

## FUZZYSCAN A780 HC

### Antimicrobial 2D Handheld Imager



### Powerful 2D scanner designed for hygiene-conscious applications

Cross-contamination is a risk in hospitals, clinics, laboratories, food processing plants and similar establishments. With its robust enclosure and antimicrobial properties, Cino's A780 HC is ideal for the tough demands of hygiene-conscious industries. When circumstances require silent signaling, the built-in vibrator can provide tactile confirmation of successful reads. A780 HC's superior performance helps you get the job done with maximum efficiency.

- Disinfectant-ready enclosure with antimicrobial additives
- Compliance with JIS Z2801: 2000 antimicrobial standard
- Reads various challenging and problematic barcodes
- Superior first-time read
- Rapid omni-directional scanning
- Reads electronic barcodes from smartphone screens
- Withstands drops from 2.0m to concrete
- Standard-Range and High-Density models
- Clear audio and visual feedback
- Built-in vibrator for tactile confirmations
- Configuration can be done through iCode
- Advanced data formatting with DataWizard Premium
- System security development using DataWizard Premium

### Sanitation-Friendly

#### Disinfectant-Ready Enclosure

The scanner's housing is disinfectant-ready, and can be wiped down with Cino's recommended cleaning solutions (see Specifications below). It is specially designed for the needs of hygiene-conscious establishments.

#### Inclusion of Antimicrobial Additives

The housing's plastic material also incorporates a silver inorganic antimicrobial agent that will not wear off during its lifetime. This provides an extra layer of protection against the growth of microorganisms.

#### Compliance with Antimicrobial Standard

This scanner complies with the JIS Z2801:2000 antimicrobial standard. It is ideal for industries where the cleanliness of work tools is prioritized, such as healthcare or food processing.

### 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.



**Hospital**



**Laboratory**



**Pharmacy**

## 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.

## 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, Visual and Tactile Feedback

This barcode scanner contains a programmable beeper with adjustable sound volume. Its LED lights provide conspicuous, multi-color indications.

A built-in vibrator offers tactile confirmation of good reads. It is ideal for instances where the scanner's beeping sounds might disturb patients, or when they are difficult to hear because of loud background noise.

### Built for Lasting Performance

This scanner merges durability and ergonomics without compromising style. Thanks to an over-mold construction, this robust device can withstand 2.0-meter drops to concrete. The handle is ergonomically designed and offers a natural, comfortable grip. Furthermore, its sleek appearance is sure to complement any professional decor.

## 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><br>2.4 mil Code 39, 4.5 mil DM<br><b>SR Model</b><br>2.7 mil Code 39, 4.8 mil DM                 |
| Reading Range *1     | <b>HD Model</b><br>13 mil (0.33mm) UPC/EAN up to 14.1"<br><b>SR Model</b><br>13 mil (0.33mm) UPC/EAN up to 19.6" |
| Roll, Pitch, Skew    | Roll: 360°; Pitch: ± 75°; Skew: ± 65°                                                                            |
| Motion Tolerance     | Up to 617 cm/s (243 in/s)                                                                                        |
| Configuration Setup  | FuzzyScan Barcode commands<br>FuzzyScan iCode<br>FuzzyScan PowerTool                                             |
| Data Processing      | DataWizard Premium                                                                                               |
| Host Interfaces      | USB HID (USB Keyboard)<br>USB VCOM (USB COM port emulation)<br>Standard RS232                                    |
| Image Capture        | BMP                                                                                                              |

## Physical Characteristics

|                         |                                                                                       |
|-------------------------|---------------------------------------------------------------------------------------|
| Dimensions              | 93.5 mm (L) x 71 mm (W) x 160 mm (D)<br>3.68 in. (L) x 2.79 in. (W) x 6.29 in. (D)    |
| Weight                  | 150g (cable excluded)                                                                 |
| Color                   | Healthcare White                                                                      |
| User Interfaces         | 3 LEDs for power, good read and status indications<br>Programmable beeper<br>Vibrator |
| Operating Voltage       | 5VDC ± 10%                                                                            |
| Operating Current       | Operating : Typical 395 mA @5VDC<br>Standby : Typical 220 mA @5VDC                    |
| Antimicrobial Additives | Silver inorganic antimicrobial agent                                                  |

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                                                                                                                                                                   |

## User Environment

|                                |                                                       |
|--------------------------------|-------------------------------------------------------|
| Drop Specifications            | Withstands multiple drops from 2m (6.6ft) 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                       |
| Recommended cleaning solutions | Gentle dish soap water or alcohol solvent             |

## Safety & Regulatory

|               |                                       |
|---------------|---------------------------------------|
| EMC           | CE, FCC, BSMI, RCM, KC, VCCI          |
| Safety *2     | LED Eye Safety IEC62471, Exempt Group |
| Environmental | Compliant with RoHS directive         |
| Antimicrobial | JIS Z2801 : 2000                      |

## Accessories

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