

X4 AI

Industrial Fixed Scanner

As a high-performance industrial barcode reader, X4 AI can be used in scenarios such as SMT line mobile code reading, assembly line picking/assembly code reading, electronic test fixtures, and automation equipment integration. X4 AI with all new Octa-core AI chipset, which helps achieve complex barcode identify and decoding with no latency, powered by AI algorithms, it can automatically and rapidly locks onto and decodes barcodes, enabling zero debugging and instant deployment. X4 AI is equipped with a new decoding algorithm and image processing filter, which can effectively improve the reading rate of various difficult-to-read DPM barcodes and fastest moving speed of 3m/s dynamic barcodes. Moreover, X4 AI has an intelligent variable light source, which can automatically adapt to barcodes with different background colors, making debugging more convenient.



Product Features



Super strong decoding speed with AI

Equipped with a new AI chip, it effortlessly reads complex barcodes, such as inverted Color Code with inconsistent patterns and colors, barcodes with intricate background textures, Low-contrast (10%) problematic barcodes, reflective barcodes engraved on curved metal surfaces



Octa-core high-speed processor

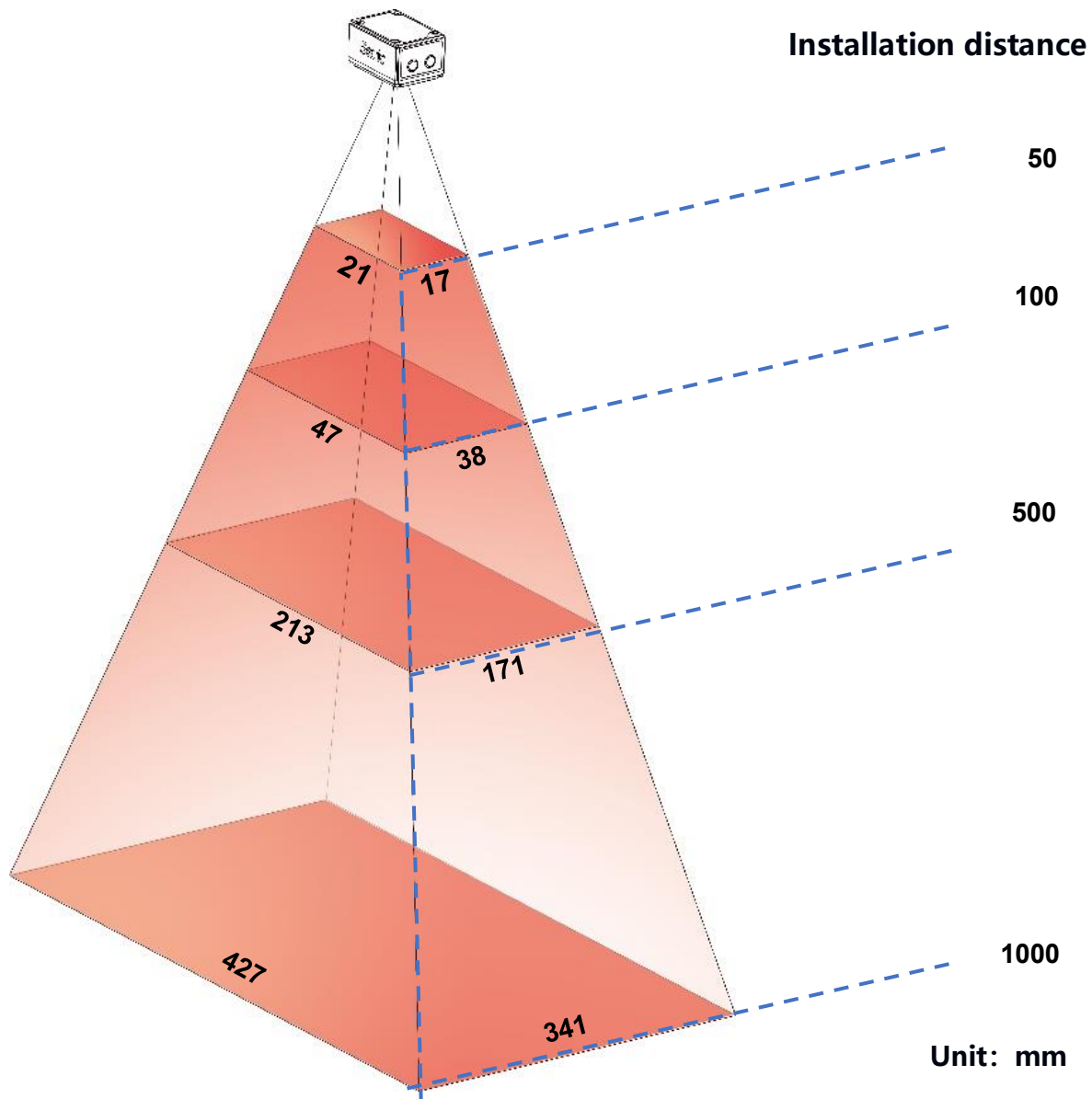
X4 AI is equipped with a new generation of Octa-core high-speed processor, which is multi-channel parallel in image acquisition-decoding-communication operations, and the response speed is greatly improved

1. Specifications

Model			X4AI (Standard)	X4W AI (Wide view)
Receiver	Sensor		CMOS Image Sensor with global shutter	
	Number of pixels		1.3M, 1280 x 1024	
Light emitter	Light source		High-intensity red LED or white LED	
	Aimer		Laser dual-point positioning aimer Class II	
Focus adjustment			50mm to 1000mm adjustable	50mm to 500mm adjustable
Reading specifications	Supported symbol	1D	Code128、GS1 128、Code39、Code93、codabar、Interleaved 2 of 5、EAN/UPC	
		2D	QR、DataMatrix (ECC200)、PDF417、Micro PDF417	
	Minimum resolution	1D	3.3mil	
		2D	2.0mil	
I/O specifications	Control input	Points	2	
		Input type	Bidirectional voltage input	
		Maximum rating	30V	
		Minimum ON voltage	< 4V	
		Maximum OFF current	0.001A	
	Control output	Points	3	
		Output type	3 optocoupler output	
		Maximum rating	30V	
		Maximum load current	1 output: 50 mA or less, 3-output total: 100 mA or less	
		Leakage current when OFF	0.1 mA or less	
		Residual voltage when ON	1 V or less	
	Ethernet	Supported protocol	TCP/UDP TCP Client, TCP Server, FTP, Profinet, MELSEC, Ethernet/IP, ModBusTcp(poll/slave), Fins	
	Serial communication	Communication speed	115200/57600/38400/19200/9600 bps	
Supported protocol		RS232/RS485		
USB	Communication standard	USB 2.0 Full Speed compliant		
Environmental Resistance	Enclosure rating		IP67	
	Ambient temperature		0°~50°C	
	Ambient storage temperature		-20°C ~70°C	
	Relative humidity		5% to 95% RH (No condensation)	
	Storage ambient humidity		5% to 95% RH (No condensation)	
	Ambient light		0~10000 lux	
	Operating environment		No dust or corrosive gas present	
Rating	Power supply voltage		10~30V DC	
	Current consumption		0.5 ~ 1.5A	
Weight			Approx.220g	
Dimensions (L x W x H)			61.2mm x 48.7mm x 45.55mm	

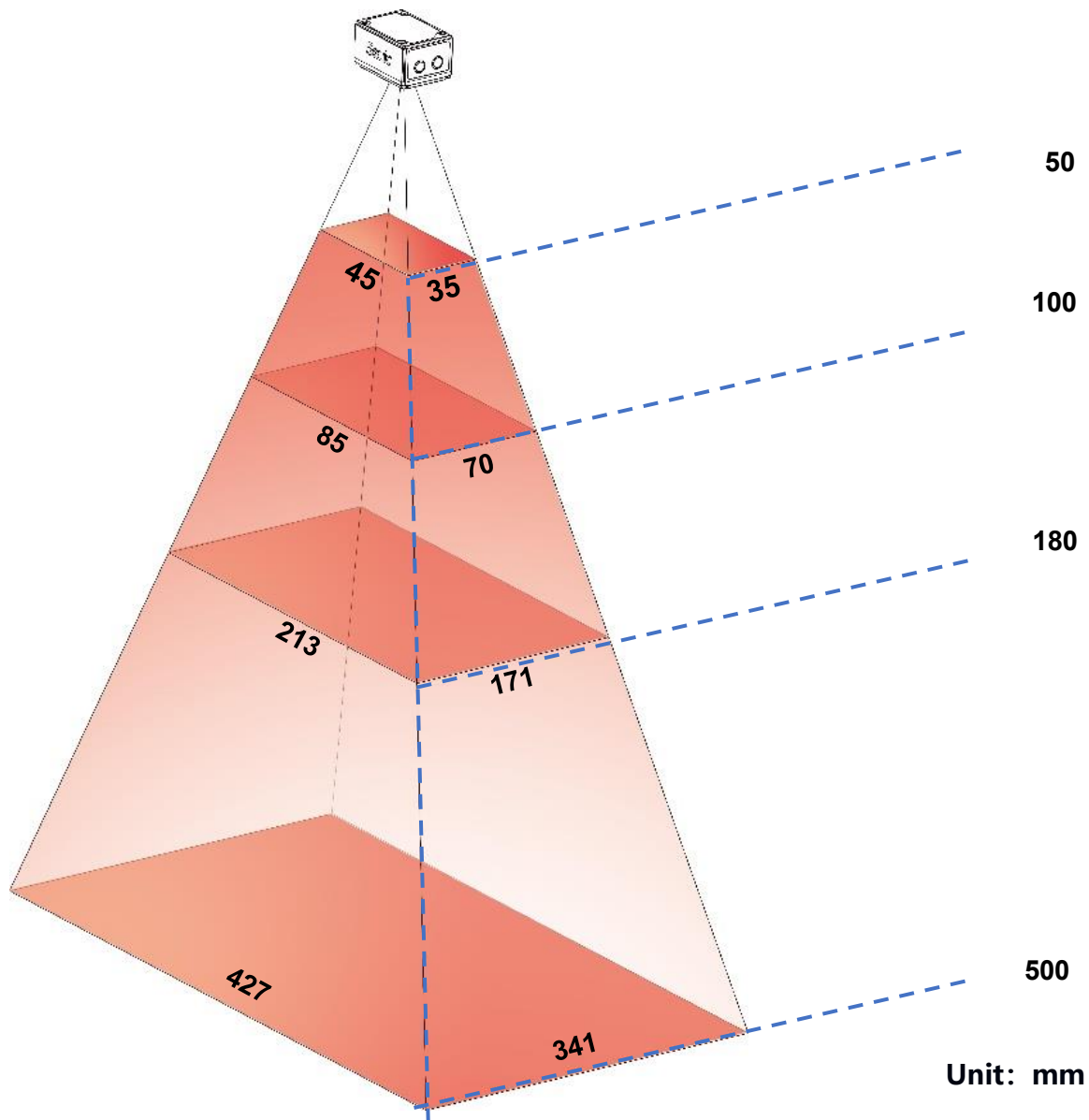
2. Field of View and Installation Distance

X4 AI supports focusing in the range of 50mm ~ 1000mm, and also supports automatic and manual focusing



X4W AI supports focusing in the range of 50mm ~ 500mm, and also supports automatic and manual focusing

Installation distance



3. Field Of View (Typical Example)

X4AI

Distance (mm)	2D	Distance (mm)	1D
50 - 83	2.5mil	55-230	3.3mil
50-125	3.3mil	45-400	5mil
50-230	5mil	45-560	7.5mil
45-450	10 mil	40-600	10mil
40-760	20 mil	40-1000	20mil

Distance (mm)	Field of View (mm)	
50	21	17
100	47	38
180	77	61
350	149	119
500	213	171
1000	427	341

X4W AI

Distance (mm)	2D	Distance (mm)	1D
35-53	2.5mil	30-140	3.3mil
35-72	3.3mil	30-200	5mil
33-115	5mil	30-285	7.5mil
30-225	10 mil	30-380	10mil
30-380	20 mil	30-500	20mil

Distance (mm)	Field of View (mm)	
50	45	35
100	85	70
180	153	122
310	260	205
350	295	235
500	427	341

4. Product Dimensions



5. Bracket dimensions

