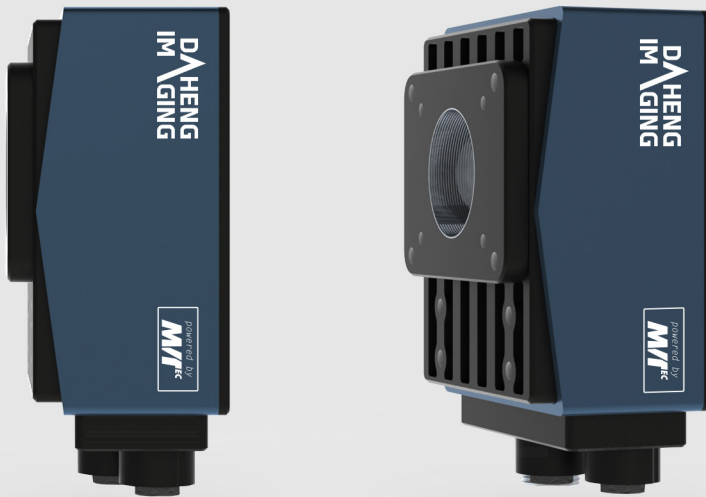


PALLAS Series Smart Camera

Powerful features | Ease of use | Fast processing speed | Low power consumption



Bar / QR code reading | OCR | Measurement | Calibration | Detection | Location



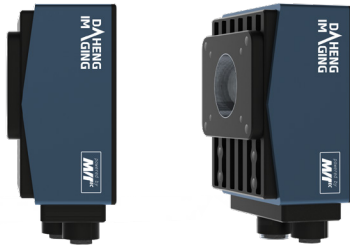
Founded in 1991, DAHENG IMAGING is a leading supplier for professional imaging components as well as machine vision solutions. Since its

founding, the company has been dedicated to the advancement of imaging & vision technologies and delivered a range of own-developed vision products with many proprietary innovations. Being a know-how company with long history in machine vision industry, DAHENG IMAGING deserves trusts from counterparts all over the world and has established close cooperation. After over two decades of rapid growth, DAHENG IMAGING becomes the most famous and successful vision company in China.

As core asset of public company "DAHENG TECH" (stock symbol: 600288), DAHENG IMAGING is committed to providing our customers with cutting edge technology, high quality products and perfect service.

PALLAS Series Smart Camera

Metal housings | Compact and robust | High price/performance ratio | Low power consumption

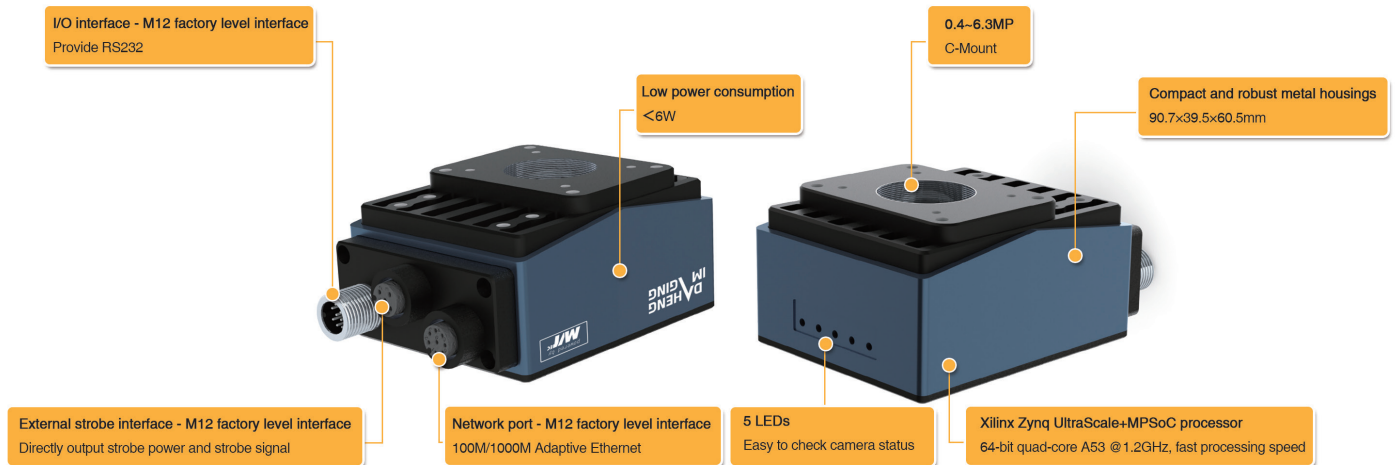


- 64-bit quad-core processor
- Innovative "ARM+FPGA" architecture
- Graphical user interface (GUI)
- Multiple communication interfaces
- Low power consumption (<6W)
- High price/performance ratio

The PALLAS series camera is DAHENG IMAGING's first industrial smart camera, featuring high price/performance ratio and low power consumption. Thanks to the compact design, robust housings and Hirose connectors, the camera can be easily installed and can secure the reliability in harsh environment.

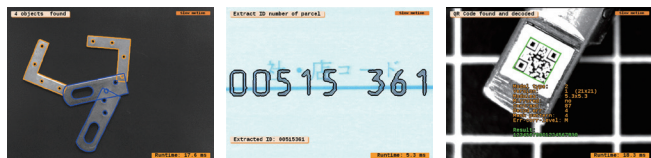
With Xilinx Zynq UltraScale+ MPSoC (quad-core A53@1.2GHz) processor, the PALLAS series camera has fast processing speed and excellent performance. Integrated powerful MERLIC graphical visual software, the camera provides rich drag-and-drop visual tools and can be easily operated without user programming.

The PALLAS cameras are widely used in bar code/ QR code reading, OCR, measurement, calibration, detection and location, and especially suitable for machine vision applications such as logistics, electron component, semiconductor, automobile, electron equipment, etc.



Compact Smart Camera Designed for Automation Applications

Outstanding performance | Easy to integrate | High flexibility



Shape-based template matching

640×480, 48 times / sec

OCR

640×480, 172 times / sec

QR code reading

640 × 480, 56 times / sec

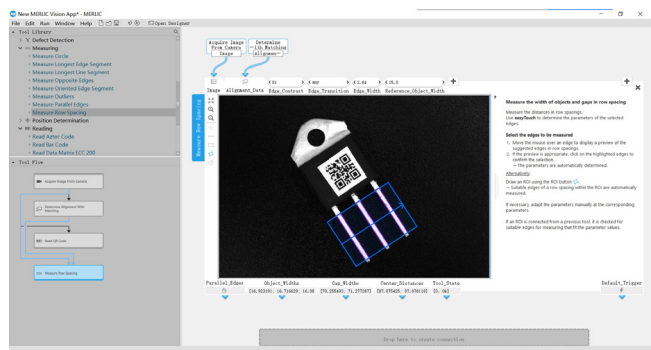
Powerful processing platform

New generation Xilinx Zynq UltraScale+MPSoC processor
(quad-core A53@1.2GHz)

Innovative "ARM + FPGA" architecture

64-bit processor

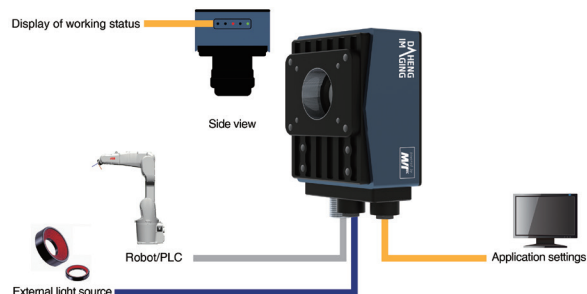
Low power consumption, high flexibility, fast and stable



GUI

Integrate powerful graphical vision software

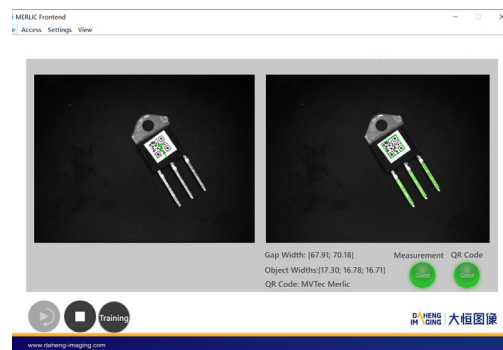
Provide rich visual tools without user programming



Multiple communication interfaces

Support UART, I/O, Ethernet data transmission methods

Provide light source control interface, no expansion board required



Custom GUI

User-defined GUI

Users can freely design GUI

Integrated Graphical Vision Software – WYSIWYG

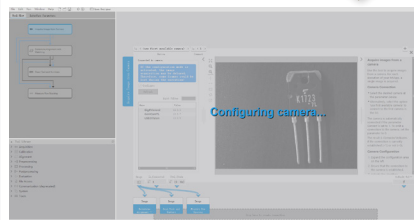
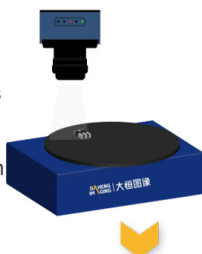
Three steps to quickly build a visual platform

Internal integration of customized graphical visual software MERLIC, provide rich plug and play tools, no programming requirement, ease of use.

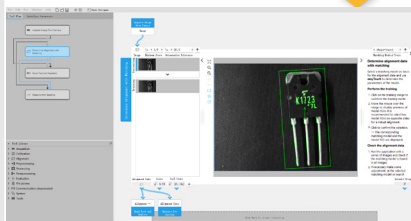
1 Create an application

Quick on-site assessment,
WYSIWYG

- 1) Camera parameter configuration
- 2) Drag-and-drop tools
- 3) Intuitive tool flow
- 4) Interactive operation
- 5) Rich visual tools



Configuring camera parameters

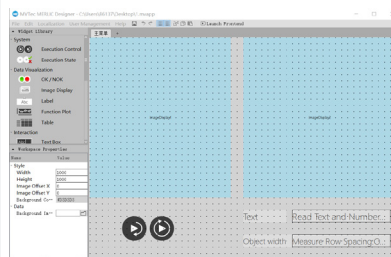


Interactive program creation



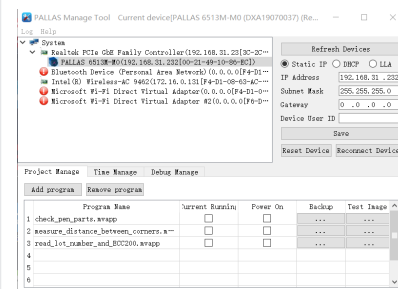
2 Custom GUI

Users can freely design GUI

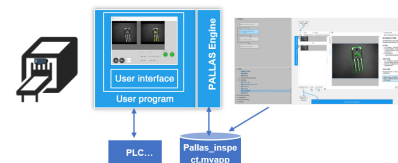


3 Load and run

Convenient program
management and time
management tools to load
programs into the camera, set
the power-on self-start, back-up
camera programs to PCs, etc.

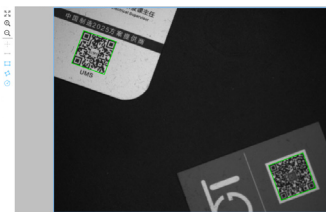


Put the created program into the camera
to run, you can set the power-on self-
start, run offline.

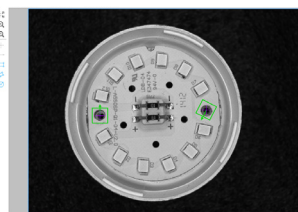


Applications

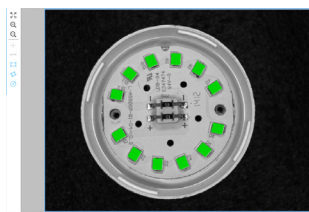
The PALLAS smart cameras are widely used in bar code/ QR code reading, OCR, measurement, calibration, detection and location, and especially suitable for machine vision applications such as logistics, electron component, semiconductor, automobile, electron equipment, etc.



QR code



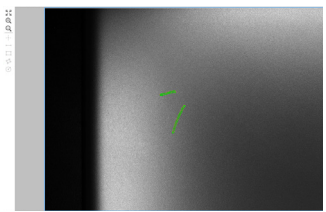
Location



Counting



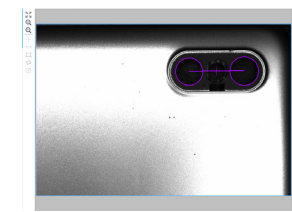
Bar code



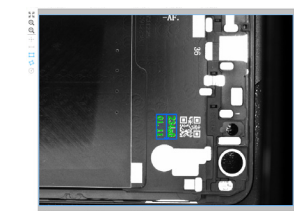
Defect detection



Reading



Measurement



OCR

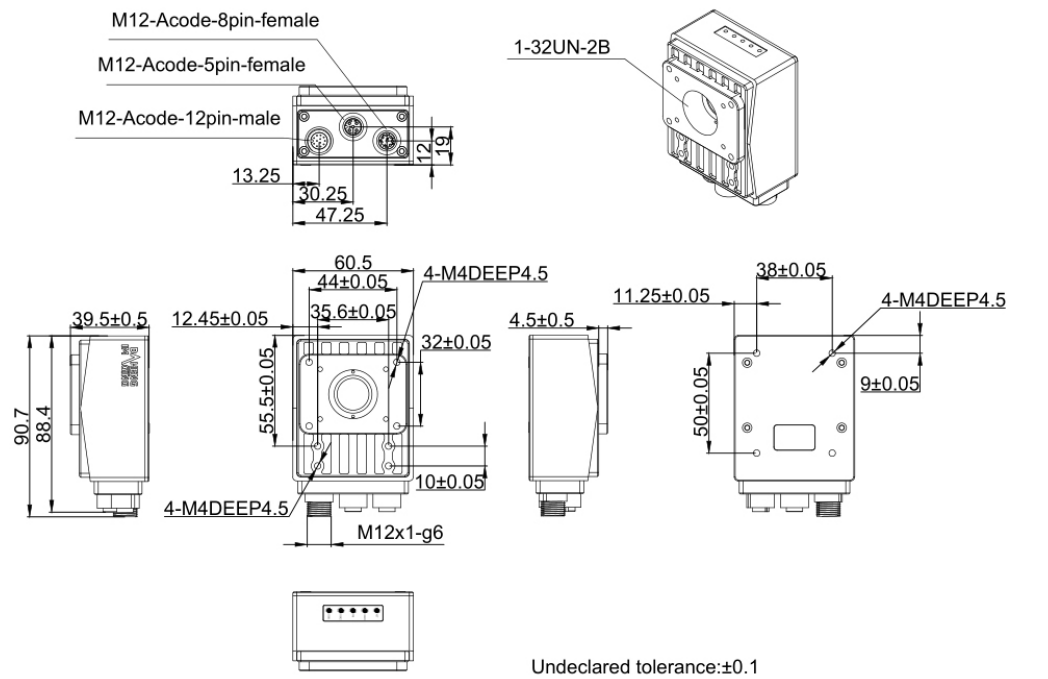
General Specification

Model	PALLAS 6504M/C-Mx	PALLAS 6513M/C-Mx	PALLAS 6516M/C-Mx	PALLAS 6563M/C-Mx
Operating System	Embedded Linux system			
Version	MERLIC			
Storage	2GB RAM, 8GB Flash			
Processor	Quad-core A53@1.2GHz			
Sensor	1/2.9" Sony IMX287 global shutter CMOS	1/3" ON AR0135 global shutter CMOS	1/2.9" Sony IMX273 global shutter CMOS	1/1.8" Sony IMX178 rolling shutter CMOS
Resolution	720×540	1280×960	1440×1080	3088×2064
Frame Rate	444fps	54fps	128fps	35fps
Pixel Size	6.9μm × 6.9μm	3.75μm × 3.75μm	3.45μm × 3.45μm	2.4μm × 2.4μm
Data Interface	100M/1000M Adaptive Ethernet			
Pixel Bit Depth	8 bits			
Lens Mount	C			
Mono/ Color	Mono/Color			
Weight	200g			
Dimensions	90.7mm×39.5mm×60.5mm (without lens adapter or connectors)			

Functional Classification

Model	PALLAS 65xxM/C-M0	PALLAS 65xxM/C-M1	PALLAS 65xxM/C-M2	PALLAS 65xxM/C-M3	PALLAS 65xxM/C-M4
Function	Full function	Code reading	Code reading + OCR	Detection, counting, location	Measurement

Camera Dimensions



unit: mm

More Versions

The PALLAS series of smart cameras are also available in open platform version PALLAS P504M/C, PALLAS P513M/C, PALLAS P516M/C, PALLAS P563M/C, which can be developed and programmed by users.

The open smart cameras provide operating environments such as OpenCV, Qt and Python, and support Windows and Linux platforms to develop applications.

General Specification

Model	PALLAS P504M/C	PALLAS P513M/C	PALLAS P516M/C	PALLAS P563M/C
Operating System	Embedded Linux system			
Version	Open-platform			
Storage	2GB RAM, 8GB Flash			
Processor	Quad-core A53@1.2GHz			
Sensor	1/2.9" Sony IMX287 global shutter CMOS	1/3" ON AR0135 global shutter CMOS	1/2.9" Sony IMX273 global shutter CMOS	1/1.8" Sony IMX178 rolling shutter CMOS
Resolution	720×540	1280×960	1440×1080	3088×2064
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Pixel Size	6.9μm × 6.9μm	3.75μm × 3.75μm	3.45μm × 3.45μm	2.4μm × 2.4μm
Data Interface	100M/1000M Adaptive Ethernet			
Pixel Bit Depth	8 bits			
Lens Mount	C			
Mono/ Color	Mono/Color			
Weight	200g			
Dimensions	90.7mm×39.5mm×60.5mm (without lens adapter or connectors)			

29 Years Dedicated to Machine Vision!



China Daheng Group, Inc. Beijing Image Vision Technology Branch

Headquarters

Add.: 12F Daheng Science & Technology Tower, No.3 Suzhou Street, Haidian District, Beijing China, 100080

Tel. : +86 10 82828878

Fax.: +86 10 82828996

E-mail: isales@daheng-imaging.com

<http://www.daheng-imaging.com/en>



July, 2020