



iData RS300 AI-Powered Full-Scenario Wearable Ring Scanner

Hands-free operation delivers a new scanning experience across all Scenarios

iData RS300 is a new generation of high-performance AI-powered full-scene wearable ring scanner, designed to create a hands-free workflow for complex operational scenarios such as warehousing and logistics, industrial manufacturing, retail stores, and electronics. With "AI decoding+full-scene wearing+rugged protection+low TCO" as the core, breaking through the scene limitations of traditional scanning devices, making barcode reading more efficient, flexible, and durable, it is the ultimate solution for enterprises to achieve efficient digital operations.

Improve operational efficiency

- AI-powered intelligent decoding: Breaking through traditional optical limitations, AI positioning+damage repair, efficient recognition of complex/dirty/wrinkled barcodes
- Free your hands, uninterrupted operation: supports ring, back of hand, and handheld modes, three flexible wearing styles, adaptable to different work postures and scenarios
- Bluetooth 5.3 high-speed transmission: stable connection without delay, real-time data synchronization
- Supports remote version: equipped with DS7500FR long-distance scanning engine, 11 meters ultra long distance reading, capable of handling various scenarios

Key benefit: From pairing, decoding, operation to transmission, the entire process is accelerated, and operations in complex environments remain efficient and smooth

Excellent wearable interactive experience

- Minimalist Bluetooth pairing: NFC one touch connection, or scan code for instant pairing, with simple steps and more convenient deployment
- 40g ultra-light design: The device is over 10g lighter than similar products, making it lightweight and comfortable to wear for long-term use
- Full hand adaptive: universal for both hands, adjustable size, no need for additional accessories, more flexible to use
- Triple intelligent feedback: combination of sound, light, and vibration, clear and precise indication, and clear operation status at a glance

Key benefits: Comfortable to wear, intuitive operation, quick to get started, significantly reducing the threshold and fatigue of use, and providing a smoother overall experience

Optimal Total Cost of Ownership (TCO)

- Industrial grade sturdy protection: IP65+1.8-meter anti-drop protection, dustproof, waterproof, anti-drop and durable, greatly reducing accidental damage and maintenance frequency
- Modular and convenient maintenance: The battery and accessories are designed to be detachable, making it quick and easy to change shifts and components, resulting in lower maintenance costs
- Efficient centralized operation and maintenance: supports multiple charging of devices and batteries, combined with unified management strategies, significantly simplifies daily operation and maintenance
- Industrial grade durable material: PC+GF+titanium alloy composite material, high strength, corrosion resistance, effectively extending the service life of the whole machine

Key benefits: high reliability, easy operation and maintenance, long lifespan, effectively reducing long-term ownership costs, and improving overall investment return rate



Warehouse
E-commerce sector
Sorting
Inbound/outbound
Listing and delisting
Inventory
Packaging

Express logistics
Collection and delivery
Sorting and transit
Abnormal item registration
Loading
Goods receiving

Retail sector
Inventory
Inbound and outbound
Sales scanning
Promotion verification
Inventory verification

Healthcare Sector
Medicine and vaccine traceability
Sample collection and verification
Medical record information input
Medicine delivery verification

Manufacturing sector
Quality inspection traceability
Assembly traceability
Material preparation and issuance verification
Inbound and outbound management for raw materials/semi-finished products/finished products

RS300 Technical Specifications

Performance parameters

Image sensor	1.3 million pixels, global exposure, frame rate of 60fps
Light source	White point light source
Aiming	Laser Cross Aiming
Reading accuracy	≥3.33mil
Scanning angle	Pitch: ±60 °; Skew: ±60 °; Tilt: 360 °
Field of view angle	Horizontal: 43.4 °, Vertical: 33 °, Diagonal: 54 °
Motion tolerance	4m/s (high motion tolerant mode can support 8m/s)
Min. Reading Contrast	8%
Scan mode	Support multiple modes such as precise decoding, automatic recognition, batch recognition, etc
SR Depth of Field (Standard Distance)	3.33mil Code128: 14~18cm 10.83mil Code128: 4.0~56cm 10.83mil Code128: 10~30cm 20.83milQRCode: 5~59cm
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/Plessey, GS1 DataBar, etc
	2D Aztec, Data Matrix, Micro PDF 417, PDF 417, QR, Micro QR, Grid Matrix etc

Environmental parameters

IP rating	IP65
Drop specification	1.8 meters (multiple falls to concrete ground)
Tumbling test	1000 times, 0.5 meters
Electrostatic protection	± 15KV (air discharge), ± 8KV (contact discharge)
Salt fog test	48 hours
Working Temperature	-20 °C~50 °C (discharge temperature)
Storage temperature	-30°C~70°C
Relative humidity	5% to 95% (non-condensing)

Related regulations and certifications

Environmental protection related	RoHS, Reach, WEEE
Battery related	CCC, IEC62133, UN38.3
Machine related	SRRC, CE

Charging and battery life

Battery life	≥ 15 hours (in automatic scanning mode, scan every 3 seconds)
Single charge scanning times	Up to 18000 times
Battery capacity	600mAh, removable battery
Charging time	2 hours(5V/2A adapter); 2h40min (USB port)

User feedback system

Wireless pairing method	NFC touch; Scan code pairing; Click to discover pairing
Wearing and triggering method	Ring (compatible with both hands); Hands back (distinguish between left and right hands)
Buzzer	85dBA (at 10cm in the direction of sound output)
Vibration alert	Support (default: off)
LED Prompt	Decoding prompt light * 2: transmission successful - green; Transmission failed - red Bluetooth indicator light * 1: Disconnected-flashing; Connected - 5 seconds on and then turn off Battery indicator light * 1: Charging in progress - red light; Full power - green light; Low battery - red light flashing

Transmission method and parameters

Bluetooth	Bluetooth 5.3; 2402MHz~2480MHz
Transmission distance	Open space up to 50m
Communication mode	Connected to PC: Base HID; Base CDC; Base POS communication Connected to mobile phones and tablets: Bluetooth HID; Bluetooth BLE

Physical parameters

Size (H * W * D)	64 * 31.4 * 16mm
Weight	52.5g (body 40+ring 12.5)
Housing material	PC+GF+titanium alloy

Accessories

Standard	Scan Rings, Single Base, Data Cable, Quick Guide
Optional	Trigger accessory: Back of Hands mount (left and right hands); Charging accessories: adapter, 4-slot charging cradle, 8-slot battery charging cradle



Wireless base



Glove



Removable battery



4-slot charging cradle



8-slot battery charging cradle

The information of iData products and software service may be subject to change without notice. Please contact your iData sales representative for the latest details.



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