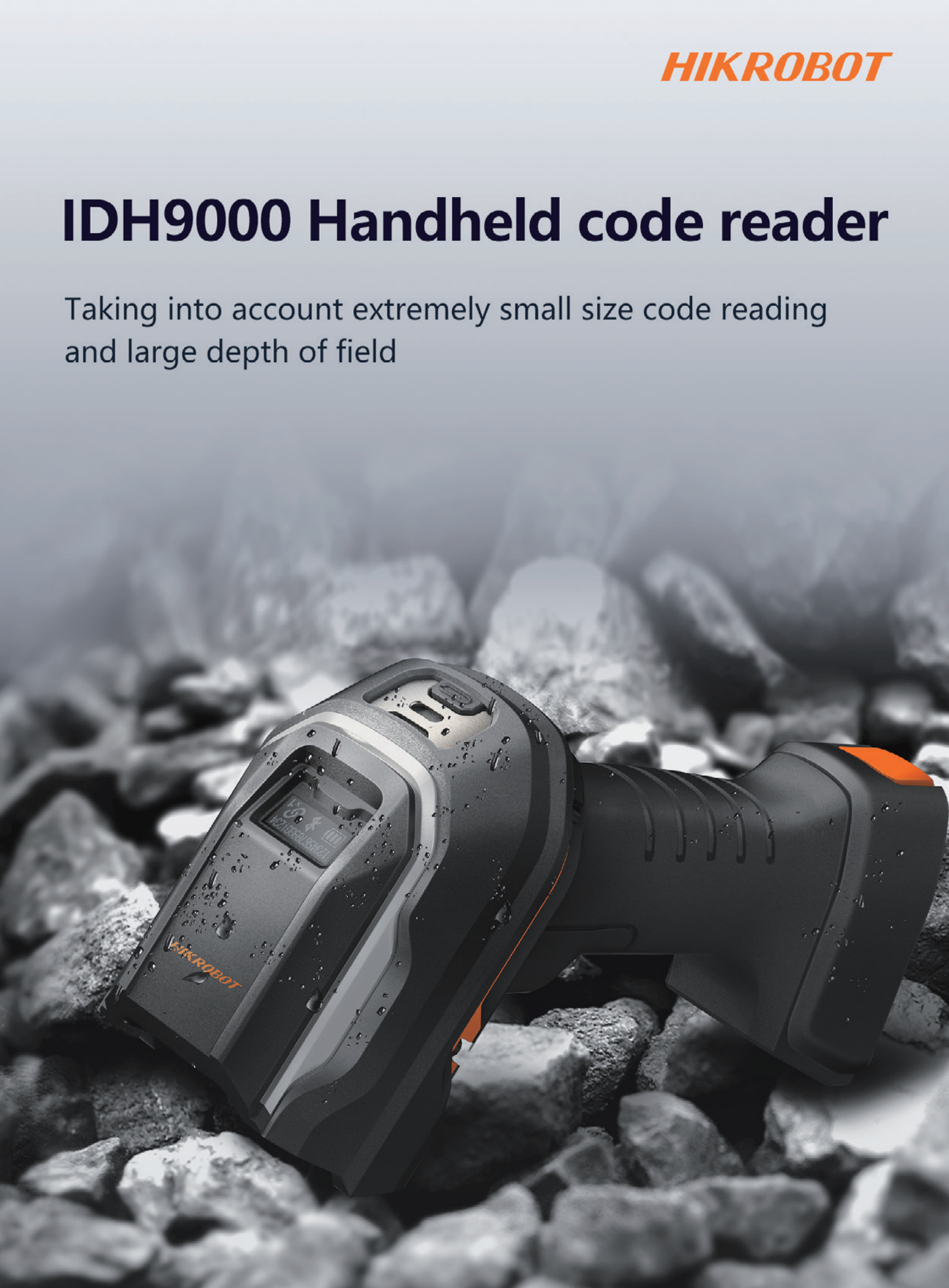
HIKROBOT

IDH9000 Handheld code reader

Taking into account extremely small size code reading and large depth of field



Appearance

Multiple light source design

- Direct spot lighting、polarized lighting、diffused reflection lighting、bi-directional lighting

Dual image sensor+ ToF sensing

- Dual 1.3MP mono global sensorsenor, a lens for reading extremely small codes and a zoom lens with a large depth of field
- ToF sensing enables distance measurement and object sensing

Multifunctional cable

- Multiple communication methods: support USB/serial port/network communication, industrial communication protocol
- Multiple power supply methods: support POE/DC/USB 5V power supply
- Safety buckle design: no fear of falling



OLED+ Ring indicator light + hidden buttons

- Clear display of status lights at all angles in handheld and fixed modes
- OLED screen supports barcode information, parameter configuration, and QR code generation
- Supports one-click parameter adjustment

Two-color injection molding and hook design

- Rubber injection molding, resistant to drops and impacts
- Support hanging

Highly durable trigger

- Triggered repeatedly more than 10 million times

Key Features

Rigorous industrial grade protection

The IDH9000 series has been optimized from multiple dimensions for complex industrial environments full of oil, water and dust. The fully rubberized design allows the product to be dropped 50 times from a height of 2.5 meters and trmbled 20,000 times from a height of 0.3 meters.

IP67 protection level. At the same time, the use of highly oil-resistant materials can effectively resist the effects of oil contamination such as diesel, gasoline, detergents, and transmission fluids, ensuring the long-term stable operation of the handheld code reader in harsh environments.



2.5m

50 times drops



20000 times

tumbling from 0.3m height



IP67

underwater



ISO16750

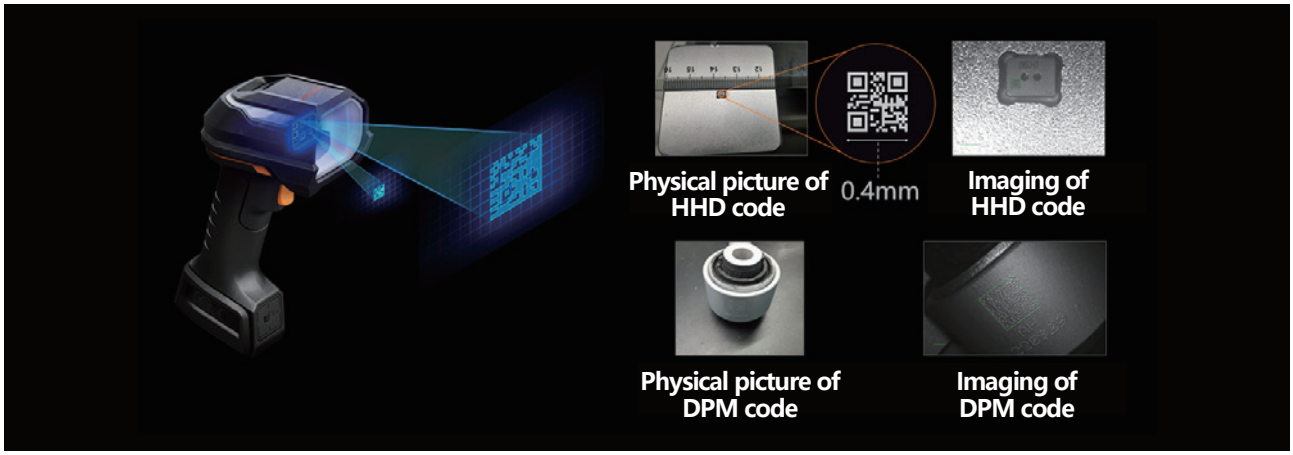
chemically resistant

Intelligent code reading system for difficult codes

The IDH9000 series is equipped with a dual lens system, one for ultra-small code reading and the other for a large depth of field. Among them, the lens for ultra-small code reading has a 16mm fixed focus design, an optimal working distance of 60mm, and can read barcodes with a minimum size of 0.04mm.

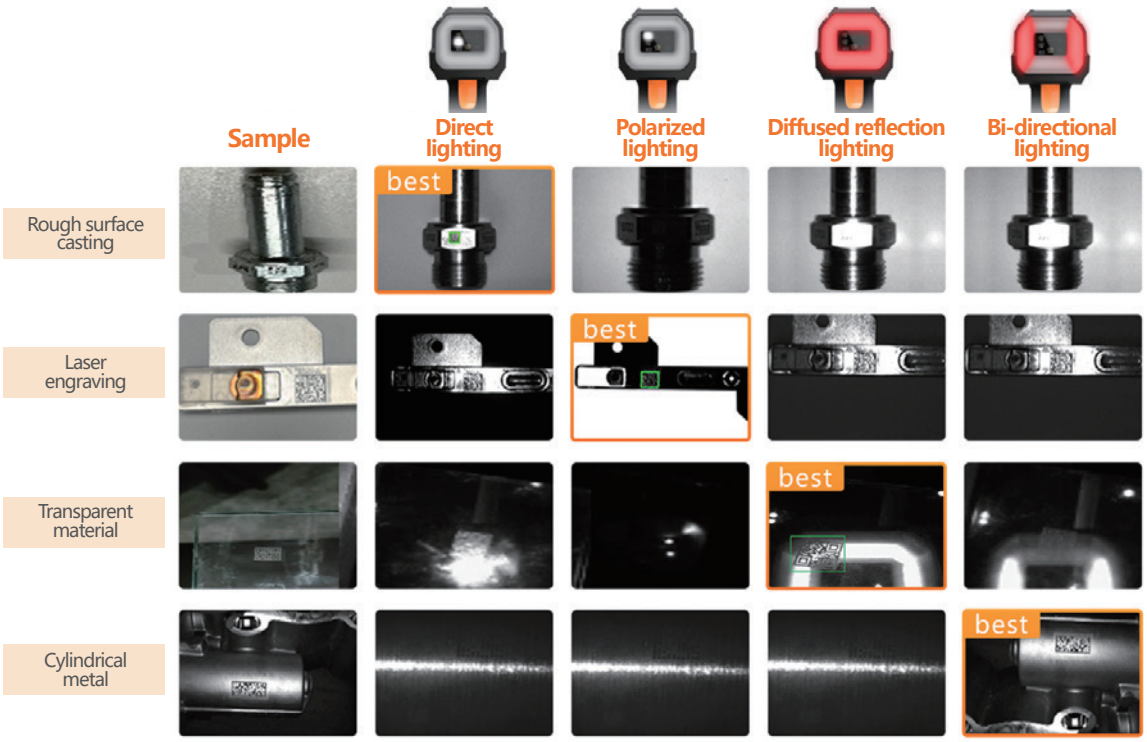
The key to accurate reading of ultra-small codes lies in the innovative dual aiming system, which integrates a straight line and an LED light spot indicator to ensure that the two accurately overlap within working distance of 60mm , providing users with intuitive scanning guidance and improving scanning efficiency.

The large depth-of-field lens can automatically adapt to changes in working distance, providing a larger depth-of-field range for code reading.



Specializing in code reading lighting systems

IDH9000 integrates four lighting modes: direct lighting, polarized lighting, diffused reflection lighting, bi-directional lighting. It can accurately identify targets that cannot be read by traditional equipment which break the limitations of coding materials, processes, shapes or surface treatments, and help to easily face various application scenarios.



Rigorous industrial grade protection



- Support USB, serial port, network port communication
- Support SmartSDK, TCP Client, Serial, FTP, TCP Server, Profinet, MELSEC, Ethernet/IP, ModBus, UDP, Fins, SLMP and other industrial protocols

Wireless charging, Intelligent power supply management



5000 mAh
Battery capacity

20 h
Battery life

70 %
2-hour charging

Avoid metal filings interfering with charging and electrode wear

■ 2-hour charging

- Battery health status
- Standby management
- Real-time power
- Data statistics and optimization
- Remaining charging time

Application scenarios



Dual image sensor+ ToF sensing

Heavy oil pollution, iron filings, falling from high places

【Scene 1】Automotive/ Aerospace

Code reading for raw material delivery， production and assembly processes

【Scene 2】Auto parts

Adapt to harsh production environment，code reading for raw material delivery



Curved metal scene

Metal roller, mobile phone vibration motor

【Scene 1】consumer electronics

Code reading of small devices such as motors, metal shafts, stepper motors, etc.

【Scene 2】Auto parts

Reading of QR codes on curved metal, metal bearings and other curved surfaces

【Scene 3】Medical device

Small DPM code reading for surgical instruments such as scalpels and endoscopes



Ultra-small code scene

0.4mm-1mm (1.57mil)

【Scene 1】Display panel

The industry's ultra-small code dimension: 0.4mm-1.2mm

【Scene 2】Glass

The industry's ultra-small code dimension: 0.4mm-1.2mm

【Scene 3】3C

Ultra-small code dimension on 3C devices, semiconductor or FPC: 0.4mm-1mm



Difficult code

DPM code and printing code

【Scene 1】Semiconductor

The imaging contrast of semiconductor materials and ceramics is extremely low

【Scene 2】Reflective surface

Light spots are easy to form on the reflective surface, and the code imaging contrast is low

【Scene 3】Metal wiredrawing, metal pits

Wiredrawing and pits affect image quality



Others

Long-distance code reading, stacking code reading

【Scene 1】Warehousing

For long-distance code reading on forklifts, pallets, small racks, and stacking, the code reading distance is about 1 meter

【Scene 2】Shoes and clothing

It is suitable for sorting and review scenarios, simulates fixed type product, and uses induction trigger mode to reduce light pollution and interference with workers' sight

Parameter

Catagory	Subcatagory	High-end DPM version	Standard DPM version
Performance	Sensor	Dual sensor of 1280 x 1024 resolution Dual lens	Single sensor of 1280 x 1024 Single lens
	Aming system	LED + laser	Laser *1
	Light source	Diffused reflection lighting, bi-directional lighting, direct lighting, polarized lighting	
Durability	Protection level	Ingress protection: IP67 Chemically resistant: ISO 16750	
	Drop height	2.5m,50 times	
	Temperature	Working temperature：-20° C to +50° C	
Code reading ability	Algorithm	AI deep learning	
	DPM code	HHD code, various different codes	Various different codes
	HHD code（≤ 1mm）	40um (min. accuracy 1.57mil QR code)	1D: 3mil，2D: 5mil
Hardware	Processor	CPU + NPU	
	TOF	Support	
	OLED	Support	
Communication	Communication protocol	USB、serial port、Industrial communication protocols (built-in)	

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