

Messen

Prüfen

Kontrollieren

Sortieren

Positionieren

Vollständigkeitskontrolle

Vorhandenseinskontrolle

Oberflächeninspektion

Teileprüfung

Werkzeugvoreinstellung

3D Sehen

3D Erkennung

Robot Vision

Markierungskontrolle

Koplanarität

BGA-Prüfung

Konturprüfung

Fehler- und  
Verschmutzungserkennung

OCR / OCV

Zeichenerkennung

Code Lesen

Faden- und Stoffprüfung

Papier- und Folienprüfung

Metallprüfung

Displayprüfung LCD, LED,  
OLED

Mustervergleich

Blasenkontrolle

Robotersteuerung

Bohrer Vermessung

Thermografie

Plastik-Inspektion

2D

**und vieles mehr...**

## Product data:

# EmSens Measure



## Description:

### Easy Measurement!

The Free Caliper command works similar to a real caliper and is placed on the area that has to be measured.

The Distance command determines the distance according to the selected options, between two points or a point and a straight line.

More information on our website: [www.evt-web.com](http://www.evt-web.com).

Please contact us if you have any questions: **+49 (0) 721 668 004 23 0**

## Camera Models Basler ace

Model	Resolution	Sensor	Frame Rate	Interface
Basler acA800-200gm	800 x 600	1/3.6" monochrome	240 fps	Gigabit Ethernet
Basler acA1440-73gm	1440 x 1080	1/2.9" monochrome	73 fps	Gigabit Ethernet
Basler acA1600-60gm	1600 x 1200	1/1.8" monochrome	60 fps	Gigabit Ethernet
Basler acA2440-20gm	2448 x 2048	2/3" monochrome	20 fps	Gigabit Ethernet
Basler acA800-510um	800 x 600	1/3.6" monochrome	511 fps	USB 3.0
Basler acA1440-220um	1440 x 1080	1/2.9" monochrome	220 fps	USB 3.0
Basler acA2440-35um	2448 x 2048	2/3" monochrome	35 fps	USB 3.0
Basler acA800-200gc	800 x 600	1/3.6" color	240 fps	Gigabit Ethernet
Basler acA1440-73gc	1440 x 1080	1/2.9" color	73 fps	Gigabit Ethernet
Basler acA800-510uc	800 x 600	1/3.6" color	511 fps	USB 3.0
Basler acA1440-220uc	1440 x 1080	1/2.9" color	220 fps	USB 3.0
Basler acA2440-35uc	2448 x 2048	2/3" color	35 fps	USB 3.0

## Camera Models Basler dart

Model*	Resolution	Sensor	Frame Rate	Interface
Basler daA1280-54um	1280 x 960	1/3" monochrom	54 fps	USB 3.0
Basler daA1600-60um	1600 x 1200	1/1.8" monochrom	60 fps	USB 3.0
Basler daA1920-30um	1920 x 1080	1/3.7" monochrom	30 fps	USB 3.0
Basler daA2500-14um	2590 x 1942	1/2.5" monochrom	14 fps	USB 3.0

\* all camera models are also available with color sensor



## Computing Hardware

### EmSys – Machine Vision Computer

#### Features

- Intel ATOM SoC E3845 Quad Core 1.91 GHz
- 4G-byte DRAM, 64G-byte storage for operating system
- 64-bit OS: Windows 10 IoT Enterprise, Windows 10 IoT Core, Ubuntu 16.04
- HDMI and VGA Display Ports
- 4 GigE camera ports with PoE+ support
- 4 independent constant current LED driver
- 8 digital Inputs and 8 digital Outputs
- DINrail mount, fanless



### Raspberry Pi



### Odroid



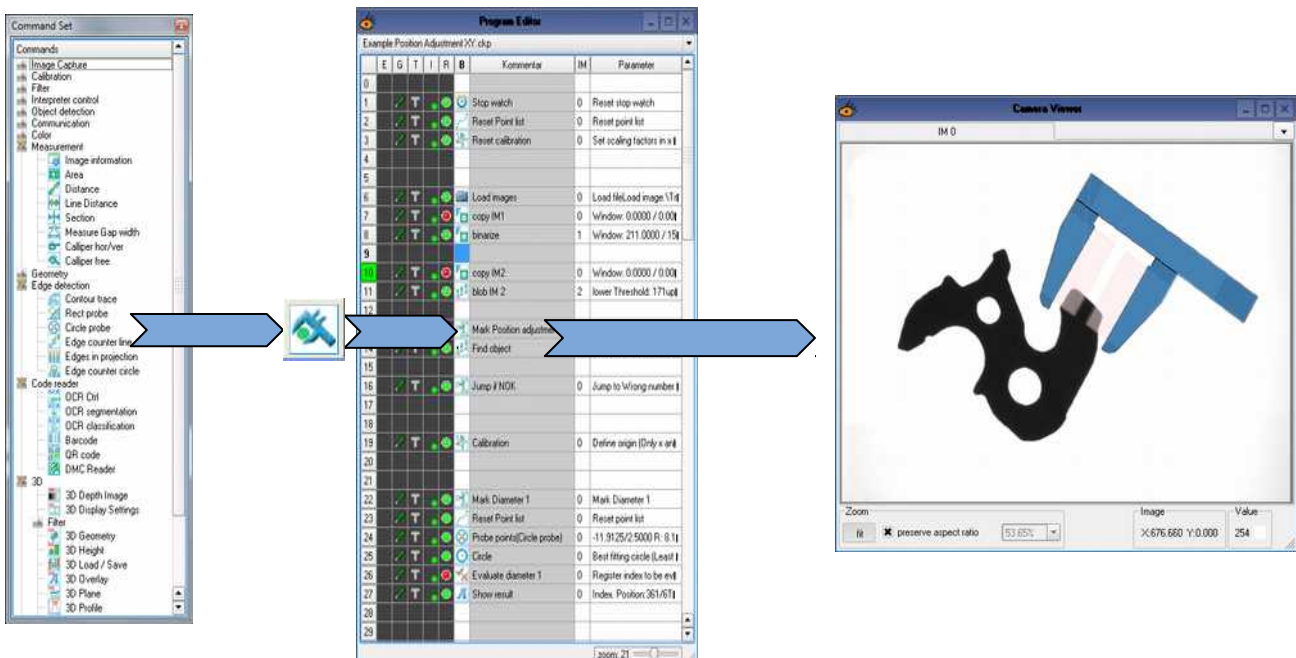
## Command Set

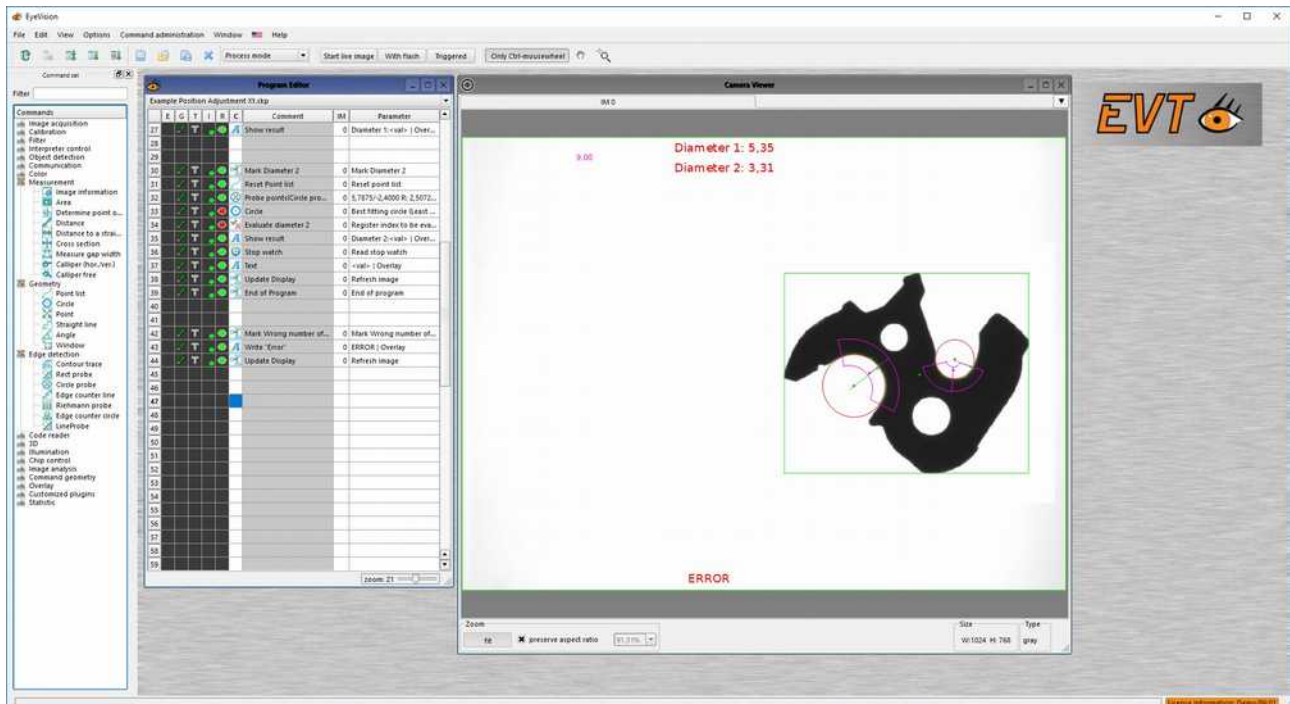
	Image Acquisition		Object count BLOB		Script Interpreter		Distance (Point-Line)		Contour Tracking
	Asynch. Image Acquisition		Check Input		Window		Distance (Line-Line)		Circle edge detection
	Camera Control		Set Output		Rectangular edge detection		Caliper (hor./vert.)		Edge counter on a line
	Calibration		Display Register Values		Overlay Arrow		Caliper any direction		Edge counter on a circle
	Stop watch		Global String		Overlay Circle		Best fit Circle		
	Program Flow Control		Image Transfer		Overlay Cross		Point Operation set		
	Subroutine call		Image Information		Overlay Line		Best fit straight line		
	Value evaluation		Point List		Overlay Square		Calculate angle		

## EyeVision Software

The drag-and-drop software with the graphical user interface.

Every EmSens vision sensor contains the EyeVision software with a specially activated command set (see list above). This command set can be extended with any command out of the EyeVision command range.





EyeVision Configuration Mode: measure diameter with Circle Commands

## Further *EmSens* Vision Sensors:

- EmSens BarCode Reader
- EmSens OCR Reader
- EmSens Match
- EmSens Object Count
- EmSens ColorInspect
- EmSens DMC Reader