iData J16 Smart

Intelligence Creates Possibility- Intelligent Wireless Barcode Scanner

➢ Strong identification and read functions for touch and scanning

- It is mounted with the million-level global exposure industrial image sensor customized for the AIDC industry to satisfy the device service stability and reliability requirements in strict environments;
- The unique Soc NPU acceleration technology to enhance the time efficiency of data collection and improve users' task performance;
- The up-to-date SmartLight3.0 decoding algorithm has been optimized and calibrated with a library consisting of hundreds of thousands of barcode cases, making the barcode reading more accurate and faster and allowing users to work ease;
- It is suitable for all scenarios, such as industrial manufacture, logistics, transport, warehousing, medical care and retail and is available to read barcodes bent, folded, broken or smudgy;

➢ Unique deep learning and multispectral technology

- For scenarios where barcode quality is poorer, the J16 series can quickly create the optimal identification and read parameters under this scenario through the intelligent learning model and help users to improve their work efficiency more effectively;
- For blurry, broken, low-contract and other special barcodes, J16 series is equipped with the unique multispectral technology and can use the embedded intelligent algorithm to provide the optimal light source in a quick and targeted way through collecting the multispectral images in a unit of time domain, making the above-mentioned barcodes easy to read;

- For metal, glass, tile and other highly reflective materials, J16 series is equipped with an up-to-date optical design. The innovative polarized light solution addresses the overexposure, double image and other difficulties due to surface reflection, raising the device suitability in extreme scenarios;

➢ Touch screen design and easy interaction

- The 1.5-inch high-definition touch screen can realize the man-machine interaction, touch control of the screen, and quickly set up scanning, Bluetooth, Wi-Fi, prompt, etc. So, users can easily view all scanning information;

➢ Multi-middleware support and high scanning extensibility

- It is available to access the health code, facilitating the anti-epidemic management in hospitals, office buildings and communities;
- It is available to develop the UDI identification code middleware for drug management in hospitals and drugstores;
- It is available to develop more middleware and the barcode scanner is provided with more functions.

➢ Ergonomic design and high durability

- The stream-lined handle grip design better suits the ergonomic requirements and improves users' use experience in high-intensity usage scenarios;
- The high-resilience button design can provide clear feedback and reduce hand stress, designed with a service life of over 5 million times of press;
- With the IP52 protection level equipped, it can bear repeated drop impact from a 1.8m high site to the concrete ground. The unavoidable drop and the destructive damages to the device should be prevented during daily high-intensity device service;

➢ More humanized device service experience

- Quick power on reduces the time for users to wait for a startup;
- The bright and sharp laser frame design is equipped with the DOE laser diffraction solution. It is manufactured in strict accordance with the industrial laser safety standard, ensuring both safety and reliability and relieving users' eyestrain in a more humanized way;
- 130DB voice prompt can ensure that the prompt sound can be clearly heard in noisy environments and users have no need to worry about missing important messages;

➢ Wireless and efficient transmission

- The Bluetooth 5.0 connection can realize a transmission distance up to 70m, extending your physical scope of work;
- Support Wi-Fi direct connection to AP or computer even no base, can also complete data transmission;

➢ Flexible charging and strong endurance

- The embedded 2600mAh battery allows to scan information more than 100,000 times for a single charge with the service duration of over 12 hours;
- An excellent power supply management system has been adopted, which supports the low consumption mode to reduce the unnecessary loss and greatly raises the battery life.

➢ Simple and easy PSSA/MSSA remote management software allowing device use upon it is available

- The device is equipped with the one-button batch setting function, device information acquisition and other MDM device management functions, providing user managers with the shortcut solution to manage several devices at a single site;
- Special functions more suitable for users' actual service scenarios are provided, facilitating user managers to manage device assets, etc.;
- The OTA device upgrading function is supported, so users can update firmware online and experience the current solution service of the J16 series devices;
- The device can assist users to better use the intelligent barcode learning functions and create barcode identification and read experts near users through barcode training, scenario settings, etc.;

Market application

Manufacture:

Inventory management

Statement management

In-warehouse management

Component tracing

Home appliance assembly

Automobile manufacture

Parts management

Electronic manufacture

Performance parameter

Image Sensor	1280*800 pixel
Light source	WHITE，RED，BLUE

Scan performance

Scanning accuracy	≥3.33mil
Scanning angle	Pitch: ±60°; Deflection (skew): ±45°; Rotation (tilt): 360°
Angular Field of View	Horizontal: 44.3°, vertical: 28.4°, diagonal: 51°
Motion tolerance	13mil UPC 2m/s (up to 8m/s in high motion fault tolerance mode)
Minimum reading contrast	20%

Physical parameter

Size	174.69mm（H）*84.32mm（W）*64.68mm (D)
Weight	Scanner: 215g, cradle: 193g
Operating Voltage	4.5V~5.5V（DC）
Current value	40mA (The cradle is in a non-charging state)
Interface	USB-HID，USB-CDC，RS232
Prompts	Speaker (voice) prompt/vibration prompt/LED prompt/screen prompt
Shell material	PC+ABS

Operating Environment

Working temperature	0℃~50℃
Storage temperature	-20℃~70℃
Humidity	5%～95% (no condensation)
Drop specification	1.8m concrete floor dropped several times
Protection level	IP52
Ambient lighting	0Lux~100000Lux
Electrostatic protection	±15KV (air discharge), ±8KV (contact discharge)

Wireless transmission performance

BT

Bluetooth	Bluetooth 5.0
Frequency band	2402MHz~2480MHz
Transmission distance	Up to 70m in open environment
Communication mode	Real-time mode/batch mode

Wi-Fi

Wireless frequency band	2.4GHz~2.4835GHz（ISM Band）
Transmission rate	Up to 72.2Mbps
WLAN	IEEE 802.11b/g/n

Scan configuration

Battery capacity	2600mAh
Charging time	5 Hours（5V/2A）
Operating hours	≥12h
Scan times	Up to 100,000 times or more (when the battery is fully charged)

Relevant regulation

Electrical Safety	IEC 60950
Environmental parameters	RoHS directive 2011/65/EU，GB/T 26572
LED safety	IEC 62471:2006
EMI/RFI	FCC Part 15 Class B，EN 55032:2015，EN 55035:2017

Decoding range

Decoding range	HD (High Density)	SR (Standard Distance)
3.33mil Code 128	2.5cm~14cm （0.98inch to 5.51inch）	8cm~19.5cm （3.15inch to 7.68inch）
10.83mil Code 128	0.5cm~19cm （0.2inch to 7.48inch）	4.5cm~37.5cm （1.77inch to 14.76inch）
5.83mil QR Code	3.5cm~8.5cm	8.5cm~15.5cm

	（1.38inch to 3.35inch）	（3.35inch to 6.1inch）
20.83mil QR Code	1.5cm~21cm （0.59inch to 8.27inch）	5.5cm~37.5cm （2.17inch to 14.76inch）

Code system

1D	Codabar，Code 11，Code 128，Code 32，Code 39，Code 93，EAN 13，EAN 8，UPC-A，UPC-E，IATA 2 of 5，Interleaved 2 of 5，Matrix 2 of 5，Straight 2 of 5，MSI/PIessey，GS1 DataBar，etc
2D	Aztec，Data Matrix，MicroPDF 417，PDF 417，QR，Micro QR，etc

Accessories

Standard accessories	Data cable*1, power cable*1, user manual*1
Optional accessories	Bracket, serial port cable