LY215A031 21.5-inch self-service all-in-one machine

Product Specification

Product Name	21.5-inch self-service all-in-one machine
Model	LY215A031
Screen Size	21.5 inches
Document Version	2026 specifications version

Product Image



Product Image

Product Overview

This specification summarizes the product configuration, detailed parameters, product image, and overall dimensions for selection, quotation, and technical confirmation.

Key Selling Points and Special Features

Display and Picture Quality	21.5-inch high-definition LCD display; 1920×1080; 250 cd/m² brightness; 178° wide viewing angle
Touch and Interaction	Projected capacitive touch; 10-touch; response time < 5.5 ms; effective recognition > 1.5mm; tempered glass
Performance and System	CPU: Intel Corei3-3110M processor with 2.4GHz frequency; 4G+128G; Android system
Identification, Payment and Printing	1D/QR code scanning; receipt/bill printing; IC/NFC card reading; fingerprint recognition
Connectivity and Expansion	Support USB interface, RS232, RS485, 4G and other interfaces
Structure and Reliability	Sheet metal structure; metal structure; tempered glass panel; wide temperature working design; humidity adaptation design
Applications	self service

Complete Configuration

No.	Item	Specification	Unit
1	LCD screen	21.5 inches 1920*1080	PCS
2	touchscreen	21.5-inch capacitive touch	PCS
3	motherboard	I3/3rd generation	PCS
4	store	4G+128G	PCS
5	QR code	one and two dimensional	PCS
6	printer	80mm	PCS
7	IC card/NFC	R20C	PCS
8	Fingerprint sensor	ZAZ-060	PCS
9	ID card reader	Second generation ID card	PCS
10	Metal password keypad	KY2088	PCS
11	social security card	Eastcom second and third generation social security	PCS

No.	Item	Specification	Unit
		cards	
12	Camera	Binocular camera	PCS
13	vertical housing	sheet metal	PCS
14	other	Consumables	PCS

Detailed Parameters

No.	Item	Specification
1	LCD screen	LG BOE LCD screen A gauge Rated power: 10W*2 Peak power: 15W*2 Brightness ≥ 250 cd/m2 Response time < 5.5 ms Refresh frequency 60Hz Total number of colors 16.7M (8-bit 2 (LVDS) channel low-voltage differential signal) Viewing angle Horizontal ≥ 178 degrees Vertical ≥ 178 degrees Lifespan > 50,000 hours
2	touchscreen	Projected capacitive technology (capacitive touch screen) response time < 5ms touch points standard 10 touch, can achieve multi-touch functions such as enlargement and reduction of pictures touch recognition > 1.5mm scanning frequency 200Hz Scanning accuracy 4096 × 4096 Communication method Full-speed USB 2.0, 3.0 More than 50 million theoretical clicks Operating Current/Voltage 180Ma/DC +5V ± 5% Anti-light interference Normal use when there is a change in bright light such as sunlight, incandescent lamps, fluorescent lamps, etc. Touch data output mode coordinate output Surface hardness: Physical tempering, Mohs level 7 explosion-proof glass
3	motherboard	CPU: Intel Corei3-3110M processor

No.	Item	Specification
		clocked at 2.4GHz Memory: DDR3 4G Hard drive: Solid state drive, 128G
4	QR code	High-speed scanning, fast mobile scanning, clear dot-like quasi-system, compatible with one-dimensional and two-dimensional codes, supports scanning code payment business; supported media types: supports reading barcode information on various media such as paper, LCD, mobile phone screens, etc.; reading angle: two-dimensional barcode 360 Read QR codes in any direction; readable bar width <= 4MIL; reading width 5-30CM; decoding ability: decode one-dimensional barcodes, stacked/lined 2D barcodes and matrix 2D barcodes; support commonly used PDF417 2D barcodes, Datamatrix 2D barcodes, Code, Code and other code systems; decoding time is less than 2 seconds; light is illuminated diagonally downwards
5	80 printer	Method Line thermal printing Paper width 80mm Paper speed 250 mm/s (max) Dot density 8 dots/mm Number of printing dots 576dots/line Printing width 72mm (max) Paper feeding method Easy paper loading Printing length 100KM Cutter Paper cutting method Sliding type Paper cutting conditions Half cutting, full cutting Paper cutting thickness 60 - 120 um Cutter life 1000,000 times Paper near end or last paper detection sensor Reflective photoelectric transmission
6	IC card/NFC	Supported cards: MF\S50\S70, CPU Operating system: Windows 98\XP\2000\CE\7\ME\NT\LIUNX, Android Card reading distance: 0~80MM Card reading time: <100MS Card reading speed: 0.2S

No.	Item	Specification
		Card reading distance: 0.5S Communication interface: USB interface Size: 104MM×68MM×10MM Power extraction method: USB power extraction Weight: 140G Working environment: temperature (-20℃~85℃) humidity (5%~95%) Working voltage: 5V Working current: 100mA Indicator light: LED indicator light Built-in speaker: buzzer, can control LED and buzzer Output format: 10-digit decimal
7	Fingerprint sensor	Communication interface USB1.1/2.0 UART baud rate 57600bps (default) Working voltage DC-5V (voltage range 5V±10%) Working current 88mA Quiescent current 46mA Antistatic ability GB/T 17626.2-2006, level 4 Anti-electromagnetic harassment ability GB/T 17626.3—2006, Level 2 sensor Sensor type Capacitive sensor Collection method: push type Service life: more than 1 million times (parameters provided by the manufacturer) Sensor size 20.4x33.4mm Image pixel 256*288pixel Image resolution 500dpi Grayscale 8-bit, 256 levels Fingerprint algorithm indicators Acquisition time <0.25s Comparison method 1:1 comparison or 1:N comparison Comparison time <0.1S (1:1) ＜1.3S（1：1000) Fingerprint capacity Default: 1000 pieces Security level: 1 to 5 from low to high

No.	Item	Specification
		False recognition rate (FAR) <0.001% (security level: 3) True rejection rate (FRR) <0.5% (security level: 3) Fingerprint feature value length 512 Bytes Working temperature Recommended working temperature: -30~60C° Extreme temperature: -30~70C° Storage temperature -30~70C°, recommended storage temperature: -10~20C° Working humidity 20~90% RH Storage humidity 16~95% RH Recommended storage humidity: 20~80% RH
8	ID card reader	"Operating frequency: usually 13.56MHz, which is the international standard RFID frequency used for wireless communication with ID card chips. Modulation method: Common ones are ASK (amplitude keying) and PSK (phase shift keying). Some devices support multiple modulation methods to be compatible with different standards. Card reading distance: Generally 0-5cm, some high-end models can reach 3-5cm. The specific distance depends on the device design and the sensitivity of the ID card chip. Card reading response time: Card reading and information decoding are usually completed within 1-2 seconds, and some high-speed models can reach within 0.5 seconds. Supported standards: Complies with ISO/IEC 14443 Type B standard, and some devices also support Type A standard to be compatible with more types of RFID cards. Interface type: Common ones include USB interface, RS232 serial port, Wiegand interface, etc. USB interface is

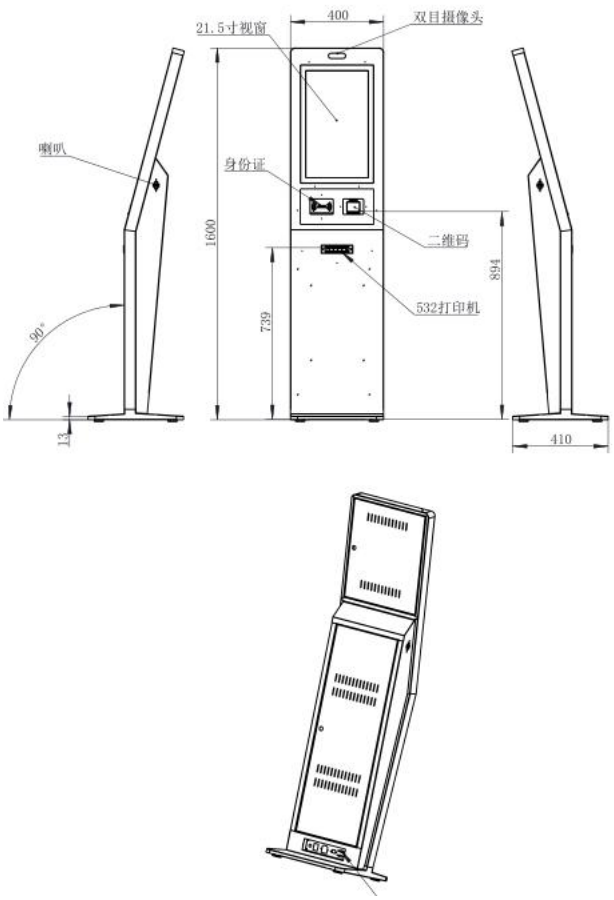
No.	Item	Specification
		the most common and supports plug and play. Power supply: Most use USB power supply, some portable devices support battery power supply, the voltage is generally DC 5V. Working temperature: Generally 0℃-50℃, some industrial-grade equipment can support a wide temperature range of -20℃-70℃. Humidity requirements: Relative humidity is usually 20%-90% (non-condensation), and some equipment can work normally in high humidity environments. Size and weight: The size of desktop card readers is generally around 100mm×100mm×30mm, and the weight is between 100-500 grams; portable card readers are smaller in size and lighter in weight. Security module: Built-in security control module (SAM) authorized by the Ministry of Public Security, used to decrypt the information in the ID card chip to ensure data security. Decoding method: It can be divided into two types: cloud service decoding and local decoding. Cloud service decoding needs to be connected to the Internet, and local decoding can be decoded directly through the built-in SAM module."
9	Metal password keypad	Product name: Numeric keyboard Product model: KY-2088B Product overview: The product has a total of 16 buttons and is an embedded device that is widely used in the fields of financial equipment, communication equipment, military equipment and A series of self-service terminal equipment fields. Main features:

No.	Item	Specification
		●The panel is made of high-quality SUS304 brushed stainless steel, which is anti-riot and anti-corrosion. ● SUS304 brushed stainless steel buttons (the characters can be laser etched when they are black) ● Button screen printing (etching) content can be customized according to customer requirements
10	Eastcom Social Security Card	Main processor Industrial grade 32-bit processor, frequency: 72MHz Contactless card reading module Supported standards: ISO/IEC 14443 A/B standard, supports ISO15693 protocol card; Card categories: Mifare One, contactless Class A/B card, contactless CPU card; Support rate: 106~424Kbps; Contact card reading module Supported standards: ISO/IEC 7816 1/2/3 standards; Card categories: contact CPU card, logical encryption card 4442/4428, Memory card, etc.; Supported rate: 9600 ~ 307200bps; Card insertion and removal life: more than 100,000 times; SAM card holder comes standard with 4 SIM card holders that comply with GSM11.11 Magnetic stripe module (optional) Supported standards: ISO/IEC 7811; Supported magnetic tracks: 1/2/3; Track swiping direction: bidirectional ID card module (optional) supports mainland ID card, Hong Kong, Macao and Taiwan residence permit, and foreigner permanent residence ID card Working frequency 13.56MHz (fc) Antenna radiation intensity 1) Antenna surface magnetic field strength (Hmax) ≤7.5A/m rms 2) The electromagnetic field strength

No.	Item	Specification
		(Hmin) at a distance of 2.5cm from the normal direction of the antenna surface is ≥1.5A/m Reading distance: ID card: 0~5cm, no blind zone; contactless card: 0~5cm, no blind zone Card reading speed <1S Power supply DC5V—500mA Communication method USB: supports HID protocol, and the magnetic stripe module supports analog keyboard output protocol; Communication rate: 12Mbps; Line length 1.5 meters; Serial port: RS232 interface, communication baud rate: 115200, line length 1.5 meters; Support customized RS485 interface to achieve long-distance transmission; Support customized active card reading, serial port output card reading information; Mean time between failures >5000 hours Usage environment a) Working temperature: -20℃～60℃; b) Storage and transportation temperature: -30℃～65℃; c) Relative humidity: 20%~90%RH; d) Atmospheric pressure: 60KPa ~ 110 Kpa; Application environment: Applicable to Windows/Android/Linux/domestic systems/single chip microcomputer and other platforms;
11	Binocular camera	Industrial-grade binocular 2 million / 2 million high-definition wide dynamic image sensor · Black and white 40CM-1M, color 40CM to infinity clear imaging · Fixed 30 frames, no smear Black and white 1.5W, color 1.0W Ultra-low power consumption · -30℃~+70℃ wide temperature range stable operation ·USB2.0 high-speed

No.	Item	Specification
		transmission UVC architecture, compatible with Windows XP/7/8.1/10/vista/seven/Mac linux2.6.2 (include UVC) various systems

Overall Dimensions



Overall Dimension Reference