

Code Readers



- Built-in megapixel image sensor combined with self-developed advanced sampling technology and millisecond decoding algorithm
- Convenient operation, one key to adjust parameters, greatly saving the time of debugging
- Powerful network function, support 32 sets of code reader combination work, through the slave station data summarized to the master station unified sending



Appearance

Resolution	1280 × 800			
Frame Rate	60			
Shutter	Global Shutter			
Color/B&W	Black and white			
Read Maximum Speed	60/sec			
Exposure Time	20 us ~ 1sec			
Gain	0 dB ~ 256 dB			
Image size	3 um x 3 um			
Target Size	1/4"			
Focusing mode	Mechanical tuning			
Focus distance	8mm	12mm	16mm	
Reading distance	100 ~ 1000mm			
Field of view	Maximum 480mm*300mm (@1000mm Distance, 8mm Focal Length)			
Barcode Category	1D Code: Code 39, Code93, Code128, EAN–8, EAN–13, Interleaved 2 of 5, UPC, Pharmacode; 2D Code: QR code, DataMatrix			
Position indication	1 green dot indicates the center area of the scanning position			
Status Indication	5 status LEDs and buzzer			
Light source	Non–polarized red light, Non–polarized white light, Polarized red light, Polarized white light			
Input control	Two input controls, opto–coupler isolated, support NPN, PNP type			
Output Control	Two input controls, opto–coupler isolated			
Communication Protocol	TCP Server, TCP Client, ModBus TCP, ModBus RTU, Profinet, Ethernet/IP, MELSEC/SLMP, Fins, Serial			
Communication Interface	RS232、Ethernet			
Power Input	24 VDC			
Power Consumption	15W			
Overall Dimension	58*53.5*69mm			
weight	About 220g			
Working Temperature	0 ~ 45℃			
Storage Temperature	–20 ~ 70℃			
Humidity	5% ~ 95%RH (Non–condensing)			
Protection Grade	IP67			
Model	Non–polarized red light	RCD-AI100-X08R	RCD-AI100-X12R	RCD-AI100-X16R
	Non–polarized white light	RCD-AI100-X08W	RCD-AI100-X12W	RCD-AI100-X16W
	Polarized red light	RCD-AI100-X08RD	RCD-AI100-X12RD	RCD-AI100-X16RD
	Polarized white light	RCD-AI100-X08WD	RCD-AI100-X12WD	RCD-AI100-X16WD

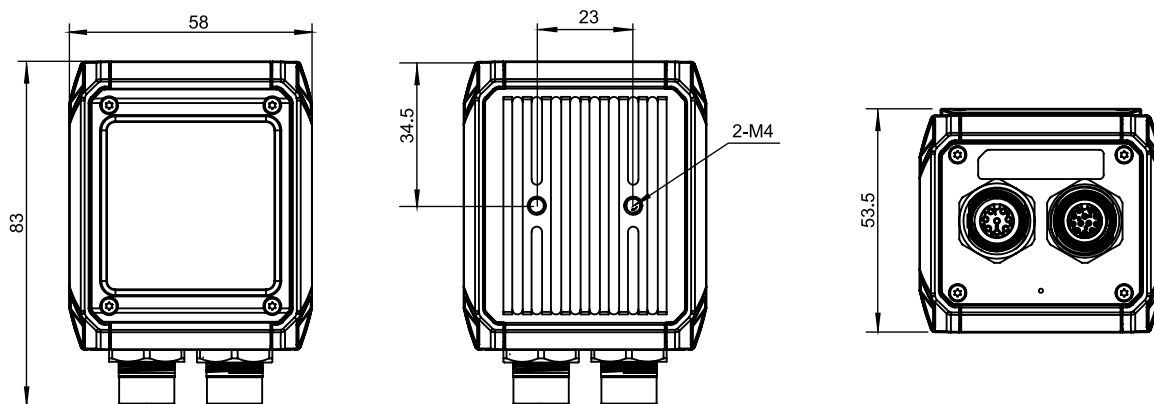
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Code readers
Intelligent code reader
QR code reader

Dimensions

Unit: mm





Appearance

Resolution	1920 × 1200			
Frame Rate	60			
Shutter	Global Shutter			
Color/B&W	Black and white			
Read Maximum Speed	60/sec			
Exposure Time	20 us ~ 1sec			
Gain	0 dB ~ 256 dB			
Image size	3 um x 3 um			
Target Size	1/2.6"			
Focusing mode	Mechanical tuning			
Focus distance	8mm	12mm	16mm	
Reading distance	100 ~ 1000mm			
Field of view	Maximum 480mm*300mm (@1000mm Distance, 8mm Focal Length)			
Barcode Category	1D Code: Code 39, Code93, Code128, EAN–8, EAN–13, Interleaved 2 of 5, UPC, Pharmacode; 2D Code: QR code, DataMatrix			
Position indication	1 green dot indicates the center area of the scanning position			
Status Indication	5 status LEDs and buzzer			
Light source	Non–polarized red light, Non–polarized white light, Polarized red light, Polarized white light			
Input control	Two input controls, opto–coupler isolated, support NPN, PNP type			
Output Control	Two input controls, opto–coupler isolated			
Communication Protocol	TCP Server, TCP Client, ModBus TCP, ModBus RTU, Profinet, Ethernet/IP, MELSEC/SLMP, Fins, Serial			
Communication Interface	RS232、Ethernet			
Power Input	24 VDC			
Power Consumption	15W			
Overall Dimension	58*53.5*69mm			
weight	About 220g			
Working Temperature	0 ~ 45℃			
Storage Temperature	–20 ~ 70℃			
Humidity	5% ~ 95% RH (Non–condensing)			
Protection Grade	IP67			
Model	Non–polarized red light	RCD-AI230-X08R	RCD-AI230-X12R	RCD-AI230-X16R
	Non–polarized white light	RCD-AI230-X08W	RCD-AI230-X12W	RCD-AI230-X16W
	Polarized red light	RCD-AI230-X08RD	RCD-AI230-X12RD	RCD-AI230-X16RD
	Polarized white light	RCD-AI230-X08WD	RCD-AI230-X12WD	RCD-AI230-X16WD

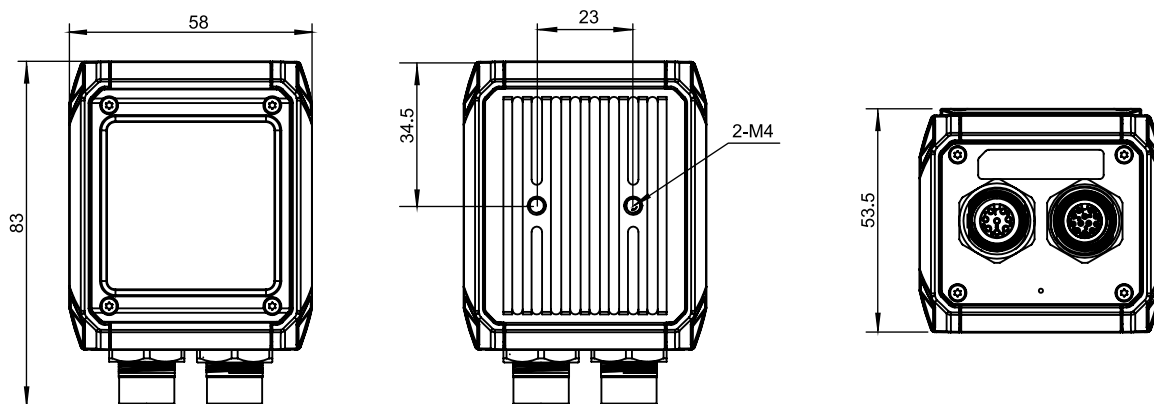
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Intelligent code reader

RCD-AI100-S Series



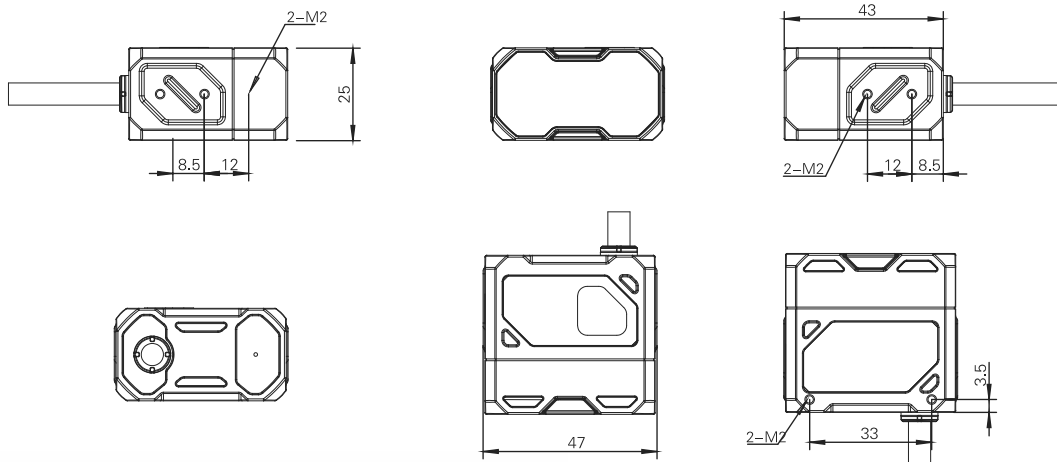
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Appearance		
Resolution	1280 × 800	
Frame Rate	60	
Shutter	Global Shutter	
Color / B&W	B&W	
Maximum read speed	60/sec	
Exposure time	20 us ~ 10000 us	
Gain	0 dB ~ 256 dB	
Pixel size	3 um x 3 um	
Target surface size	1/4"	
Focusing method	Liquid Focusing	Manual Focusing
Focal length	6mm	
Code reading distance	40 ~ 300mm	30 ~ 300mm
Field of view	Max. 192mm*120mm (@300mm distance)	
Bar Code Category	One-dimensional code: Code 39, Code93, Code128, EAN-8, EAN-13, Interleaved 2 of 5, UPC; Two-dimensional code: QRcode, DataMatrix	
Location indicatio	2 green light dots indicate the central area of the scanning position	
Status indication	3 status LEDs and buzzer	
Light source	Unpolarized red light, unpolarized white light, polarized red light, polarized white light	
Input Control	Two-way optocoupler isolated input, support NPN, PNP type	
Output Control	Three-way non-isolated NPN output	
Communication Protocol	TCP Server, TCP Client, ModBus TCP, ModBus RTU, Profinet, MELSEC/SLMP, Serial	
Communication Interface	RS232、Ethernet	
Power input	24 VDC	
Power consumption	5W	
Dimension	47*25*43mm	
Weight	About 100g	
Operating temperature	0 ~ 45° C	
Storage temperature	-20 ~ 70° C	
Humidity	5% ~ 95% RH (non-condensing)	
Protection degree	IP67	
Model	Non-reddish light	RCD-AI100-SQ06R
	Non-polarized white light	RCD-AI100-SQ06W
	Polarized red light	RCD-AI100-SQ06RD
	Polarized white light	RCD-AI100-SQ06WD
		RCD-AI100-SH06R
		RCD-AI100-SH06W
		RCD-AI100-SH06RD
		RCD-AI100-SH06WD

Size specification

Unit: mm





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Appearance

Resolution	1280 × 800	
Frame rate	60	
Shutter	Global shutter	
Color/Monochrome	Monochrome	
Exposure time	20 us ~ 100000 us	
Pixel size	3 um x 3 um	
Focusing method	Fixed Focusing	
Reading parameters	Code 39(5 mil):85~220 mm	Code 39(3 mil):30~60 mm
	Code 128(10 mil):51~415 mm	Code 128(10 mil):40~122 mm
	QR Code(15 mil):42~313 mm	QR Code(5 mil):30~80 mm
	Data Matrix(10 mil) :60~150 mm	Data Matrix(5 mil) :35~74 mm
Bar Code Category	One-dimensional code:Code 39, Code93, Code128, EAN-8, EAN-13, Interleaved 2 of 5, UPC, Pharmacode; Two-dimensional code: QR code, DataMatrix	
Location indicator	2 green light dots indicate the central area of the scanning position	
Status indication	2 status LED(reading,powering) and buzzer	
Polarizer	Polarization supported	
Light source	Red/white light source optional	
Input control	Two way non-isolated outputs	
Output control	Two way non-isolated outputs	
Communication protocol	TCP Server, TCP Client, ModBus TCP, ModBus RTU, Profinet, Ethernet/IP, MELSEC/SLMP, Serial	
Communication interface	RS232、RJ45、USB	
Power input	24 VDC/USB5V	
Power consumption	5W	
Dimension	49*25*42.5mm	
Weight	80g	
Operating temperature	0 ~ 45° C	
Storage temperature	-20 ~ 70° C	
Humidity	5% ~ 95% RH(non-condensing)	
Protection of degree	IP54	
Model	Unpolarized red light	RCD-AI100-F06R
	Unpolarized white light	RCD-AI100-F06W
	Polarized red light	RCD-AI100-F06RD
	Polarized white light	RCD-AI100-F06WD
Model	Unpolarized red light	RCD-AI100-HF06R
	Unpolarized white light	RCD-AI100-HF06W
	Polarized red light	RCD-AI100-HF06RD
	Polarized white light	RCD-AI100-HF06WD

Fiber Optic

Slot Sensors

Photoelectric

Laser

Proximity

Displacement

Magnetic

Contact

Area

Ultrasonic

Vision

Code Readers

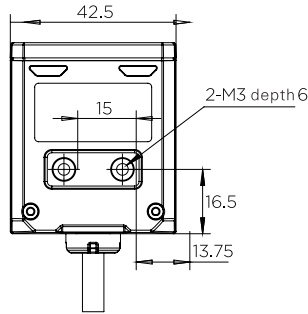
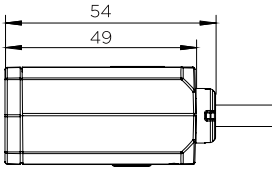
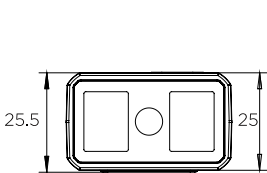
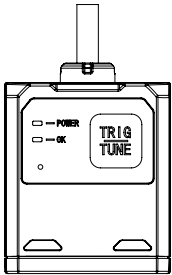
Vibration

Temperature

Accessories

Dimensions

Unit: mm





NEW!

CE



NEW!

CE

Appearance						
Resolution	2448x2048					
Frame rate	30					
Shutter	Global					
Color/B&W	Black and White					
Exposure time	20us~1sec					
Pixel size	2.74 um x 2.74 um					
Image size	1/1.8"					
Focus mode	Mechanical Focus				Liquid Focus	
Focal Length	M Port: 8mm	M Port: 12mm	M Port: 16mm	M Port: 25mm	Liquid: 16mm	
Code distance	100–2000mm (@8/12/16mm) 200–2000mm(@25mm)					
FOV	1D code: Code 39, Code93, Code128, EAN–8, EAN–13, Interleaved 2 of 5, UPC, Pharmacode; 2D code: QR code, DataMatrix					
Types of code	1 Green Light Point Indicating the Center Area of the Detection Position;1 Distance Sensor for Focus Assistance					
Position indicator	5 status LEDs and buzzer					
Polarizer	Standard light sources are available in unpolarized and semi–polarized optionsand bright light sources are available in unpolarized models					
Light source	Red/White Light Source is Available					
Input control	Two Input Control, Photocoupler Isolation–Support NPN and PNP					
Output control	Triple Output Control, Photocoupler Isolation					
Communications Protocol	TCP Server、TCP Client、ModBus TCP、ModBus RTU、Profinet、Ethernet/IP、MELSEC/SLMP、Fins、Serial					
Communication interface	RS232、Ethernet					
Power supply	24 VDC					
Power consumption	15W					
Weight	Standard Light Source: Approx. 550g; Power Light Source: Approx. 750g					
Working temperature	0 ~ 45° C					
Storage temperature	–20 ~ 70° C					
Humidity	5% ~ 95%RH (Non–condensing)					
Protection degree	IP67					
Model	Non–Polarized red light	RCD-AI500-X08R	RCD-AI500-X12R	RCD-AI500-X16R	RCD-AI500-X25R	RCD-AI500-Q16R
	Non–polarized white light	RCD-AI500-X08W	RCD-AI500-X12W	RCD-AI500-X16W	RCD-AI500-X25W	RCD-AI500-Q16W
	Polarized red light	RCD-AI500-X08RD	RCD-AI500-X12RD	RCD-AI500-X16RD	RCD-AI500-X25RD	RCD-AI500-Q16RD
	Polarized white light	RCD-AI500-X08WD	RCD-AI500-X12WD	RCD-AI500-X16WD	RCD-AI500-X25WD	RCD-AI500-Q16WD
	Non–Polarized red light (High power)	RCD-AI500-X08RH	RCD-AI500-X12RH	RCD-AI500-X16RH	RCD-AI500-X25RH	RCD-AI500-Q16RH
	Non–polarized white light (High power)	RCD-AI500-X08WH	RCD-AI500-X12WH	RCD-AI500-X16WH	RCD-AI500-X25WH	RCD-AI500-Q16WH



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CE

Appearance			
Resolution	2448x2048	5120*3840	5472*3648
Frame rate	30	15	
Shutter	Global	Rolling shutter	
Color/B&W	Black and White		
Exposure time	20 μs~1sec		
Pixel size	2.74 μm x 2.74 μm	1.4 μm x 1.4 μm	2.4 μm x 2.4 μm
Image size	1/1.8"		
Focus mode	Manual focusing		
Focal Length	C Port		
Code distance	Based on lens		
FOV	1D code: Code 39, Code93, Code128, EAN-8, EAN-13, Interleaved 2 of 5, UPC, Pharmacode; 2D code: QR code, DataMatrix		
Types of code	1 green light point indicates the center area of the scanning position		
Position indicator	5 status LEDs and buzzer		
Polarizer	None		
Light source	External light source		
Input control	Two optocoupler isolated inputs, support NPN, PNP type		
Output control	Triple output control, opto-isolated – solid state relay		
Communications Protocol	TCP Server、TCP Client、ModBus TCP、ModBus RTU、Profinet、Ethernet/IP、MELSEC/SLMP、Fins、Serial		
Communication interface	RS232、Ethernet		
Power supply	24 VDC		
Power consumption	15W		
Weight	About 450g		
Working temperature	0 ~ 45° C		
Storage temperature	-20 ~ 70° C		
Humidity	5% ~ 95%RH (Non-condensing)		
Protection degree	IP67		
Model	RCD-AI500-C	RCD-AI2000-C	RCD-AI2000-HC

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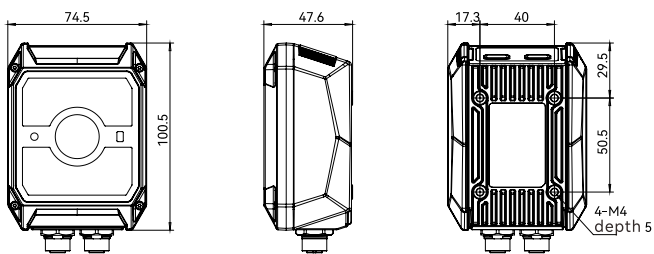
Guidance

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QR code reader

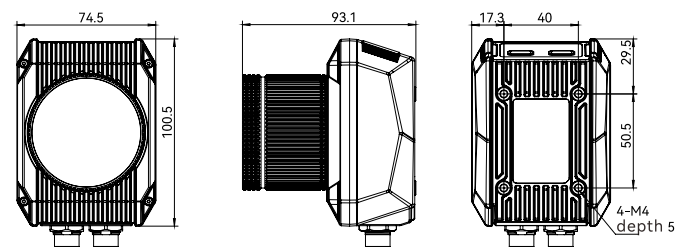
Dimensions

Unit: mm

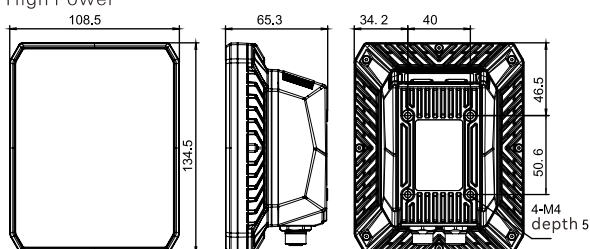
Standard



C Port



High Power





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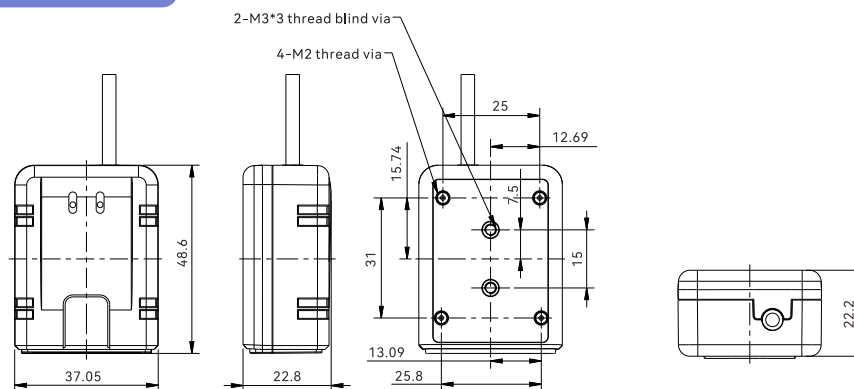


Appearance

CMOS	640*4800, Global shutter
Illumination	White LED
Aimer	Red LED
Frames rate	60 fps
Motion	Max.2m/s@13milUPC, printing class A
Field of view	Horizontal: $\pm 21^\circ$; Vertical: $\pm 16^\circ$
Print contrast	Min. 20%
Symbology	Codabar , Code 11, Code 128, Code 2 of 5, Code 39 , Code 93 and 93i, EAN/JAN-13, EAN/JAN-8, IATA Code 2 of 5, Interleaved 2 of 5, Matrix 2 of 5, MSI, GS1 DataBar, UPC-A, UPC-E, UPC-A/EAN-13
Barcode	
Stacked	Codablock A, Codablock F, PDF417, MicroPDF 417
2D code	Aztec, Data Matrix, MaxiCode, QR, Han Xin
Working voltage	24VDC $\pm 10\%$
Communication	RS232
Typical current	42mA
Input	Low volt effective
Output	Low volt effective
Connection	Standard: 1m cable with open end; Customerized
Material	Al for Housing; Glass for Window
Weight	105g
Installation	2-M3*3
Working temperature	-10°C~ 40°C
Storage temperature	-40°C~60°C
Humidity	Relative 95% Non-condensation
Environmental light	0-10000lux
Model No.	RCD-AI30-232

Demensions

Unit: mm



Scanning Range

Symbology and printing density	Near (mm)	Far (mm)	DOF (mm)
5MilCode39	40mm	150mm	110mm
13MilEAN-13	60mm	350mm	290mm
6.7MilPDF417	50mm	125mm	75mm
10MilDM	45mm	120mm	85mm
15MilQR	30mm	170mm	140mm

Cable Definition

Color	Definition
Red	24VDC
Black	GND
White	RxD
Green	TxD

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