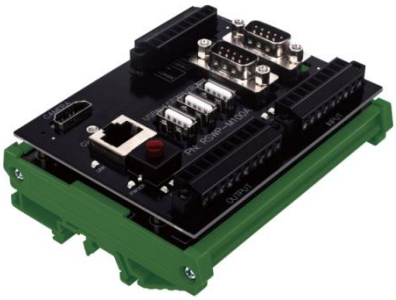
Compact Smart Camera For Vision Applications

SMARTX – R Series



SMARTX R series is our latest x86 smart camera that features Intel® Atom™ quad core processor E3845 , 1.91 GHz which offers a proven hardware platform combined with high computing speed and flexibility to serve a wide range of vision applications across diverse industries.

When integrated to WIZER vision software, SMARTX R series can deliver a rugged and highly flexible machine vision solution with good cost value and ease of use in a compact form factor.

SMARTX R series is a "Out of the box, Plug & Play" vision camera with illumination control and digital I/O which make it possible for end users and system integrators to implement vision applications more efficiently.

WIZER vision software is a drag & drop concept, with a wide suite of inspection tools developed from Halcon library, and it is easy to configure one's own vision applications without any programming at all. A graphical user interface can be designed in very short time too.

Essential Features

Quad core Intel® ATOM processor E3845 1.91GHz

Quiet Fanless Design with ready programmable I/Os & illumination control

Small form factor with energy-efficient hardware

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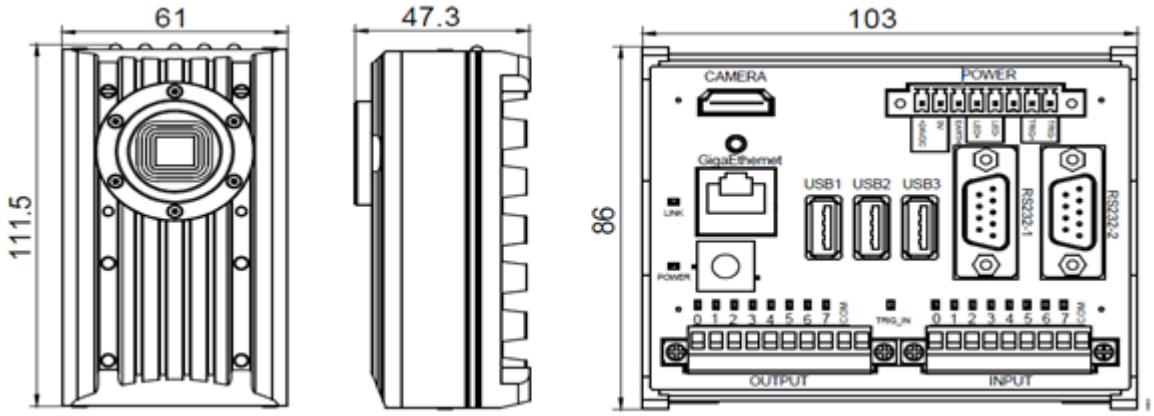

Application Areas

- ***Barcode / DataMatrix Code Reading & Traceability***
- ***Optical Character Reading (OCR)***
- ***Part Presence & Orientation***
- ***Positioning & Alignment for Robot Guidance***
- ***Component Measurement & Tolerance Checking***
- ***Color Inspection***

CPU	CPU Model	Intel® ATOM™ CPU E3845
	CPU Type	Quad-core 1.91GHz, 64-bit x86
	L2 Cache	2M-byte
	Memory	4G-byte DDR3L-1333 (solder on board)
	Storage	64G-byte eMMC5.0 Flash (solder on board)
I/O Module	Ethernet	One Gigabit Ethernet by Intel® I210 controller
	USB	Three USB2.0 ports
		One internal USB 2.0 (inside camera casing, dedicated for USB dongle)
	Monitor Port	One HDMI port, support resolution from VGA (640x480) to 1080P
	Serial Port	Two 9-pin RS232 ports with TX/RX signal only
	Trigger Input	One isolated trigger input (5V/12V/24VDC supported)
	General Input	Eight photo-isolated input ports (5V/12V/24VDC supported)
	General Output	Eight photo-isolated output ports (Max current 0.3A, Max voltage 40VDC)
Special Functions	LED Driver	External LED driver (in IO module) supports general LED Illuminator, with max output 1.5A/24V
	LED Indicator	Five red/green indicators: Power, LAN and three user-define LEDs
	Watchdog	Hardware Watchdog timer (1 to 256 second adjustable)
	Temperature Monitoring	Internal temperature sensor, real-time mainboard temperature monitoring
OS (64bit)		Windows 10 IoT Enterprise, Linux (Ubuntu)
Power Consumption		12W Max
Power Supply		20 to 30VDC (24VDC recommended), 2A Max
Operation Condition		-40°C to +80°C
Storage Condition		-40°C to +90°C
Hardware Structure		Aluminium alloy casing, fan-less design
Dimensions		110 x 61 x 47 mm
Weight		380 g
Standard		CE