

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:

EyeCheck 2000 & 3000



Description:

The combination of EyeVision software and the latest cameras of the EyeCheck 2000 & 3000 series enables the user to efficiently solve image processing applications.

The smart cameras include a Texas Instruments processor, an ARM Cortex-A8 core and high computing power.

Additionally they contain the EyeVision image processing software, with its drag-and-drop programming for an extremely user friendly handling – even without programming skills difficult tasks can be solved.

For more information have a look at our website or contact us:
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www.evt-web.com

Technical Data

Sensors

EyeCheck 2xxx (CMOS Sensors)

Model	EC2000	EC2050	EC2200	EC2210	EC2300	EC2600
Variation	G / C	G / C	G / C	G / C	G / C	G / C
Resolution	640 x 480	752 x 480	1280 x 960	1280 x 960	1280 x 1024	2592 x 1944
MPixel	0,4	0,4	1,2	1,2	1,3	5,0
Max. FPS (Hz)	60	60	40	25	60	5,8
Shutter type	Global	Global	Global	Rolling	Global	Global
Sensor size	1/3"	1/3"	1/3"	1/3"	1/1.8"	1/2.5"
Pixel size μm	6 x 6	6 x 6	3,75 x 3,75	3,75 x 3,75	5,3 x 5,3	2,2 x 2,2
Exposure time	10 μs - 460ms	10 μs - 460ms	10 μs - 1s	10 μs - 1s	10 μs - 1s	10 μs - 10s
Trigger (HW/SW)	Ja / Ja	Ja / Ja	Ja / Ja	Ja / Ja	Ja / Ja	Ja / Ja
Sensor maker	Aptina	Aptina	Aptina	Aptina	e2v	Aptina
Sensor	MT9V034	MT9V034	MT9M021	MT9M034	EV76C560	MT9P031

EyeCheck 3000 (CCD Sensors)

Model	EC3000	EC3010	EC3050	EC3200	EC3300	EC3400	EC3600
Variations	G / C	G / C	G / C	G / C	G / C	G / C	G / C
Resolution	640 x 480	640 x 480	776 x 580	1280 x 960	1360 x 1024	1600 x 1200	2448 x 2050
MPixel	0,3	0,3	0,5	1,2	1,4	1,9	5,1
Max. FPS (Hz)	90	104	87	31	30	28	10
Shutter type	Global	Global	Global	Global	Global	Global	Global
Sensor size	1/3"	1/2"	1/2"	1/3"	1/2"	1/1,8"	2/3"
Pixel size μm	7,4 x 7,4	9,9 x 9,9	8,3 x 8,3	3,75 x 3,75	4,65 x 4,65	4,4 x 4,4	3,45 x 3,45
Exposure time	10 μs - 10s	10 μs - 10s	10 μs - 10s	10 μs - 10s	20 μs - 10s	20 μs - 10s	20 μs - 10s
Trigger (HW/SW)	Ja / Ja	Ja / Ja	Ja / Ja	Ja / Ja	Ja / Ja	Ja / Ja	Ja / Ja
Sensor maker	Sony	Sony	Sony	Sony	Sony	Sony	Sony
Sensor	ICX424AL/AQ	ICX414AL/AQ	ICX415AL/AQ	ICX445ALA/AQA	ICX267AL/AK	ICX274AL/AQ	ICX655AL/AQ

Hardware

ARM Cortex-A8,
up to 1 GHz (OMAP 37 Serie)

ADC Resolution: s 14 Bit
Image depth in memory: s 12 Bit

DSP up to 800 Mhz C64x:

L1: 32 KB D + 32 KB I
L2: 256 KB

Automatic Gain Control
(AGC)

SIMD:

NEON, 8 x 8 Bit, VFPv3

Automatic Exposure Control
(AEC)

Memory:

DDR RAM 512 MB

Flash: intern microSD,
extern available microSD

Power consumption less than 5 W

Connection:

100 MBit
Ethernet LAN
2x Hirose 12-Pin:
- #1 (Stecker): RS232 power supply
- digitale I/O
- #2 (female): VGA Display
(analog. resolution up to XGA). USB 2.0
Host

MicroSD Card
USB 2.0
on-the-go

Industrial power supply range:
12..24 VDC

C-mount. Optional: CS-/S- mount,
12C-support for Underwater lenses,
Support of zoom lenses (optional)

Permitted environmental temperature:
- operation: 0 to 50° C / 30 to 80 % RH
- storage: -20 to 60° C / 20 to 90 % RH

Digitale I/Os:

- 2 Inputs 3-24V ± 1V
(Optocoupler with current limiting)
- 4 Outputs up to 24V and 700 mA
(High-Side) Direct-Drive-Output
for high power-light,
- Relais or - trigger

weight (without lens): ca. 195 g

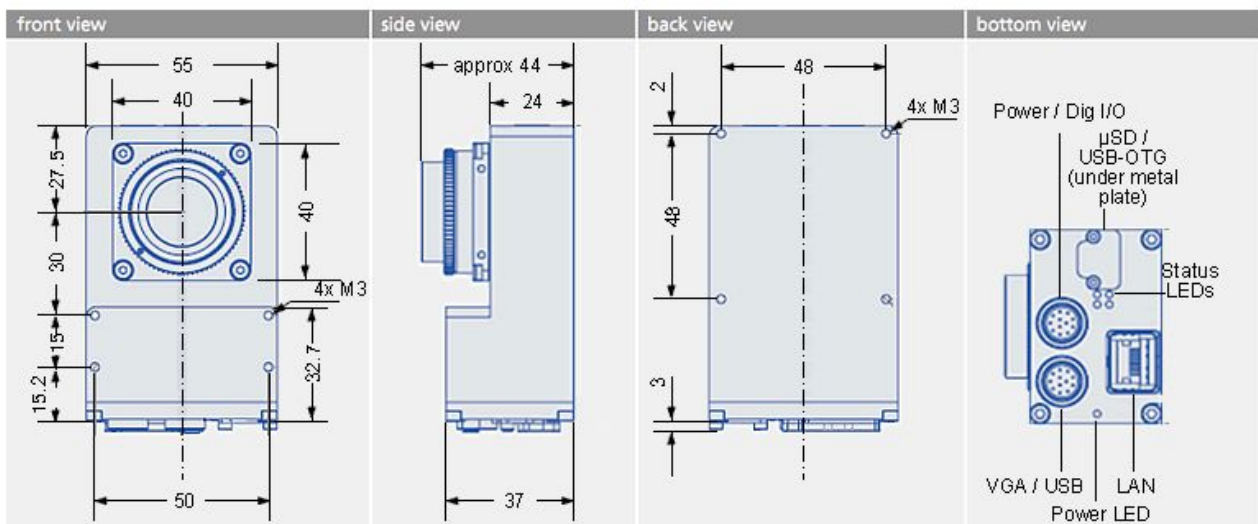
dimensions (without lens):
87,5 x 55 x 37 mm

IP65 as option

Software

Operating system: Linux	Support <i>EyeVision</i> Software
Applications: - Industrial image processing: OCR, bar code, DMC, etc. - supervision and surveillance - Automation - bio science and medical applications	Interfaces: Mono for .NET applikations, Webserver for remote access and MMI

Dimensions



Further products:

- EyeVision image processing software for Smart Cameras, Vision Sensors and PC
- EyeCheck 9xx & 1xxx Smart Cameras
- EyeSens Vision Sensors
- EyeScan 3D cameras