



# FUZZYSCAN A780BT

## 2D Cordless Imager



### A premium 2D cordless imager for demanding enterprise applications

Integrated with the exclusive FuzzyScan Imaging technology and the latest Bluetooth connectivity, the A780BT series cordless handheld imager delivers outstanding reading performance to fulfill various challenging scanning needs. In addition, broad wireless connectivity, the UltraCap™ battery-free solution, versatile features, and a durable over-mold construction make this imager ideal for any demanding enterprise applications. The FuzzyScan A780BT series cordless handheld imager raises the bar for exceptional cost-performance value in its category.

- Instant cordless migration via Cino Smart Cradle
- Up to 100m of communication coverage while working with Cino Smart Cradle
- One-step & hassle-free pairing
- UltraCap™ Battery-Free solution supported
- Works with Bluetooth-enabled Windows, MAC, and Linux hosts
- Compatible with most popular Android and iOS mobile devices
- Reads most challenging and problematic barcodes
- Batch Scanning for simple stocktaking
- Optional vibration function for tactile confirmations
- Withstands 2m drops to concrete
- Inherits the powerful FuzzyScan DNA

### Wireless Connectivity and Beyond

For Cino cordless imagers, superior performance is just the start. Comprehensive connectivity and one-step pairing will change the way you work by providing more agility, flexibility and productivity.

#### Instant Cordless Migration

No Bluetooth? Not a problem! Pair your A780BT imager with Cino's Smart Cradle or Smart Dongle to instantly overcome the lack of Bluetooth connectivity. Without any additional costs, this instant "Plug-and-Play" cordless migration provides you with a working range of up to 100 meters.

#### Broad Connectivity

Through the HID or SPP profile, Cino cordless imagers can connect to the most popular Bluetooth-enabled Windows, MAC, and Linux hosts as well as Android and iOS mobile devices.

#### One-Step & Hassle-Free Pairing

Pairing Cino cordless imagers is a breeze - just "Scan to pair". Scan the "Quick Pair Barcode" on the smart cradle or smart dongle to instantly create a pairing with your A780BT. To pair the A780BT with your remote host, you can easily scan the on-screen "Quick Pair Barcode" generated by Cino ConnectWizard™ to simplify Bluetooth pairing process.



## Exclusive FuzzyScan Imaging Technology

### Scan All Your Needs

Powered by the exclusive FuzzyScan Imaging technology, the A780BT imager is capable of reading a vast array of challenging and problematic barcodes. Whether your barcodes are wrinkled, dirty, soiled or displayed on paper, plastic, metal, digital screens, or curved surfaces, your A780BT imager performs quick and accurate readings.

### Cutting Edge Imaging Technology

Powered by the state-of-the-art AI-based machine vision, the exclusive FuzzyScan imaging technology is a performance-driven innovation. Incorporated with advanced optics and powerful hardware platform, all Cino scanners deliver unrivalled scanning speed and accuracy across virtually any type of real-world barcodes.

### A Complete Lineup

The A780BT series provides three different models to ensure maximum suitability for users' scanning applications. The Standard-range model offers superior reading performance on both regular and problematic real-world barcodes, which makes it suitable for a wide range of applications. The High-density model is purpose-built to read DPM-like, ultra-high density, and very small 2D barcodes that appear on items such as electronic components, jewelry tags, and medical equipment. The Extended-range model helps users capture regular barcodes from longer distances with ease.

### Practical Functionalities

The advantages of Cino cordless imagers go beyond the ultimate mobility delivered via Bluetooth technology. Powered by more practical functions, the FuzzyScan A780BT imager enables you to complete various business tasks and maximize productivity.

#### “On the Spot” Data Transmissions

“Online Scanning” sends data to hosts immediately after each scan. If the “Out-of-range-scanning” function is enabled, the imager can continue to scan and retain up to **5,000 EAN** barcodes when it loses the Bluetooth connection. Once back into radio range, it will automatically reconnect and transmit all stored data to the host.

#### Inventory Counts Made Simple

“Batch Scanning” is ideal and useful for simple stocktaking. When you use this function, all scanned data will be stored into the imager's flash memory. Once data transmission is activated, all stored data will be sent to the host as a batch. The A780BT imager can store a maximum of **100,000 EAN** barcodes per batch. Moreover, you can add a quantity value following each scanned data.

#### Verifying Data Uniformity Made Easy

“Validation Scanning” enables the A780BT imager to compare scanned data against the stored master data to verify data uniformity. This function is useful if data verification is needed during “shipping and receiving” or “order picking”.



## Battery-Free Solution

### UltraCap™ Battery-Free Solution

The Cino Battery-Free solution is powered by the UltraCap™ Capacitor. This alternative power source is purpose-built on the concerns of cost saving and environmental sustainability. The UltraCap™ Capacitor is ideal for applications requiring a very quick charge to fulfill short-to medium-term operations, such as retail, hospitality, healthcare, and so on.

#### Swappable & Interchangeable

The UltraCap™ features a swappable design. It is not only interchangeable with Cino's standard Li-ion battery, but also compatible with all FuzzyScan cordless handheld imagers.

#### Lower Total Cost of Ownership

In an UltraCap™'s lifespan, you would otherwise use more than 25 standard Li-ion batteries. Therefore, this battery-free solution not only significantly lowers your replacement costs of battery, but also minimizes your potential productivity losses caused by dead batteries.

#### Extended Working Time

The UltraCap™ provides the longest working time by far compared to its competition. With a capacity of 750 Farads, the largest in its class, each full charge is able to support more than **4,200 scans**. Even under intensive use, this is enough to last for at least one hour.

#### Quick Get-Up-And-Go

Out of power? No worries. Every 1-minute quick charge is able to support **130 scans**. Compared to the standard Li-ion battery, this feature maximizes uptime and allows you to complete short-term scanning operations in a timely fashion.

#### Eco-Friendly for a Healthier Planet

Thanks to the long lifespan of UltraCap™, it helps to reduce lots of e-waste while also exemplifying ESG consciousness and environmental sustainability in the business world.

### Enhanced User Experiences

Designed with a sharp aiming and multifaceted notification feedback via visual, audio as well as tactile indications, the A780BT delivers superior usability and great user experience.

#### Clear Audio and Visual Feedback

The A780BT imager uses audio and visual indicators to indicate its various statuses. The imager has a loud beeper that allows you to adjust volume and tone, while LED lights emit conspicuous, multi-color signals to help users clearly identify the current status at a quick glance.

#### Tactile Feedback Option

Beeping sounds are considered disruptive in certain circumstances. Vibration is available as an option on this imager to provide tactile feedback to users. This is ideal for both quiet and noisy environments.



## FUZZYSCAN DNA

### Value beyond Measure

FuzzyScan DNA is a collection of unique features available on all Cino barcode scanners at no additional cost. Aside from the exclusive FuzzyScan Imaging technology, Cino scanners also provide the following features to deliver additional value beyond barcode scanning.

- **DataWizard Premium**, a unique feature to perform advanced data formatting and complex data processing to fit any specific needs without modifying host programs, such as driver's license parsing or application identifier (AI) parsing from a GS1 barcode.
- **iCode**, an one-step configuration process with a single scan of a macro barcode command.
- **Multilingual Edge**, a useful feature that enables output of scanned data in your desired language. Aside from Western European and Latin languages, it also supports many Asian languages, such as Simplified Chinese, Traditional Chinese, Korean, Japanese, Thai, Hindi, and so on.
- **Smart Scene**, a choice of several predefined configurations for various application scenarios to achieve optimal scanning performance.
- **Security Plus**, a user-defined security mechanism to prevent from the access of unauthorized barcode scanners.
- **FuzzyScan Enabling Solution**, a suite of software utilities and SDK for easy configuration, management, and deployment of scanners.

# SPECIFICATIONS

Performance Characteristics	
Image Sensor	1280 x 800 Pixels
Print Contrast	15% 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> 3 mil Code 39, 5 mil DM <b>ER Model</b> 3.5 mil Code 39, 7.5 mil DM
Reading Range *1	<b>HD Model</b> 13 mil (0.33mm) UPC/EAN up to 14.1" <b>SR Model</b> 13 mil (0.33mm) UPC/EAN up to 19.6" <b>ER Model</b> 13 mil (0.33mm) UPC/EAN up to 26"
Roll, Pitch, Skew	Roll: 360°; Pitch: ± 75°; Skew: ± 65°
Motion Tolerance	Up to 617 cm/s (243 in/s)
Host Interfaces	USB HID (USB Keyboard) USB VCOM (USB COM port emulation) USB OEM POS Standard RS232
Configuration Setup	FuzzyScan Barcode commands FuzzyScan iCode FuzzyScan PowerTool
Data Processing	DataWizard Premium
Image Capture	BMP

Electrical Characteristics	
Operating Voltage	5 ± 10% VDC
Operating Current	Scanner with Smart Cradle Charging: Maximum 830 mA Standby: Maximum 145 mA

Power	
Li-Ion Battery	2550 mAh capacity 3-4 hours charge time over PSU 9-10 hours charge time over USB Ready-to-Scan at 30% of full charge : 3 hrs over USB
UltraCap™ Capacitor	3.8V, 750 Farads 500,000 charge cycles Less than 50 min. charge time over PSU Less than 60 min. charge time over USB Over 80 min. of use per full charge Over 4200 scans per full charge Over 130 scans after one minute charge

Communication Characteristics	
RF Standard	Bluetooth v4.X
RF Frequency Band	2.402~2.4830 GHz unlicensed ISM band
Radio Link Modes	PAIR, PICO, SPP, HID
Communication Range	Up to 100 meters in open space when working with Smart Cradle, line of sight
Supported Profiles	SPP, HID

Physical Characteristics	
Dimensions	93.5 mm (L) x 71 mm (W) x 160 mm (D) 3.68 in. (L) x 2.79 in. (W) x 6.29 in. (D)
Weight	208g (With Battery) 186g (With UltraCap™)
Color	Classic Black

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 multiple drops from 2.0m (6.6ft) to concrete
Environmental Sealing	IP52
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

Safety & Regulatory	
EMC & Radio	CE, FCC, BSMI, RCM, KC, NCC, VCCI, MIC
Safety *3	LED Eye Safety IEC62471, Exempt Group
Environmental	Compliant with RoHS III and REACH

Accessories	
<b>Smart Cradle</b>	
RF Standard	Bluetooth v4.X
Charging	Fast charge
User Interfaces	1 blue link indicator 2-color status indicator Beeper, Paging / Reset button
<b>Charging Cradle</b>	
Charging	Fast charge
User Interface	1 blue power indicator
<b>Interface Cables</b>	
	RJ45 to RS232 Serial Cable RJ45 to USB-A Cable RJ45 to USB-C Cable
<b>Others</b>	
	5VDC Power Supply Unit USB Power Cable UC2210 UltraCap™ (750 Farads) BT2100 Battery Pack (2550mAh) US100 SmartStand

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.

