

小型固定式 · 产线工位读码 · 紧凑空间易集成

G4503 小型固定式条码扫描器

G4503 Compact Fixed-Mount Barcode Scanner

小型固定式安装

1600 × 1200 CMOS

1D ≥ 3.3 mil

USB / TTL / RS232

49 × 21 × 16.8 mm

75 g

01 自研核心技术

Self-Developed Core Technology

自主研发的核心识读技术，可识读褶皱、弯曲、弯折、破损、磨损、薄膜覆盖、低对比度等各类品质条码，并配合客户开发或定制需求。

An independently developed reading core handles wrinkled, curved, bent, damaged, worn, film-covered and low-contrast barcodes; custom development available.

02 高扫描性能

High Scanning Performance

纸质条码与屏幕码快速识读，复杂 DPM 码、复杂喷墨码、疑难纸质标签码同样高效。

Quickly reads paper barcodes and screen codes, plus complex DPM and inkjet codes and difficult paper labels.

03 高集成度 · 小巧紧凑

Highly Integrated & Compact

集成度高、稳定可靠；机身仅 49 × 21 × 16.8 mm，适用于紧凑空间安装。

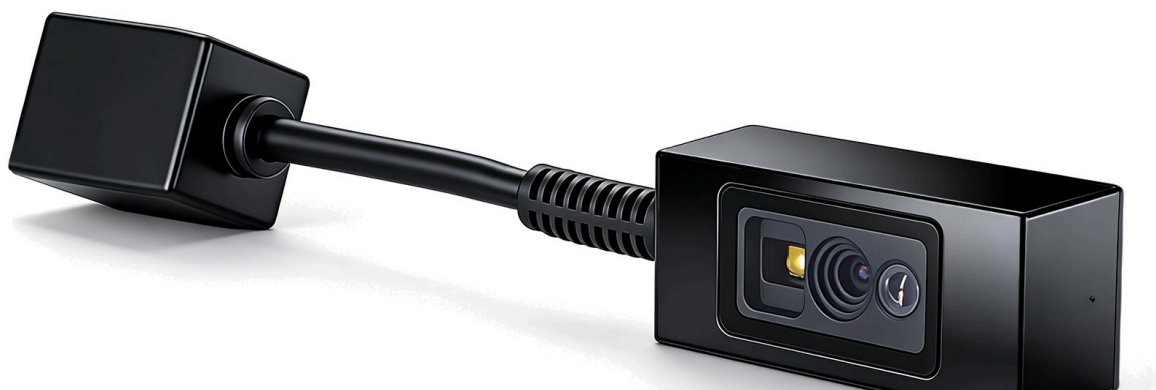
High integration and reliability in a compact 49 × 21 × 16.8 mm body that fits tight installation spaces.

04 接口丰富 · 多种识读模式

Rich Interfaces & Reading Modes

USB（默认）、TTL、RS232 接口；支持手动、命令触发、感应、连续模式及 IO 触发。

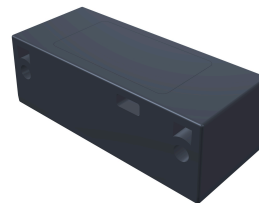
USB (default), TTL and RS232 interfaces; manual, command-trigger, sensing and continuous modes with IO trigger.



扫描窗口特写 (Scan Window)



连接端与线缆 (Connector & Cable)



外观 3D 视图 (3D View)

应用场景 Application Scenarios

3C 治具自动化流水线纸质条码快速扫码；生产线上工位读码、户外自助值机、快递柜、检票机、展示亭及各类自助柜设备等，可作为设备配件嵌入集成。

Rapid paper-barcode scanning on 3C fixture automation lines; production-line workstation reading, outdoor self-service check-in, parcel lockers, ticket gates, display kiosks and self-service cabinets — embedded as a device accessory.

G4503 小型固定式条码扫描器 Compact Fixed-Mount Barcode Scanner

产品特点 Product Features

- 自主研发核心技术**，可识读褶皱、弯曲、破损、磨损、低对比度等各类品质条码
Independently developed reading core for wrinkled, curved, damaged, worn and low-contrast barcodes
- 高集成度·小巧紧凑**：49 × 21 × 16.8 mm，适用于紧凑空间
Compact 49 × 21 × 16.8 mm body for tight installation spaces
- 多种识读模式**：手动、命令触发、感应、连续模式，支持 IO 触发
Manual, command-trigger, sensing and continuous modes, plus IO trigger

识读性能 / READING

图像传感器 Image sensor	1600 × 1200 CMOS
照明 / 瞄准 Illumination / Aiming	白光补光 LED / 红光 LED 瞄准 White illumination LED / red aiming LED
识读精度 Accuracy	1D ≥ 3.3 mil; 2D ≥ 5 mil
典型识读景深 Depth of field	30 ~ 300 mm (支付宝支付码) 40 ~ 300 mm (EAN-13 13 mil)
打印对比度 Print contrast	≥ 20%
旋转 / 倾斜 / 偏转 Roll / Pitch / Yaw	±360° / ±60° / ±60°
视场角度 Field of view	±43° / ±33°

识读码制 / SYMBOLOGIES

二维码 2D code	PDF417, Data Matrix, QR Code, HanXin, AZTEC, MaxiCode
一维码 1D code	EAN-13, EAN-8, UPC-A, UPC-E, Code 39, Code 128, ISBN, Code 93, Code 11, UCC/EAN-128, GS1 Databar, Interleaved 2 of 5, Matrix 2 of 5, Industrial 2 of 5, Codabar, Standard 2 of 5, MSI-Plessey, GS1 composite code 等

环境参数 / ENVIRONMENTAL

工作温度 Operating temperature	-20 °C ~ +50 °C
储存温度 Storage temperature	-40 °C ~ +60 °C
工作湿度 Humidity	5% ~ 95% (无凝结) Non-condensing
环境光照 Ambient light	0 ~ 100,000 LUX

- 高扫描性能**：纸质条码与屏幕码快速识读，复杂 DPM 码、喷墨码同样胜任
High scanning performance on paper barcodes, screen codes, complex DPM and inkjet codes
- 接口丰富**：USB（默认）、TTL、RS232
Rich interfaces: USB (default), TTL and RS232
- 调试方便**：图像工具 ImageTool、升级工具 OtaToolV（OTA 升级）
Easy setup with ImageTool and OtaToolV for OTA firmware upgrade

机械 / 电气 / MECHANICAL & ELECTRICAL

通讯接口 Communication	USB（默认）/ TTL / RS232 USB default, TTL and RS232
外观尺寸 Dimensions	49 (D) × 21 (W) × 16.8 Max (H) mm
重量 Weight	75 g
安装孔 Mounting holes	φ2 安装孔 (2.0 螺钉) / φ1.1 安装孔 (1.2 螺钉) φ2 for 2.0 screws / φ1.1 for 1.2 screws
工作电压 Voltage	5 V
额定电流 Current	< 200 mA (典型值, 5 V 输入) Typical, at 5 V input

8-PIN FPC 接口定义 / FPC PINOUT

PIN 1 / 5 TXD / RXD	RS232 发送 / 接收 RS232 transmit / receive
PIN 3 / 6 USB DP / USB DM	USB D+ / D- 信号 USB data lines
PIN 4 TRIG	读码触发信号 (GND 短接触发) Trigger, short to GND
PIN 7 VCC	输入电源 +5 V
PIN 2 / 8 GND	地 Ground

抗热冲击性能 / THERMAL SHOCK

最高温度 Max. temperature	60 °C (140 °F)
最低温度 Min. temperature	-20 °C (-4 °F)
循环次数 Number of cycles	30 分钟高温; 30 分钟低温 30 min high / 30 min low temperature
周期 Cycle	24

典型景深测试条件：环境温度 23 °C，白炽灯光源，使用本司制定的测试样码。规格如有更改，恕不另行通知 / Specifications subject to change without notice.