

# FUZZYSCAN FA470

## 2D Fixed Mount Scanner



### Deluxe 2D fixed mount scanner for general purpose and embedded applications

Designed to fulfill increasing adoption of complex barcodes in enterprise applications, the FA470 comes in a compact form factor that provides both 1D and 2D readability, allowing seamless transition from 1D to 2D scanning across various embedded scanning applications, such as ATM, payment kiosk, ticket validator, reversed vending machine, parcel locker and other self-service terminals. Small yet durable, the FA470 can also operate as a stand-alone device in both indoor and outdoor settings, yielding unparalleled scanning performance in space constraint areas, devices, as well as in challenging industrial environments.

- Compact and durable design with IP54 sealing
- Powered by AI technology and deep learning
- High motion tolerance design
- Read challenging and problematic barcodes
- Choice of USB, standard RS232, or Universal interface
- Side-view model for space constrained applications
- Operating temperature from -20°C to 50°C
- Inherit Cino's powerful FuzzyScan DNA

### Scan All Your Needs

Thanks to Cino's exclusive FuzzyScan imaging technology, the FA470 is capable of reading a vast array of problematic and challenging barcodes, including wrinkled, dirty, soiled, or watermark barcodes that are displayed on paper, plastic, metal, digital screens, and curved surfaces.

### Cutting Edge Imaging Technology

Powered by AI technology and deep learning, Cino's exclusive FuzzyScan imaging technology delivers unrivaled readability and motion tolerance, as well as accuracy across most real-world barcodes.

### Unsurpassed Reading Performance

The FA470 brings exceptional reading performance and motion tolerance on both regular and difficult-to-read barcodes. The snappiness also dramatically improves user's experience. The first-time, every-time scanning makes FA470 ideal for a wide range of applications.

### Ease of Integration

With its compact form factor, as well as two scan directions and three host interface cables to choose from, the FA470 is designed for ease of integration and offers a high level of adaptability.

### Compact with two scanning directions

The FA470's small footprint allows an easy fit into various devices. You can select either a front-view or side-view model depending on your orientation needs. The side-view model is particularly suited for space constrained applications.



## FUZZYSCAN DNA

### Enterprise-Class Durability

To ensure utmost reliability, the FA470 is purposely designed to operate under temperatures between -20°C to 50°C (-4°F to 122°F). Constructed with IP54 sealing, the FA470 UW is excellent for both indoor and outdoor applications.

### Intelli Button™ for optimal installation

The FA470 is equipped with an Intelli Button™, which not only serves as a physical trigger for manual programming, but can also work as a switch to activate the test mode, allowing users to find the most optimal position for installation.

### Multiple interfaces

To accommodate host connection requirements, we offer three choices of interface: RS232, USB, and Universal. The Universal model provides great adaptability by supporting external triggers, plus OK and NG signal outputs to fulfill more advanced requirements.

### Useful user-defined trigger command

This fixed mount scanner supports user-defined trigger command, which allows you to adopt the commands of the replaced scanner with ease, minimizing the amount of integration effort.

### Smart Scenes™ for rapid adaptation

Similar to a digital camera, the FA470 offers a variety of useful scene options that are optimized for specific application scenarios. This feature enables users to achieve optimal scanning results with minimal efforts.

## Value Beyond Measure

FuzzyScan DNA is a collection of useful features with added-values available for every Cino imager at no additional cost. These exclusive features not only elevate your user experience, but also help you overcome various technical limitations beyond barcode scanning.

### DataWizard

A powerful feature that allows advanced formatting on GS1 and UDI data. By using data scripts, it is able to perform complex data processing, such as US driver's license parsing

### iCode

A useful macro command barcode for enabling one-step configuration with a single scan

### Multilingual Edge

A comprehensive function for converting data output into your desired languages

### Smart Scene

A series of preset configurations for easy adaptation to specific scenarios

### Security Plus

A programmable security script for preventing unauthorized access

### FuzzyScan Enabling Solution

A suite of software utilities and SDK that enables easy integration, management, and deployment of scanners

# SPECIFICATIONS

## Performance Characteristics

Image Sensor	1120 x 768 Pixels
Print Contrast	18% minimum reflective difference
Light Source	Warm White LED
Min. Resolution	3.0 mil Code 39 5.0 mil DM, 6.0 mil QR
Reading Range *1	13 mil (0.33mm) UPC/EAN up to 16.5"
Roll, Pitch, Skew	Roll: 360°; Pitch: ± 75°; Skew: ± 65°
Motion Tolerance	Up to 370 cm/s (145 in/s)
Host Interfaces	USB HID (USB Keyboard) USB VCOM (USB COM port emulation) Standard RS232 serial
Configuration	Barcode commands iCode FuzzyScan PowerTool
Data Processing	DataWizard Premium
Image Capture	BMP format

## Physical Characteristics

Dimension (W x D x H)	40.6 mm x 47.6 mm x 25.6 mm 1.60 in. x 1.87 in. x 1.01 in.
Weight	101g
Scanning Direction	Choice of front-view or side-view scanning direction
Connector	FA470-00x: 9-pin D-sub FA470-11x: 4-pin USB Type A FA470-98x: 15-pin D-sub HD
Input Voltage	5VDC ± 10%
Input Current	Operating: Typical 360 mA @5VDC Standby: Typical 220 mA @5VDC

## Supported Symbologies

1D Linear Codes	Code 39, Code 39 Full ASCII, Code 32, Code 128, GS1-128, Codabar, Code 11, Code 93, GS1 DataBar, Standard & Industrial 2 of 5, Interleaved & Matrix 2 of 5, IATA, UPC/EAN/JAN, UPC/EAN/JAN with Addendum, Telepen, MSI/Plessey & UK/Plessey
2D Codes*2	PDF417, Micro PDF417, Composite Codes, DataMatrix, MaxiCode, QR Code, MicroQR, Aztec, Codablock F, Code 16K, Code 49, Chinese Sensible (Han Xin) Code
Postal barcodes	Australian Post, US Planet, US POSTNET, Japan Post, Posi LAPA 4 State Code, German Post, British Post, Intelligent Mail, Korean Post, Dutch KIX Post, China Post

## User Environment

Drop Specifications	Withstands drops from 1.5m (5ft) to concrete
Environmental Sealing	IP54
Operating Temperature	-20 °C to 50 °C (-4 °F to 122 °F)
Storage Temperature	-40 °C to 70 °C (-40 °F to 158 °F)
Humidity	5% to 95% relative humidity, non-condensing
Ambient Light Immunity	0 ~ 100,000 Lux
ESD Protection	Functional after 15KV discharge

## Safety & Regulatory

EMC	CE, UKCA, FCC, BSMI, KC, VCCI
Safety*3	LED Eye Safety IEC62471-1, Exempt Group
Environmental	Compliant with RoHS and REACH

1. The Reading Range are measured under Cino's test environmental condition. For more details, please refer to Scan Map.
2. Codablock F, Code 16K, Code 49, and Chinese Sensible (Han Xin) Code are available upon request.
3. Don't stare into the LED beam

