



## FUZZYSCAN FA460 Series

### 2D Fixed Mount Scanner

#### Cost-effective 2D fixed mount scanner for general purpose applications

Powered by Cino's exclusive imaging technology, FuzzyScan FA460 is built to provide a distinguished scanning performance within a small form factor. This fixed mount scanner effectively captures most real-life barcodes, in addition to problematic ones, such as distorted or damaged barcode labels, electronic coupons on screens with poor lighting. Thanks to a compact and durable design, the FA460 is ideal for stand-alone use, as well as embedded applications, such as ATMs, kiosks, parcel lockers, or other self-service terminals.

- Compact and durable design with IP54 sealing
- Reads most real-life barcodes
- Choice of front-view or side-view scanning direction
- Intelli Button™ helps with scanner positioning
- Smart Scenes™ for quick adaption to diverse applications
- Multilingual output support
- Single scan setup with iCode
- Advanced data processing with DataWizard Premium
- Security Plus offers free security to host applications

#### Scan All Your Needs

Powered by Cino's exclusive imaging technology, the FA460 offers a distinguished reading performance on most real-life barcodes, providing a cost-effective solution for enterprises that require a reliable scanner for use in cost-sensitive applications.

#### More than enough reading performance

The FA460 delivers remarkable reading performance on a wide range of barcodes. It also captures a large portion of challenging and problematic barcodes, such as soiled, distorted, damaged, or overwrapped barcode labels, as well as electronic coupons displayed on screens with poor lighting.

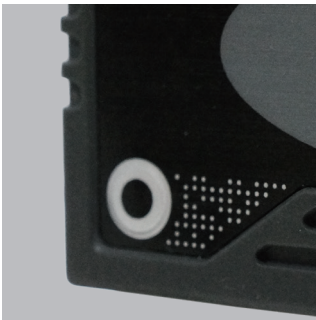
#### Simple and intuitive scanning

This model allows for omni-directional reading, which makes it easy and convenient to use, even in fast-paced applications such as on-counter scanning. No need to pre-align the target barcode. Simply move it across the scan window and get instant results. Thanks to this feature, scanning becomes highly intuitive and effortless.





IP54 Sealing



Useful Intelli Button™



Smart Scenes™

## Ease of Integration

With its compact form factor, as well as two scan directions and three host interface cables to choose from, the FA460 is designed for ease of integration and offers a high level of adaptability.

### Compact and durable

The FA460's compact size is perfect for applications with space constraints. Whether used as a stand-alone device or embedded in a terminal, its small footprint will allow for an easy fit. Its over-molded shell offers IP54-rated protection and withstands multiple drops to concrete from a height of 1.5m.

### A choice of host interface cables

To accommodate host connection requirements, we offer a choice of interface cables: RS232, USB, or Universal. The Universal model provides great adaptability by supporting external triggers, as well as OK and NG signal outputs to fulfill advanced requirements.

### Different scanning directions

Users can select either a front-view or side-view scanning direction, according to integration needs. The side-view scanning direction is particularly suited to space-limited applications such as blood analyzers.

### Intelli Button™ for optimal installation

The FA460 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 test mode, allowing users to find the optimal position for installation.

### User-defined serial trigger lessens integration work

This fixed mount scanner supports user-defined serial trigger commands. It can therefore adopt the command of another scanner that FA460 replaced, and minimizes the amount of integration work.

### Smart Scenes™ for rapid adaptation

Cino's FA460 offers a variety of scene options through the Smart Scenes feature. These useful options are factory fine-tuned and pre-programmed to automatically yield optimized settings for diverse application scenarios. Smart Scenes works just like a digital camera's scene mode. This feature enables users to achieve the best scanning results for selected applications with minimal efforts.

## A Set of Features that Brings Maximum Value

The FA460 inherited the advantages of the FuzzyScan DNA, delivering enhanced usability and exceptional added-value.

### Advanced imaging control

If applicable, users can control advanced imaging parameters, such as exposure time and digital gain, allowing you to optimize the scanner's settings in accordance with specific application requirements.



### Multilingual Output



### DataWizard Premium

### Multilingual output removes language barriers

Cino 2D scanners can be configured to output almost all languages, including Arabic, German, Greek, Russian, and Turkish, etc. They can also transmit Asian languages such as simplified Chinese, traditional Chinese, Japanese and Korean. This feature enables users around the world to use their own languages, removing linguistic barriers and expanding business horizons.

### Single scan setup via iCode

The iCode is a macro barcode command designed to simplify and accelerate your setup process. Instead of configuring scanners with multiple barcodes, users can achieve identical results with a single iCode. This useful feature lowers the risk of misconfiguration, expedites field deployments, and reduces service expenses. The iCode will speed up your workflow and increase your efficiency.

### Powerful data processing

DataWizard Premium is a unique feature designed for FuzzyScan barcode scanners. It allows them to execute complex data formatting and processing tasks, fulfilling a wide range of client-specific requirements. This, in turn, reduces the need for costly or time-consuming changes to your host application. DataWizard Premium brings exceptional flexibility and value to sophisticated business applications.

### Cost-free security for business protection

Security Plus guards your host application by restricting its access to authorized Cino scanners only. This powerful safety mechanism blocks connection attempts by unrecognized scanners, thereby preventing unsanctioned use. Security Plus delivers peace of mind by offering a reliable security solution that protects businesses at no extra cost.

# SPECIFICATIONS

## Performance Characteristics

Image Sensor	640 x 480 Pixels
Print Contrast	20% minimum reflective difference
Light Source	660nm LED
Min. Resolution	3.3 mil Code 39 6.7 mil DM
Reading Range *1	13 mil (0.33mm) UPC/EAN up to 15.6"
Roll, Pitch, Skew	Roll: 360°; Pitch: ± 75°; Skew: ± 65°
Motion Tolerance	Up to 627 cm/s (247 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 & Electrical Characteristics

Dimensions	47.6 mm (L) x 40.6 mm (W) x 25.6 mm (H) 1.87 in. (L) x 1.60 in. (W) x 1.01 in. (H)
Weight	101g
Scanning Direction	Choice of front-view or side-view scanning direction
Connector	FA460-00x 9-pin D-sub female FA460-11x 4-pin USB Type A FA460-98x 15-pin D-sub HD female
Input Voltage	5VDC ± 10%
Current	Operating: Typical 305 mA @5VDC Standby: Typical 195 mA @5VDC

1. The Reading Range are measured under Cino's test environmental condition.
2. Don't stare into the LED beam.

## Decode Capabilities

1D Linear Codes	Code 39, Code 39 Full ASCII, Code 32, Code 128, GS1-128, Codabar, Code 11, Code 93, Standard & Industrial 2 of 5, Interleaved & Matrix 2 of 5, IATA, UPC/EAN/JAN, UPC/EAN/JAN with Addendum, Telepen, MSI/Plessey & UK/Plessey, GS1 DataBar, Linear & Linear Stacked
2D Codes	PDF417, Micro PDF417, Codablock F, Code 16K, Code 49, Composite Codes, DataMatrix, MaxiCode, QR Code, MicroQR, Aztec
Postal Barcodes	Australian Post, US Planet, US Postnet, Japan Post, Posi LAPA 4 State Code

## 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, FCC, BSMI, VCCI, KC
Safety *2	LED Eye Safety IEC62471, Exempt Group
Environmental	Compliant with RoHS directive

## Accessories

<b>Cables</b>	USB Cable Converter RS232 Cable Converter
<b>Others</b>	5VDC Power Supply Unit