

## FUZZYSCAN A680

### 2D Handheld Imager



### A versatile 2D barcode scanner for retail and commercial applications

FuzzyScan A680's exceptional capabilities take operational efficiency to new heights. Thanks to Cino's advanced imaging technology, this scanner performs swift readings on a wide range of 1D and 2D symbologies, whether displayed on paper, plastic, or electronically. It is also capable of scanning various challenging and problematic barcodes. The A680's versatility makes it a tool of choice for retail and general commercial applications.

- Reads small and dense barcodes
- Reads various challenging and problematic barcodes
- Superior first-time read
- Rapid omni-directional scanning
- Reads electronic barcodes from smartphone screens
- Withstands drops from 1.8m to concrete
- Standard-Range and High-Density models
- Clear audio and visual feedback
- Optional vibrator for tactile confirmations
- Configuration can be done through iCode
- Advanced data formatting with DataWizard Premium
- System security development using DataWizard Premium

### Scan All Your Needs

#### Exceptional Imaging Platform

Cino's FuzzyScan imaging platform combines the latest advancements in image processing, electro-optics, computing architecture, and barcode decoding. It also makes use of Machine Learning Algorithm to enhance dynamic exposure control, pattern finding, image processing, as well as historical control.

This exceptional platform is built into Cino scanners, maximizing the speed and quality of data captures.

#### Ready for Challenges

Empowered by the FuzzyScan imaging platform, this scanner is designed to capture a vast array of challenging and problematic barcodes. For example: distorted, dirty or damaged barcode labels, or electronic barcodes on dimly-lit displays.

#### Complete Lineup to Fulfill Diverse Requirements

Scanning applications are increasingly diverse, and specialized tools may be needed to get the job done. For this reason, Cino has made this scanner available in different models: Standard-Range and High-Density.

The Standard-Range model is designed to fulfill most scanning requirements. Enabled by advanced technologies, this model offers superior reading performance on both regular and high-density barcodes. It is suitable for a wide range of applications that would normally require different types of scanners.

The High-Density model, on the other hand, is built to read very small, high-density 2D barcodes that appear on items such as electronic components, jewelry tags, or medical equipment.

Users can choose the model that best suits their needs.



Retail



Commercial



Hospitality

## Enhanced User Experience

### Simple and Intuitive Scanning

With omni-directional reading capabilities, this scanner's operation is straightforward and user-friendly. There is no need to pre-align with the barcode, which makes your scanning experience intuitive, fast and effortless.

### Sharp Aimer for Rapid Targeting

The scanner's "round spot" LED beam helps users aim faster and with greater accuracy. A separate background light is also projected to further expedite barcode capture; this bright red illumination is particularly useful under low ambient lighting.

### Clear Audio and Visual Feedback

Status information on the device is given through audio and visual indicators. This scanner's beeper offers an adjustable sound volume, while its LED lights emit conspicuous, multi-color signals. These features, along with the optional vibrator, contribute to an enhanced user experience.

### Optional Vibrator for Quiet or Noisy Environments

An optional vibrator is available to provide tactile feedback. It is ideal when the scanner's beeping sounds might be considered disruptive, such as in hospital rooms where patients are resting, or in a library. The vibrator is also useful where loud background noises may drown out the scanner's audio indications.

### Stylish, Ergonomic and Robust

This scanner merges style and ergonomics without compromising durability. Its appearance is aesthetically pleasing and sure to complement any professional decor. The handle is ergonomically designed, offering a natural and comfortable grip. Furthermore, this robust scanner can withstand 1.8-meter drops to concrete.

## Value Beyond Measure

### Simplified Configuration Process

The iCode is a configuration barcode designed to simplify and accelerate your scanner set-up process. It can be embedded with more than one command, thereby enabling the simultaneous change of numerous parameters. Instead of configuring their Cino scanners with multiple barcodes, users can achieve the same results with a single iCode.

Simply choose your desired settings in the FuzzyScan PowerTool, and click on the "iCode" button to generate a comprehensive barcode that embodies them all.

### Customized Functionalities

DataWizard Premium lets you write data or security scripts which can then be used to program Cino scanners for customized tasks. The script language is similar to BASIC and easy to learn for experienced programmers.

This exceptional feature is included in the FuzzyScan PowerTool and offered to Cino clients without extra charge.

### Advanced Data Formatting

Data scripts can be used to configure your scanners for intricate formatting procedures that would otherwise be assigned to the host device. For example: parsing raw data captured from a driver's license, adding prefixes or suffixes, and more.

## System Security

Cino devices can be programmed via security scripts to participate in system protection. Set your host system to prompt scanners for an algorithm-generated key, and to refuse connection if such key is not provided. Develop a security script containing the said algorithm so that it may deliver the correct key. Install the security script on approved scanners only. This set-up will help prevent unauthorized scanners from connecting with the host system.

# SPECIFICATIONS

## Performance Characteristics

Image Sensor	1280 x 800 Pixels
Print Contrast	18% minimum reflectance difference
Light Source	660nm LED
Imager Field of View	41.5 ° H x 25.9 ° V
Minimum Resolution	<b>HD Model</b> 2.4 mil Code 39, 4.5 mil DM <b>SR Model</b> 2.7 mil Code 39, 4.8 mil DM
Reading Range *1	<b>HD Model</b> 13 mil (0.33mm) UPC/EAN up to 13.6" <b>SR Model</b> 13 mil (0.33mm) UPC/EAN up to 19"
Roll, Pitch, Skew	Roll: 360 °; Pitch: ± 75 °; Skew: ± 65 °
Motion Tolerance	Up to 617 cm/s (243 in/s)
Configuration Setup	FuzzyScan Barcode commands FuzzyScan iCode FuzzyScan PowerTool
Data Processing	DataWizard Premium
Image Capture	BMP

## User Environment

Drop Specifications	Withstands multiple drops from 1.8m (6.0ft) to concrete
Environmental Sealing	IP42
Operating Temperature	-10 °C to 50 °C (14 °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 ~ 106,000 lux
ESD Protection	Functional after 15KV discharge

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

## Supported Symbolologies

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	PDF417, Micro PDF417, Codablock F, Code 16K, Code 49, Composite Codes, DataMatrix, MaxiCode, QR Code, Aztec, MicroQR
Postal barcodes	Australian Post, US Planet, US Postnet, Japan Post Posi LAPA 4 State Code

## Physical Characteristics

Dimensions	97.0 mm (L) x 65.0 mm (W) x 156.0 mm (D) 3.81 in. (L) x 2.55 in. (W) x 6.14 in. (D)
Weight	130g (cable excluded)
Color	Black
User Interfaces	3 LEDs for power, good read and status indications Programmable beeper Optional vibrator
Operating Voltage	5VDC ± 10%
Operating Current	Operating : Typical 395 mA @5VDC Standby : Typical 220 mA @5VDC

## Safety & Regulatory

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

## Accessories

<b>Cables</b>	RS232 Serial Cable USB Cable USB Power Supply Cable
<b>Others</b>	5VDC Power Supply Unit US100 Smartstand US50 Hands-Free Stand Universal Holder

