

指环式穿戴扫描器 · 解放双手 · 蓝牙 4.2 / 2.4G 双模 · 100 万像素全局快门

XL-ZH480 指环扫描器

XL-ZH480 Wearable Ring Barcode Scanner

100 万像素全局快门

≥ 3 mil 识读精度

蓝牙 4.2 / 2.4G 双模

30 m 无线传输

41 g

57.5 × 36.9 × 48.3 mm

指环佩戴 · 解放双手

Wearable, Hands Free

指带、腕带两种佩戴方式，魔术贴调节松紧；拇指自然按压橙色触发键，搬货、理货、拣选时双手不必离开货物，边搬边扫。

Worn on the finger or wrist with an adjustable Velcro strap. The thumb rests on the orange trigger, so both hands stay on the goods while picking, sorting or moving stock.

01

100 万像素全局快门

1 MP Global Shutter

100 万像素二维影像模组配白光照明，纸质码、屏幕码、覆膜与低对比度码都能读；识读精度 ≥ 3 mil，景深 50 ~ 620 mm。

A 1 MP global-shutter imaging module with white illumination reads paper, screen, laminated and low-contrast codes. Minimum resolution ≥ 3 mil with 50-620 mm depth of field.

02

蓝牙 4.2 + 2.4G 双模

Bluetooth 4.2 & 2.4G

蓝牙支持 HID / SPP / BLE，直连手机、平板与电脑；标配 2.4G 接收器即插即用，空旷环境传输距离 30 m。

Bluetooth HID / SPP / BLE connects straight to phones, tablets and PCs. The bundled 2.4G receiver is plug-and-play, with 30 m transmission in open space.

03

存储模式 · 2 万条以上

Storage Mode, 20,000+

350 KB 本机存储，离线先扫后传，超 2 万条商品码不丢数据；振动 + LED + 蜂鸣三重提示，嘈杂现场也能确认。

350 KB of on-board storage holds 20,000+ codes for scan-now-upload-later workflows. Vibration, LED and buzzer feedback confirm every read even in noisy sites.

04



斜侧面与指带 (45°)
Angled view with strap



侧面接口 Type-C / 开关
Type-C port and switch



顶部指示环与触发键
Indicator ring and trigger

应用场景 Applications

移动支付、商超零售、仓储拣选、快递分拣、生产制造、库存盘点、医疗采集、电力抄表：戴在手上、单手搬货也能扫码，双手真正被解放。

Mobile payment, retail, warehouse picking, parcel sorting, manufacturing, stocktaking, healthcare collection and meter reading: scan while your hands are full - both hands stay free.

产品特点 Product Features

- 指环佩戴 解放双手
Wearable ring design, hands free
- ≥ 3 mil 识读精度
≥ 3 mil minimum resolution
- 蓝牙 4.2 + 2.4G 双模
Bluetooth 4.2 and 2.4G dual mode
- 存储模式 2 万条以上
Storage mode, 20,000+ codes

识读性能 / SCAN PERFORMANCE

图像传感器 Image sensor	CMOS 全局快门, 100 万像素 Global shutter CMOS, 1 MP
识读精度 Minimum resolution	≥ 3 mil / 0.076 mm (PCS 90%, Code39)
视场角 Field of view	水平 40° × 垂直 30° Horizontal 40°, vertical 30°
识读景深 Depth of field	50 ~ 620 mm
解码速度 Decoding speed	65 cm/s
识读角度 Roll / Pitch / Yaw	旋转 360° / 倾斜 ±60° / 偏转 ±55°
符号反差 Print contrast	≥ 20%
识读模式 Scan mode	手动识读、感应识读 Manual and auto-sense
提示方式 Feedback	LED 指示灯、振动、蜂鸣器
识读码制 1-D 1-D symbologies	UPC-A/E, EAN-8/13, Code128, GS1-128, Code39, Code32, Code93, Code11, ITF, Matrix 2 of 5, Industrial 2 of 5, Codabar, MSI, GS1 DataBar 等
识读码制 2-D 2-D symbologies	QR Code、Micro QR、Data Matrix、PDF417、MicroPDF417、Aztec 等

标准配件 Accessories

USB 数据线 ×1 (连接主机、充电与 USB 通信) ; 2.4G 接收器 ×1 (无线传输) ; 简易操作指南 ×1 ; 指带 / 腕带按整机配置提供。
USB cable x1 (host link, charging and USB data); 2.4G receiver x1 (wireless link); quick operation guide x1; finger / wrist strap supplied per configuration.

- 100 万像素全局快门
1 MP global shutter sensor
- 50 ~ 620 mm 识读景深
50-620 mm depth of field
- 30 m 空旷无线传输
Up to 30 m wireless range
- 振动 + 蜂鸣 + LED 提示
Vibration, buzzer and LED feedback

无线 / 电气 / 机械 / 环境 / WIRELESS, ELECTRICAL & PHYSICAL

无线通信 Wireless	蓝牙 4.2 (HID / SPP / BLE) 、2.4G Bluetooth 4.2 (HID/SPP/BLE) and 2.4G
工作模式 Operating mode	同步模式 (即扫即传) / 存储模式 Sync and storage modes
传输距离 Transmission range	30 m (空旷环境 open area)
存储容量 Storage	350 KB (约 20,000 条以上商品码 20,000+ codes)
电池容量 Battery	450 mAh
充电时间 Charging time	约 1.5 小时 (DC 5 V / 1000 mA) approx. 1.5 h
续航能力 Runtime	持续扫描 ≥ 2 小时 / 待机 ≥ 4 周 ≥ 2 h scanning, ≥ 4 weeks standby
通讯接口 Interfaces	USB-KBW、USB-COM、TTL (有线) / USB Type-C Type-C charging and communication
支持系统 Supported OS	Windows、macOS、iOS、Linux、Unix、 Android
外观尺寸 Dimensions	57.5 × 36.9 × 48.3 mm
重量 Weight	约 41 g (本体 net weight)
线材长度 Cable length	1.0 m (Type-C)
电源 Power	DC 5 V / 1 A, 工作电流 260 mA (平均 average)
工作环境 Environment	0 °C ~ 50 °C, 湿度 5% ~ 95% (无凝结) 0-50 °C, 5-95% RH non-condensing
储存环境 Storage	-20 °C ~ 60 °C -20-60 °C

佩戴与使用 Wear & Usage

佩戴与调节

Wear & Adjust

指带 / 腕带两种方式，魔术贴自由调节松紧，可戴在食指与中指之间或手背；41 g 机身长时间佩戴不吃力，长时间作业更轻松。

Finger or wrist strap with Velcro adjustment - wear it between two fingers or on the back of the hand. At 41 g it stays comfortable through long shifts.

01

触发与识读

Trigger & Sensing

拇指按压橙色触发键即可扫码，也可开启感应识读，靠近条码自动触发；LED、振动、蜂鸣三重反馈，嘈杂与强光现场都能确认结果。

Scan with the orange thumb trigger or enable auto-sense to read on approach. Triple LED, vibration and buzzer feedback confirms the read in noisy, bright sites.

02

三种连接方式

Three Ways to Connect

2.4G 接收器即插即用；蓝牙 HID / SPP / BLE 直连手机、平板、电脑；Type-C 有线连接可边充边用，随时切换。

Plug-and-play 2.4G receiver, Bluetooth HID / SPP / BLE for phones, tablets and PCs, and a Type-C wired link for charging while working.

03

充电与续航

Charge & Runtime

Type-C 接口充电约 1.5 小时充满，450 mAh 电池支持持续扫描 ≥ 2 小时、待机 ≥ 4 周，满足一整个班次的使用。

The Type-C port refills the 450 mAh battery in about 1.5 h, giving ≥ 2 h of scanning and ≥ 4 weeks of standby - enough for a full shift.

04

项目 / Item	数值 / Value	说明 / Note
长度 Length	57.5 mm	含扫描窗口 with scan window
宽度 Width	36.9 mm	机身 body
高度 Height	48.3 mm	含指带 with finger strap
重量 Weight	约 41 g	本体 net weight
线材 Cable	1.0 m	Type-C 线 Type-C cable
接口 Port	USB Type-C	充电 / 有线通讯 charge and wired data

典型识读景深 / Depth of Field	距离 / Range
Code39 (3 mil)	110 ~ 200 mm
PDF417 (6.8 mil)	110 ~ 230 mm
Data Matrix (10 mil)	100 ~ 220 mm
UPC / EAN (13 mil)	70 ~ 550 mm
Code39 (20 mil)	60 ~ 620 mm
QR Code (20 mil)	50 ~ 340 mm

设置与配置 Configuration & Setup

- ① 蓝牙配对：扫描配对设置条码即可与手机、平板、电脑连接；使用 2.4G 接收器时即插即用。
- ② 常用设置：前缀 / 后缀、码制开关、存储模式、振动与蜂鸣提示等均可通过设置条码配置。
- ③ 资料索取：完整规格书、设置指南与集成文档可向我司索取。

① Bluetooth pairing: scan the pairing setup code to link with a phone, tablet or PC; the 2.4G receiver works plug-and-play. ② Everyday settings: prefixes and suffixes, symbology toggles, storage mode, vibration and buzzer feedback are all configured by setup codes. ③ Documentation: ask us for the full specification, setup guide and integration documents.

应用提示 Application Notes

- ① 适合移动支付、商超零售、仓储拣选、快递分拣、生产制造、库存盘点、医疗采集、电力抄表等场景；② 佩戴时让扫描窗口朝手掌外侧，拇指自然按压触发键；③ 支持纸质码、屏幕码与覆膜 / 低对比度码；④ 规格如有更改恕不另行通知，完整规格与集成资料可向我司索取。

① Suited to mobile payment, retail, warehouse picking, parcel sorting, manufacturing, stocktaking, healthcare collection and meter reading. ② Wear the scan window facing outward and let the thumb rest naturally on the trigger. ③ Reads paper, screen, laminated and low-contrast codes. ④ Specifications subject to change - ask us for the full specification and integration documents.