1004 (1M)	1600 x 1200 (2M)	1600 x 1200 (2M)	1920 x 1080 (HDTV)	2048 x 2048 (4M)
Sensitivity @ 33 ms integration, 100 % video, 1x gain	16.5 Lux (for green pixels)	13.5 Lux (for green pixels)	6.75 Lux (for green pixels)	19.5 Lux (for green pixels)	8.2 Lux (for green pixels)
Frame rate @ full resolution	50 fps (Dual) 30 fps (Single)	34 fps (Dual) 18 fps (Single)	34 fps (Dual) 18 fps (Single)	32 fps (Dual) 17 fps (Single)	16 fps (Dual) 8 fps (Single)
Sensor & pixel size	Interline CCD with 7.4 µm square pixels				
Dynamic range	60 dB	62 dB	60 dB	62 dB	62 dB
Full well capacity	40 ke ⁻				
Video output	8, 10, or 12 bit				
Lensmount	C-Mount				
Size	45 x 45 x 75 mm	52.5 x 52.5 x 79.4 mm			
Weight	185 g	250 g			
Operating temp.	-10°C to +40°C				
MTBF	75,000 h @ 40°C				
Features	Electronic Pixel Correction • Continuous and controlled operation				
Compliance	CE • RoHS				

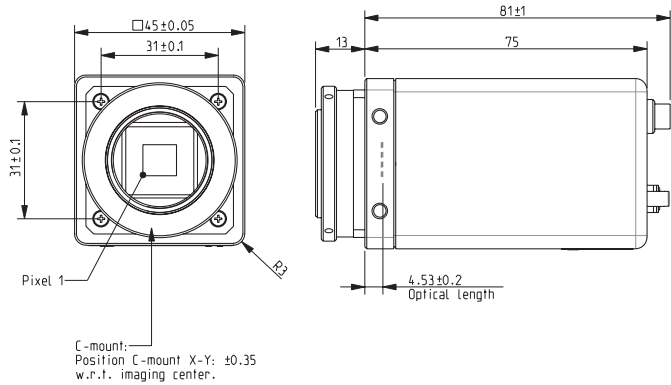
Adimec-1000m



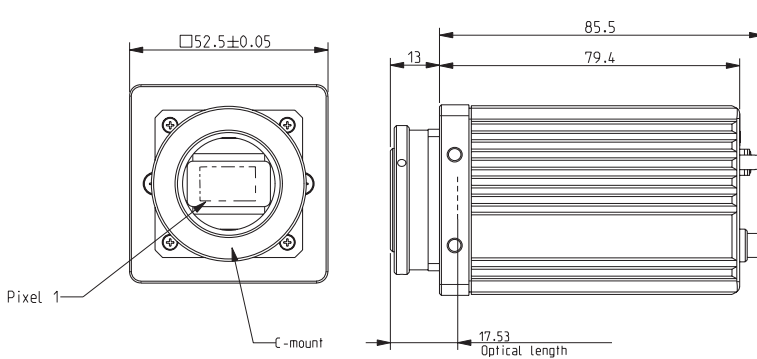
Adimec-1600m
Adimec-1620m
Adimec-2000m
Adimec-4000m
Adimec-4020m



Adimec-1000c



Adimec-1600c
Adimec-1620c
Adimec-2000c
Adimec-4020c



We designed the specifications for our machine vision camera platform with the input of our most demanding customers and key suppliers. This Adimec 1000 Family is based on the Camera Link standard. These cameras are known to offer higher image quality, faster frame speeds and greater durability than other machine vision cameras. Adimec's 1000 family is optimized for OEMs that seek to both lower the cost of integrating multiple cameras and maximize their system performance. Because these cameras are extremely versatile, they are also being used for applications that range from outdoor traffic control to eye surgery.

We cross-breed innovations from the three markets we serve to make all of our cameras better. Our experience in medical applications – where clear images are critical for correct diagnosis – motivated us to develop cameras with superior image quality. This technology has been transferred to our machine vision cameras, enabling our customers to substantially increase defect detection and yields. The military market requires high-performance imaging in harsh environments driving us to continuously improve the reliability of all of our cameras. For our machine vision customers, this means less downtime and lower cost of ownership.

Benefits/Features

- Superior inspection and measurement capability through Adimec's proprietary imaging technology.
- High resolution (1 – 4 megapixel) for crisp, clear images in a variety of aspect ratios.
- High frame rates allow for faster throughputs.
- Rugged design allows for high product reliability and reduces sensitivity to environment.
- Small outline and low power consumption minimizes system constraints.

Applications

- Semiconductor inspection
- Electronics manufacturing
- Metrology
- Industrial X-ray
- Traffic monitoring

Adimec has the ability to offer additional camera functionality and create customer specific cameras for large volume programs. For more information, please contact your nearest Adimec office.

Adimec

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

- Machine Vision
- Medical Imaging
- Defense Imaging

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

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

