

RS20

Retail-First
Touch Mobile Computer

Smart Retail. Made Light.

The CipherLab RS20 is purpose-built for modern retail with a lightweight, ergonomic design and enterprise-grade features like Edge AI Pic 'n Fill OCR, flexible RFID and under-display NFC capabilities, and easy device management. It helps frontline teams work faster, reduce errors, and enhance customer experiences from receiving to checkout.



Ultra-Light
198g



Pocketable
Design



One-Handed
Control



Under-display
NFC



Pic 'n Fill™
Edge AI OCR

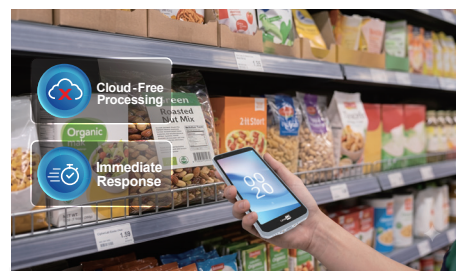


Lightweight and Pocketable for one-handed use

Designed for frontline retail associates, the RS20 weighs just 198g, with a slim, pocketable design, dedicated scan keys, and an anti-slip grip. Optimized for one-handed use, it reduces fatigue while enabling fast, confident operation during long shifts.

On-Device AI OCR for Faster Data Capture

Powered by Pic 'n Fill™ Edge AI OCR, the RS20 instantly captures expiry dates, batch numbers, shelf labels, and product information directly on the device. Cloud-free processing delivers immediate response, enhanced data security, and greater accuracy while eliminating manual entry and reducing operational delays.



One Device for Flexible Retail Tasks

The RS20 adapts to every retail scenario, from receiving and stock replenishment to price audits, markdowns, returns, and checkout assistance. Optional UHF RFID speeds up inventory and item location tracking, while under-display and front-facing NFC enable quicker contactless payments, member ID, and smoother customer interactions.

Fashionable by Design. Branded by You.

More than a mobile computer, the RS20 becomes an extension of your retail brand. With customizable logos and color-coded accessories, it supports visual asset management, staff role identification, and a consistent brand image while maintaining the sleek, modern look expected in today's retail environments.





Performance	Operating System ¹	Android 16 upgradable to Android 18 (GMS & AER Certified)
	CPU	Octa-core Processor 4 x A78 2.6GHz + 4xA55 2GHz
	Memory	6GB RAM / 64GB Flash
	Expansion	Micro SD card socket support up to 2TB capacity
	Operating Power	3000 mAh Li-Polymer Battery (Typical), Supports Hot Swap (up to 30 seconds)
	Working Hours ²	12 hours
	Alert	Power LED (Red/Green), Notification LED (Blue/Green), Haptic Feedback (LRA)
	Interface Supported	Type-C interface: Support USB 2.0 OTG, Rear Expansion Connector (10-pin) Support RFID/Accessories, 2-pin Charging Interface: Supports charging via charging cradle.
Wireless Communication	WLAN	Wi-Fi 6E (802.11ax) IEEE 802.11 a/b/g/n/ac/ax/d/h/i/r/k/v/w; Tri-band Antenna (2.4GHz & 5GHz & 6GHz) 802.11r (fast roaming), 802.11 v/k (Voice-Enterprise), IPv4, IPv6, WPA3
	WPAN	Bluetooth® 5.4 (BR/EDR + BLE)
Data Capture	Barcode Scanning	Supports 1D/2D Scan Engine
	RFID Read / Write	Support ISO 14443 Type A and B, ISO 15693, MIFARE, FeliCa, NFC Forum Card Emulation and Reader Mode, FeliCa M Class compliant
	Camera	Rear Camera: 16 MP PDAF Autofocus, LED Flash, Front Camera: 8MP Fix focus
Characteristics	Display	5.5-inch TFT HD (720x1440), 450 nits (typical)
	Touch Panel	Multi-touch capacitive display, Glass with Anti-Fingerprint (AF) coating
	Interactive Sensor Technology	Proximity Sensor, 3-axis Accelerometer, Gyroscope
	Keypad	Right/Left Trigger key, Right FN key (User definition), Volume up/down key, Power key
	Audio	Built-in Speaker with Smart Amplifier, Built-in Receiver, Bluetooth Headset Support (HFP 1.6, Wideband Speech) Dual Microphones with Noise Reduction and Echo Cancellation
	Dimensions (LxWxD)	153.8 x 71.3 x 12.8 mm
	Weight	198g (with 3000mAh battery)
User Environment	Operating Temperature	-10°C to 50°C / 14°F to 122°F
	Storage Temperature	-30°C to 70°C / -22°F to 158°F (without battery), (Sharp temperature change, dewing or freezing not allowed) (Battery storage temperature refer to battery cell's spec)
	Humidity(non-condensed)	Operating Humidity: 10% to 90%, Storage Humidity: 5% to 95% (Sharp temperature change, dewing or freezing not allowed)
	Impact Resistance	IP65 (with battery installed) Drop Specification • Multiple 1.2 m drops to concrete at room temperature per MIL-STD-810H • Multiple 1.5 m drops to concrete at room temperature with Rubber Boot per MIL-STD-810H Tumble Specification • 500 tumbles (1,000 impacts) at 0.5 m • 500 tumbles (1,000 impacts) at 1.0 m with Rubber Boot • IEC 60068-2-31
	Electrostatic Discharge	IEC 61000-4-2, ±15 kV Air discharge, ±8 kV Contact discharge
	Regulation Compliance	Compliant with regional regulatory certifications, RoHS compliant: Yes Surge Protection: IEC 61000-4-5 (8/20us waveform), ±250V
	Development Support	Android 16.0 SDK, HTML 5 API, Reader API (Java/Xamarin/.NET MAUI)
Application Software	Reader Config, Terminal Emulation, Button Assignment, Device Health Dashboard, LogGen, AppLock, A-Demo, Ping Tool, Enterprise Settings, BarcodeToSetting, EZConfig, Ezedit, UHF_RFID Service, Chrome, Pic 'n Fill™ OCR	
Certified Application	SOTI MobiControl, Ivanti, 42 Gears SureMDM, ReMoCloud, ReMoCloud Express, EnDeCloud, WMDS, Edge MDM	
Accessories	Single charging cradle, Single charging and communication cradle, 4-slot battery charger, Hand strap, Wrist Strap, Rubber boot, Screen protector, Shoulder strap, Pistol grip, UHF RFID reader	
Warranty	1-year standard warranty	

1. The Android version is subject to technical feasibility confirmed by CPU vendor.

2. SE4780 Scan Engine, Scanning per 20 seconds, LCD 50% backlight and speaker on (volume is default) at 25°C.

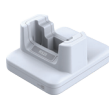
Accessories



Battery (3000mAh)



4-slot Battery Charger



Single Charging Cradle
(& Communication)



Shim



Rubber Boot



Screen Protector



Pistol Grip



UHF RFID Reader