AI100 series
Industrial Barcode Reader

SCANTECH ID
CHAMPTEK Group

Introduction

SCANTECH ID AI100 Industrial fixed-mount barcode reader series uses a high-quality 1.6 million pixel resolution global shutter image sensor and quad-core processor, which can capture full-frame high-quality images at a speed of up to 60 frames per second, especially suitable for reading multiple codes or ultra-small codes within the range in dynamic scenes. Its liquid lens integrated with patented technology can automatically focus and read codes at high speed within the working range of 35mm-600mm. The professional red and blue dual-wavelength LED light source design has excellent performance for DPM, Direct Part Marking codes reading. The unique optical design achieves high-resolution, large depth of field, and high uniformity imaging. At the same time, it is equipped with a variety of lenses to achieve the reading of the smallest 0.5x0.5mm QR code. The global shutter technology is used to achieve high-speed motion state reading. Its excellent code reading ability can easily solve the problems faced by the electronic manufacturing and traceability industries, and is suitable for applications in electronic assembly, new energy, LCD screens, drug traceability and other industries.
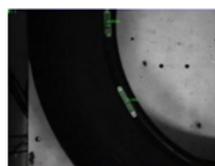
Features

- Compact size
- The quad-core processor can analyze 4 images at the same time
- High-speed liquid lens autofocus design
  - Improve hardware installation efficiency by 30%
  - No need to adjust product model when changing inspection stations
- Superior performance in decoding DPM codes
- Simultaneous reading of multiple codes
- Optional OCR , DM code level function and polarizing filter
- IP65 sealing protection

- Multiple status indicators for daily status observation
  - Power supply indication, Network diagnosis, Output status and Learning status
- The light sources in 8 areas can be individually controlled to be applied to a variety of code reading scenarios
- Flexible and easy-to-use software, 3 steps to complete setting, support various configuration methods

AI100 Series

Typical application

- Manufacturing automation
- 3C, home appliances
- Pharmaceuticals
- Packaging industry
- Semiconductors
- Automobile industry

Specifications

Model	AI100-C	AI100-L	AI100-R	AI100-G
Auto-Focus	Not supported	Supported		
Focus position（mm）	38-1000（default）	38-600		
Min. Resolution（mm）for 2D code	1.0x1.0	Standard: 1.0x1.0, High density: 0.5x0.5		
OCR (character recognition)	Not supported		Supported	Not supported
DM code level	Not supported			Supported
Image resolution	1.6M Pixels			
Reading frequency	60Hz			
Positioning	Dual laser positioning			
Light source	High brightness red/white LED+blue LED, optional long-distance light source			
Status output	Buzzer and power indicator light, network transmission indicator light, 5 status			
Reading symbology	2D- QR、Micro QR、Data Matrix、PDF417、Micro PDF417			
	1D- CODE39、CODE128、CODE93、CODE11、CODABAR、Interleaved 25、Matrix25、MSI、Standard25、 UPC、EAN			
Scan triggering	1 channel photoelectric isolation acquisition trigger signal input			
Reading Speed	3m / s			
IO Input	1 way photoelectric isolation input			
IO Output	3 channels of photoelectric isolation output			
	(1 channel can be switched to flash sync output)			
Communication	1 RS232 serial port; 1 Ethernet port, supports TCP/IP			
Sealing Protection	IP65			
Working temperature	0 - 45°C			
Storage temperature	-20 - 70°C			
Dimension	92 x 61 x 43mm			
Weight	Approx. 228.2g			
Working voltage	10 - 28V DC			
Working current	1.2 - 0.6A			
Certificate	CE FCC RoHS			