NFC READING · 640 × 480 IMAGE SENSOR · SCREEN-CODE OPTIMISED · 81.48 × 52 mm FRAME

F21-NFC-W

Embedded Barcode Reader with NFC

640 × 480 CMOS | NFC | Cards | Resolution ≥ 7 mil | DOF 0–100 mm | 143 g

01 Slim, Screen-Code Optimised

A compact, slim body tuned for on-screen codes — mobile payment codes and e-coupons read faster, while printed tickets still scan.

02 Integrated NFC Reading

Integrated NFC near-field reading for cards and phones, suited to kiosks, access control and transit ticketing.

03 High-Performance Decoder

Built-in high-performance processing chip: ≥ 7 mil resolution and a 0–100 mm working range, with PCS ≥ 30%.

04 Developer Friendly

Open image capture, device and I/O interfaces plus an SDK for custom functions; firmware upgradeable in the field.





Engine overview



Interface and structure

TYPICAL VERTICALS

Small self-service terminals, desktop devices and transit card readers — **embedded reading of phone screens, tickets and NFC cards** in one module.

PRODUCT FEATURES

- **Slim form factor** — built for compact self-service terminals
- **NFC reading** — integrated near-field card and phone reading
- **High-performance decoder** — fast decoding with ≥ 7 mil resolution
- **Screen-code optimised** — reads phone screens and paper tickets
- **Card and phone reading**
- **Open SDK** — configuration, custom functions and firmware upgrade

SCAN PERFORMANCE

Image Sensor	640 × 480 CMOS
Resolution	≥ 7 mil
Depth of Field (DOF)	0–100 mm
Print Contrast Signal (PCS)	≥ 30%
Pitch / Skew / Tilt	60° / 60° / 360°
Ambient Light Immunity	0–100,000 lux

PHYSICAL

Frame Dimensions	81.48 × 52 mm
Panel Dimensions	75.51 × 69.21 mm
Mounting Holes	49.7 × 44.8 mm Corner radius R1.5
Step Thickness	1.9 mm
Weight	143 g

SUPPORTED SYMBOLOGIES

2D	QR Code, Micro QR, PDF417, Micro PDF417, Data Matrix (ECC 200), Han Xin, Grid Matrix, Aztec
1D	Code 11, Code 39, Code 93, Code 128, EAN-13, EAN-8, UPC-A, UPC-E, Codabar, Standard 2 of 5, Matrix 2 of 5, Interleaved 2 of 5, MSI, GS1, Plessey, Telepen

ELECTRICAL & NFC

Input Voltage	5 V
Operating / Max. / Standby Current	200 mA / 240 mA / 30 mA
Power Consumption	1.2 W max.
NFC Reading	Integrated NFC Near-field card and phone reading

ENVIRONMENTAL

Operating / Storage Temperature	−20 °C to +60 °C / −40 °C to +80 °C
Humidity	5–95% RH, non-condensing
Warranty	2 years

HOST INTERFACE

Open image capture, device and I/O interfaces, with an SDK for host integration and custom functions.

MOUNTING

Frame 81.48 × 52 mm, panel 75.51 × 69.21 mm, 49.7 × 44.8 mm fixing centres, R1.5 corners.

POWER

Single 5 V supply: 200 mA operating, 30 mA standby, 1.2 W maximum.

Shenzhen Xinlong IoT Technology Co., Ltd. XINLONG IOT
ADDRESS Room 207, Building A, No. 168 Cenxia Road, Fenghuang Community, Fuyong Street, Bao'an District, Shenzhen 518103, China
EMAIL lixuan@xinlongiot.com **WEB** www.xinlongiot.com
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