

ADIMEC-4000m Fast, digital 4-Megapixel camera for demanding machine vision applications

- 2048 x 2048 pixels with up to 16 progressive images per second
- Full a-synchronous image capture with programmable partial scan
- Small outline & low power consumption
- Unparalleled image quality



Member of a fully compatible product family sharing a common mechanical, optical, hardware and software interface



Adimec-1000m
1004*1004@50fps



Adimec-1600m
1600*1200@34fps



Adimec-2000m
1920*1080@32fps

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ADIMEC-4000m



The Adimec-4000m camera has been designed for demanding OEM customers that apply fast Megapixel cameras in the latest technology Machine Vision applications. The state of the art camera electronics allow for the highest possible frame rate, image quality and reliability. To support a wide variety of frame grabbers, the Adimec-4000m camera can be ordered in single tap (Adimec-4000m/S) or dual tap (Adimec-4000m/D) output mode with up to 8 or 16 fps, respectively.

The Adimec-4000m is a member of the Adimec line of fast Megapixel cameras that offer similar functionality and allow for easy upgrading. Its advanced features and unique performance ratio can not be found in any competing product. The Adimec-4000m is a perfect choice as a key component in a top of the line machine vision system.

FEATURES

2048 x 2048 with 7.4 μm square pixels
 Interline CCD with high Blue and NIR response
 Very stable and accurate sensor mounting
Adimec-4000m/S, up to 8 progressive fps @ full resolution via a single tap output
Adimec-4000m/D, up to 16 progressive fps @ full resolution via dual tap output with excellent channel matching characteristics
 12 bit signal processing with defect pixel correction
 Built-in Test Signal Generator
 Camera Link interface
 Small outline & low power consumption
 High Product reliability through rugged design

BENEFITS

Allows for imaging of small details in a large inspection area
 Supports low light levels and strobe illumination
 Ensures accurate and reproducible measurement results
 Offers highest quality of images at lowest overall cost

 Offers the fastest frame rate without sacrificing image quality
 Creates zero defect images of unparalleled quality
 Allows for automatic testing of the digital imaging chain
 Enables 'Plug and Play' frame grabber connection
 Facilitates integration in modern inspection machines
 Allows failure free operation in fast moving inspection machines

TYPICAL PERFORMANCE DATA

MTF	50% contrast @ 67 lp/mm (limiting resolution)
Sensitivity (for full video)	
1x Gain	3.3 Lux
8x Gain	0.4 Lux
Dynamic range	> 60 dB
Spectral Response	
350 nm	20%
500 nm	55%
700 nm	25%

IMAGE ACQUISITION & READOUT -Fully programmable

Continuous	Programmable frame rate and integration time down to 10 μs
Control	Full a-synchronous image capture via external control input
Partial Scan format	Programmable start line and number of lines, V-binning possible

INTERFACE -CAMERALINK 8 OR 10 BITS

Camera control	Fully RS232 Programmable over Camera Link interface
Power input	10.5 - 14 Vdc < 8 W
Lens mount	Standard: adjustable C-mount Option: C to F-mount adapter / Option: T2 mount (M42x0.75) on request
Camera outline & weight	52.5 x 52.5 x 80 mm, 250 grams
Operating Temperature (full performance)	-10 $^{\circ}\text{C}$ to +40 $^{\circ}\text{C}$
MTBF (MIL-HDBK-217F)	75,000 hours @ 40 $^{\circ}\text{C}$

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 OEM's around the world who review quality and reliability as essential to their success.

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