

# 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

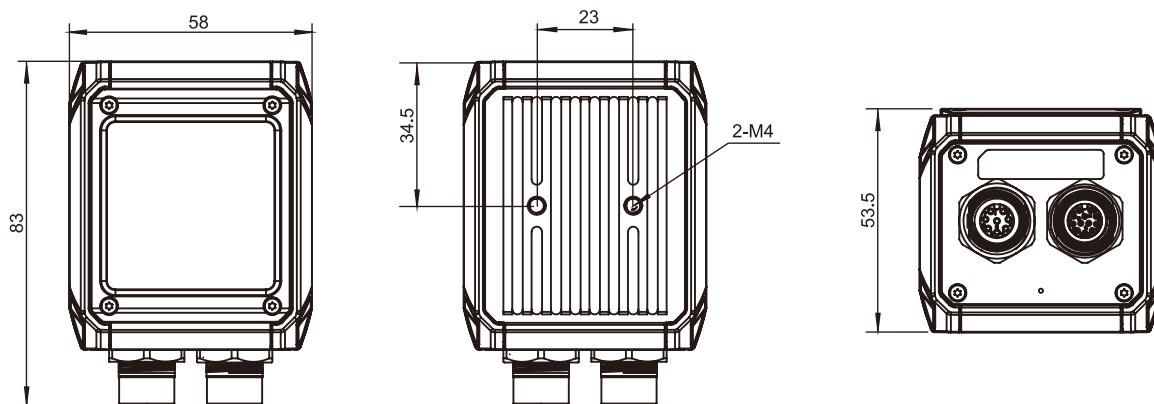


Appearance				
Resolution	1280 × 800			
Frame Rate	60			
Shutter	Global Shutter			
Color/B&W	Black and white			
Read Maximum Speed	60/sec			
Exposure Time	20 us ~ 1sec			
Gain	0 dB ~ 256 dB			
Image size	3 um x 3 um			
Target Size	1/4"			
Focusing mode	Mechanical tuning			
Focus distance	8mm	12mm	16mm	
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, Pharmacoce; 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°C			
Storage Temperature	-20 ~ 70°C			
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

- Fiber Optic
- Slot Sensors
- Photoelectric
- Laser
- Proximity
- Displacement
- Magnetic
- Contact
- Area
- Ultrasonic
- Vision
- Code Readers**
- Vibration
- Temperature
- Accessories
- Guidance
- Code readers
- Intelligent code reader
- QR code reader

## Dimensions

Unit: mm



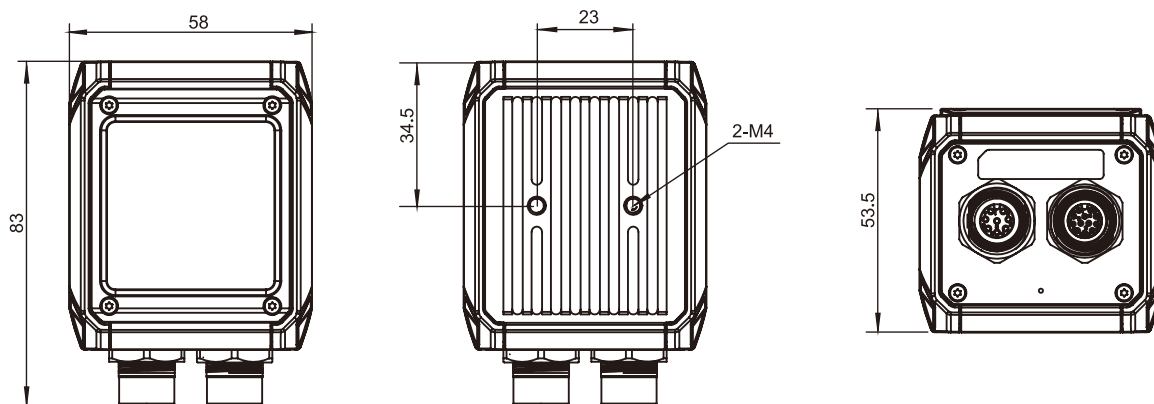


Appearance				
Resolution	1920 x 1200			
Frame Rate	60			
Shutter	Global Shutter			
Color/B&W	Black and white			
Read Maximum Speed	60/sec			
Exposure Time	20 us ~ 1sec			
Gain	0 dB ~ 256 dB			
Image size	3 um x 3 um			
Target Size	1/2.6"			
Focusing mode	Mechanical tuning			
Focus distance	8mm	12mm	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, Pharmacoce; 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°C			
Storage Temperature	-20 ~ 70°C			
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

- Fiber Optic
- Slot Sensors
- Photoelectric
- Laser
- Proximity
- Displacement
- Magnetic
- Contact
- Area
- Ultrasonic
- Vision
- Code Readers**
- Vibration
- Temperature
- Accessories
- Guidance
- Code readers
- Intelligent code reader
- QR code reader

## Dimensions

Unit: mm



## Intelligent code reader

RCD-AI100-S Series



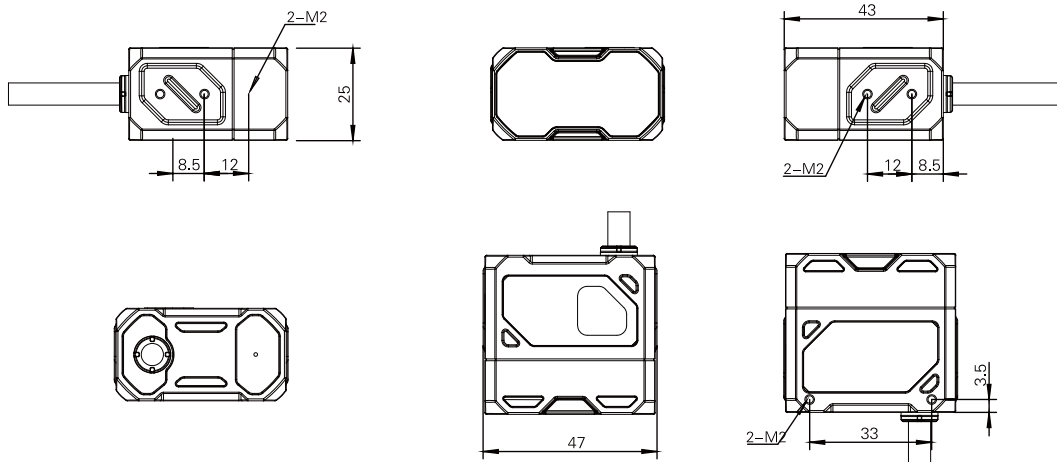
NEW!

CE

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 × 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	RCD-AI100-SH06R
	Non-polarized white light	RCD-AI100-SQ06W	RCD-AI100-SH06W
	Polarized red light	RCD-AI100-SQ06RD	RCD-AI100-SH06RD
	Polarized white light	RCD-AI100-SQ06WD	RCD-AI100-SH06WD

## Size specification

Unit: mm





**NEW!**

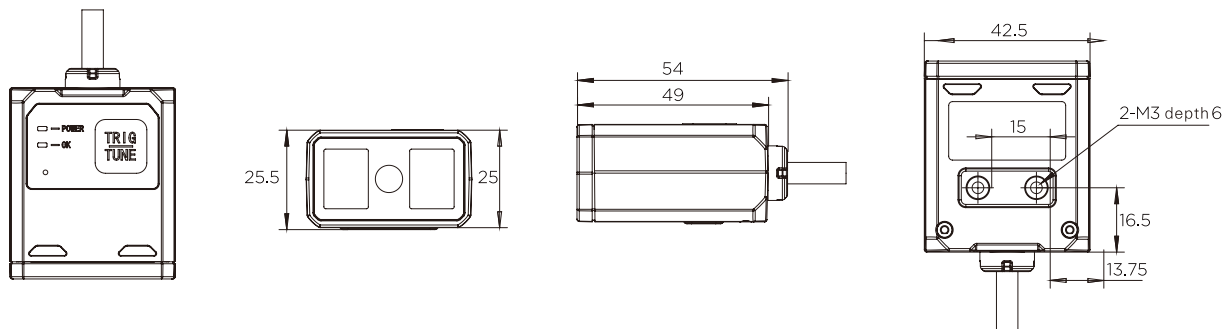


Appearance			
Resolution	1280 × 800		
Frame rate	60		
Shutter	Global shutter		
Color/Monochrome	Monochrome		
Exposure time	20 us ~ 100000 us		
Pixel size	3 um x 3 um		
Focusing method	Fixed Focusing		
Reading parameters	Code 39(5 mil):85~220 mm Code 128(10 mil):51~415 mm QR Code(15 mil):42~313 mm Data Matrix(10 mil) :60~150 mm	Code 39(3 mil):30~60 mm Code 128(10 mil):40~122 mm QR Code(5 mil):30~80 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	<b>RCD-AI100-F06R</b>	<b>RCD-AI100-HF06R</b>
	Unpolarized white light	<b>RCD-AI100-F06W</b>	<b>RCD-AI100-HF06W</b>
	Polarized red light	<b>RCD-AI100-F06RD</b>	<b>RCD-AI100-HF06RD</b>
	Polarized white light	<b>RCD-AI100-F06WD</b>	<b>RCD-AI100-HF06WD</b>

- Fiber Optic
- Slot Sensors
- Photoelectric
- Laser
- Proximity
- Displacement
- Magnetic
- Contact
- Area
- Ultrasonic
- Vision
- Code Readers**
- Vibration
- Temperature
- Accessories

### Dimensions

Unit: mm





NEW!

CE



NEW!

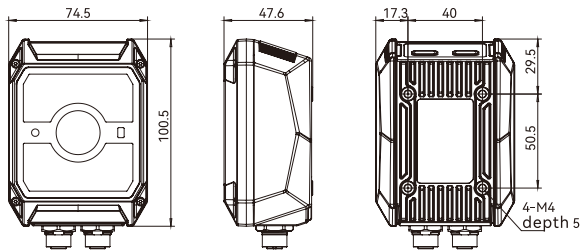
CE

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 options and 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; High 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

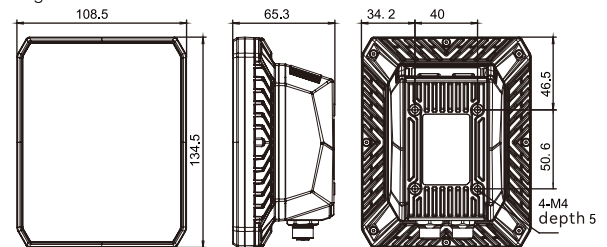
Dimensions

Unit: mm

Standard



High Power





**NEW!**

CE

Appearance	
Resolution	2448x2048
Frame rate	30
Shutter	Global
Color/B&W	Black and White
Exposure time	20 $\mu$ s ~ 1sec
Pixel size	2.74 $\mu$ m x 2.74 $\mu$ m
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	<b>RCD-AI500-C</b>

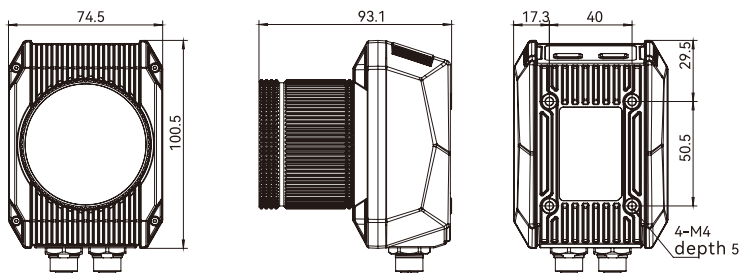
- Fiber Optic
- Slot Sensors
- Photoelectric
- Laser
- Proximity
- Displacement
- Magnetic
- Contact
- Area
- Ultrasonic
- Vision
- Code Readers**
- Vibration
- Temperature
- Accessories

### Guidance

- Code readers
- Intelligent code reader**
- QR code reader

## Dimensions

Unit: mm





**NEW!**

CE

Appearance	
Resolution	5472*3648
Frame rate	15
Shutter	Rolling shutter
Color/B&W	Black and White
Exposure time	20 μs~1sec
Pixel size	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	<b>RCD-AI2000-HC</b>

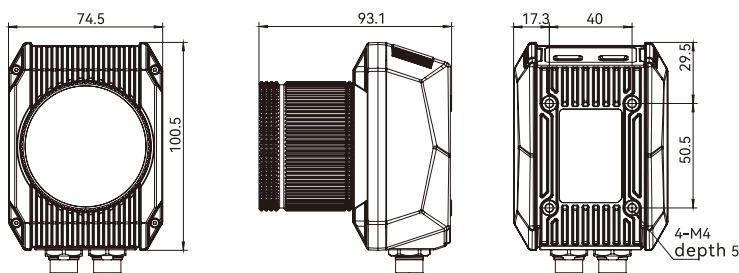
- Fiber Optic
- Slot Sensors
- Photoelectric
- Laser
- Proximity
- Displacement
- Magnetic
- Contact
- Area
- Ultrasonic
- Vision
- Code Readers**
- Vibration
- Temperature
- Accessories

**Guidance**

- Code readers
- Intelligent code reader**
- QR code reader

### Dimensions

Unit: mm







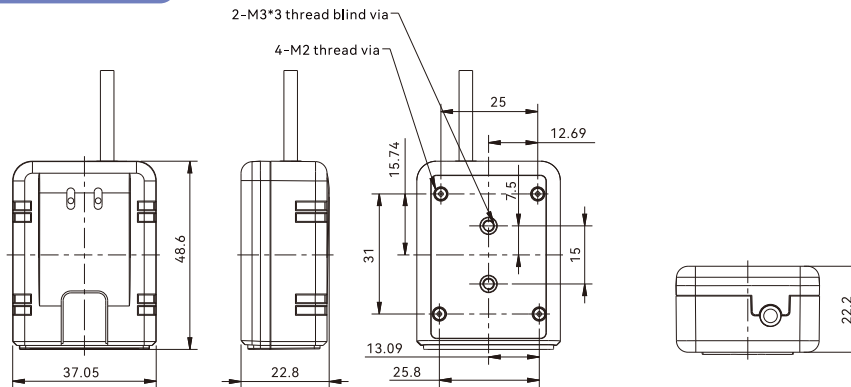
**NEW!**



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	Barcode 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
	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; Customized
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.	<b>RCD-AI30-232</b>

### Dimensions

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

Fiber Optic

Slot Sensors

Photoelectric

Laser

Proximity

Displacement

Magnetic

Contact

Area

Ultrasonic

Vision

Code Readers

Vibration

Temperature

Accessories

Guidance

Code readers

Intelligent  
code reader

QR code reader