



ED-AIC1000

Datasheet

by EDA Technology Co., Ltd

built: 2026-03-06

ED-AIC1000 Datasheet-draft

Note

Version	Description	Date
-	Draft	2026.03.06

Industrial Smart Camera Based on Raspberry Pi CM0

- 1GHz quad-core 64-bit Arm Cortex-A53 processor
- 512MB SDRAM, 8GB or 16GB eMMC storage available
- Utilizes a 1.3MP image sensor with a sampling rate of up to 120 FPS for ultra-fast image acquisition
- Equipped with a motorized auto-focus module for automatic zoom
- Integrated modular lighting design, with each lighting zone independently controllable
- Orange industrial aluminum alloy housing, supports bracket mounting



Specifications

System	
CPU	1GHz quad-core 64-bit Arm Cortex-A53 processor
VPU	H.264/MPEG-4 video decoding, 1080p@30fps H.264 encoding, 1080p@30fps
GPU	OpenGL ES 1.1/2.0 graphics processing
Memory	512MB SDRAM
Storage	8GB or 16GB eMMC storage available

Software	
Operating System	Raspberry Pi OS (Lite) 32-bit
Communication Protocols	Modbus TCP, TCP/IP, and UDP

Panel I/O	
Power & I/O (12-Pin)	<p>1 x Power & I/O Connector, 12-Pin aviation connector. External signals are accessed via a Power & I/O Cable (12-Pin M12 female to bare wire/RJ45), including power input, 100M Ethernet, RS232, trigger, and DO.</p> <ul style="list-style-type: none"> • 1 x DC IN: 2-Pin, supports DC 24V input, signal definition DC-/DC+ • 1 x 100M Ethernet: 4-Pin, signal definition TX+/TX-/Rx+/RX- • 1 x RS232: 2-Pin, signal definition TX/RX

Panel I/O	
	<ul style="list-style-type: none"> • 1 x DO: 2-Pin, signal definition DO/COM_OUTPUT • 1 x Trigger: External trigger signal, 2-Pin, signal definition Trigger+/Trigger+

Indicator	
Power	1 x Power indicator, indicates camera power on/off status
Fault	1 x Fault indicator, indicates camera fault status
Status	1 x Status indicator, indicates camera operational status
Network	2 x Network indicators, indicate network link and data communication status

Lighting and Lens	
Lighting	3 lighting zones, default red light, each zone supports independent configuration
Lens	Supports optional 6mm, 8mm, or 12mm M12 fixed-focal-length lenses Includes motorized auto-focus module for automatic focusing

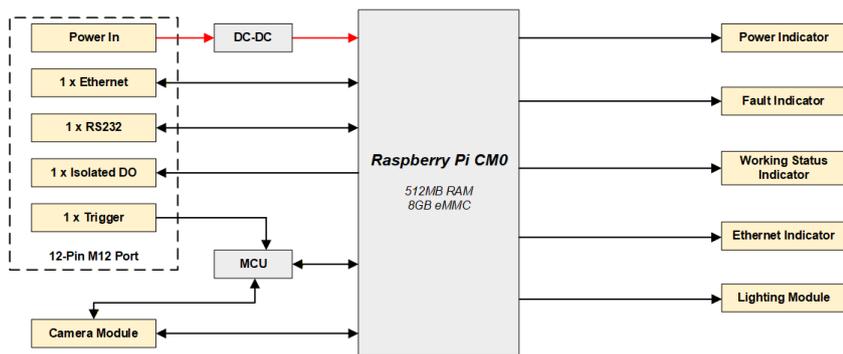
Performance Characteristics	
Image Sensor	1.3MP, Global Shutter
Frame Rate	Up to 120 FPS
Aiming Point	Red LED dot

Electrical Characteristics	
Input Voltage	DC 24V ($\pm 10\%$) A DC 24V 1A power adapter is recommended.
Power Consumption	24W (Max)

Mechanical Characteristics	
Dimensions	67mm x 46mm x 46mm
Weight	About 120g
Installation	Bracket mounting, mounting bracket optional

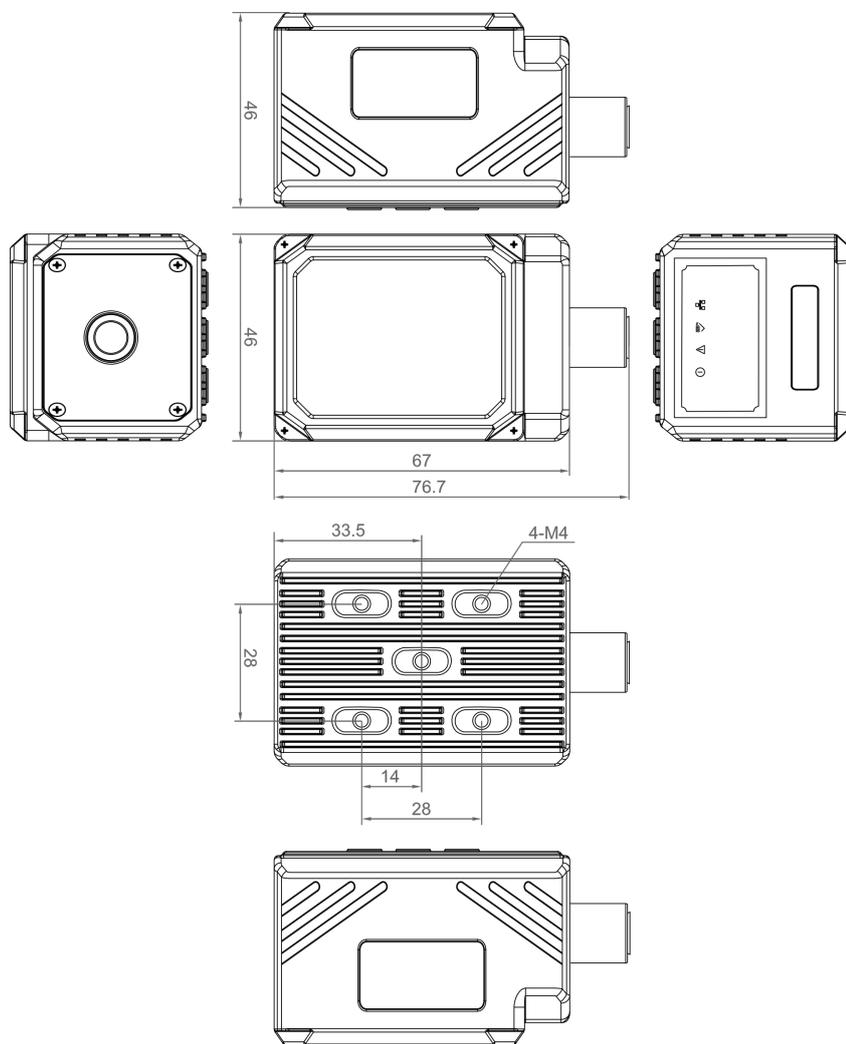
Environmental & Regulatory	
Operating Temperature	0°C ~ 60°C
Storage Temperature	-40°C ~ 70°C
Ambient Humidity	5% ~ 90% (non-condensing)

System Diagram



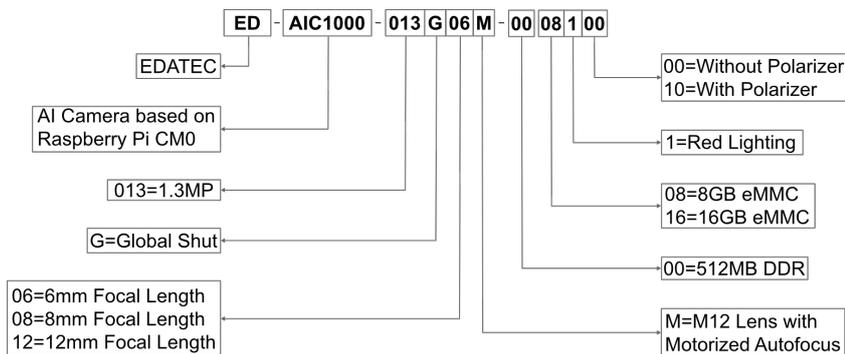
Dimensions

Unit: mm



Ordering Information

Coding Rules



Example
P/N : ED-AIC1000-013G06M-0008100
 Configuration : AI Camera Based on Raspberry Pi CM0, with 512MB DDR, 8GB eMMC, 1.3MP sensor, global shut, 6mm M12 lens with motorized autofocus and red lighting.

Ordering Code

Model	Description	Stocking Level
ED-AIC1000-013G06M-0008100	512MB DDR, 8GB eMMC, 1.3MP sensor, global shut, 6mm M12 lens with motorized autofocus and red lighting	Preview
ED-AIC1000-013G08M-0008100	512MB DDR, 8GB eMMC, 1.3MP sensor, global shut, 8mm M12 lens with motorized autofocus and red lighting	Preview
ED-AIC1000-013G12M-0008100	512MB DDR, 8GB eMMC, 1.3MP sensor, global shut, 12mm M12 lens with motorized autofocus and red lighting	Preview

TIP

If you require products with other configurations, please contact our sales team separately.

Optional Accessories

Optional cables and mounting accessories are available.

Ordering Code	Description	Picture
ED-ACC-AIC-PWR-B-03	Power & I/O Cable, 12-Pin M12 female to bare wire/RJ45, 3 meters	

Ordering Code	Description	Picture
		
ED-ACC-AIC-DW-FIX001	Mounting Bracket, for fixing the product to profiles	
ED-ACC-AIC-DW-FIX002	3 x M4 * 8 screws (with 3 spring washers and 3 flat washers) 1 x M6 * 10 screw (with 1 spring washer and 1 flat washer)	

Packing List

- 1 x ED-AIC1000 Unit