

# FUZZYSCAN A678BT

## 2D Cordless Imager



### The deluxe yet compact 2D cordless imager with wireless charging

By utilizing Cino's exclusive FuzzyScan imaging technology, the A678BT is capable of reading most real-world challenging and problematic barcodes. Incorporating broad Bluetooth connectivity and a compact yet durable design, the A678BT is a superb solution for retail, commercial, and hospitality applications. Moreover, both battery-free and wireless charging solutions help reduce total ownership costs, while versatile functionality, and FuzzyScan DNA help enhance your scanning experience with exceptional cost-performance value.

- Instant cordless migration via Cino Smart Cradle
- Up to 100m of communication coverage while working with Cino Smart Cradle
- One-step & hassle-free pairing
- Qi wireless charging supported
- 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
- Optional vibration function for tactile confirmations
- Compact, sturdy construction
- Withstands 1.8m drops to concrete
- Inherits the powerful FuzzyScan DNA

### Cino Wireless Charging Solution

By leveraging Qi technology, Cino's wireless charging solution highlights the advantages of reliability and cost-effectiveness. Without physical charging contacts, this wireless charging solution delivers remarkable reliability and a lower total cost of ownership to extract the most value from the A678BT.

#### Lower Total Cost of Ownership

Physical contact pins often get dirty, oxidized, bent, or broken over time; requiring a lot of maintenance and cleaning. Cino's wireless charging solution eliminates the need for physical charging contacts. This means significantly less field service and maintenance efforts. Furthermore, reduced downtime also minimizes productivity losses to give great cost-performance value to the A678BT.

#### Enhanced ESD & Sealing Protection

Electrostatic discharges often result in damage to electronic components. Thanks to the contactless design enabled by wireless charging, both the imager and cradle are equipped with crevice-free enclosures with better sealing to provide superior ESD and water-dust protection.

#### More Reliable Charging

Wireless charging is straightforward, foolproof, and user-friendly. Thanks to the optimal design, the A678BT fits perfectly with its wireless charging cradle. This means exceptional charging reliability with less charging failures from wobbly or shaky movements.

#### Optimal Cradle Design

In addition to providing charging stability, the cradle also has an optimal design to further streamline presentation scanning.



## Exclusive FuzzyScan Imaging Technology

## 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 A678BT 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 pair with your A678BT. To pair the A678BT with your remote host, simply scan the "Quick Pair Barcode" generated by Cino ConnectWizard™ and simplify the Bluetooth pairing process.

## Scan All Your Needs

Powered by exclusive FuzzyScan Imaging technology, the A678BT imager is capable of reading a vast array of challenging and problematic barcodes. Enhanced with warm-white illumination, the A678BT imager is capable of scanning wrinkled, dirty, soiled, or watermark barcodes that are displayed on paper, plastic, metal, digital screens, and curved surfaces.

### Cutting Edge Imaging Technology

Powered by state-of-the-art AI-based machine vision, the exclusive FuzzyScan imaging technology is a performance-driven innovation. Incorporated with an advanced optical design and a powerful hardware platform, all Cino imagers deliver unrivaled scanning speed and accuracy across all types of real-world barcodes.

### No Compromise on Performance

The A678BT is designed with superior performance in mind. It not only provides point-and-shoot scanning simplicity, but also delivers outstanding snappiness. This imager does not compromise performance for price and is suitable for most commercial applications.

## Practical Functionalities

The advantages of Cino cordless imagers go beyond the maximum mobility delivered via Bluetooth technology. Powered by more practical functions, the FuzzyScan A678BT imager enables you to complete various business tasks and maximize productivity.

### "On the Spot" Data Transmissions

"Online Scanning" usually sends data to hosts immediately after each scan. However, 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.



## Battery-Free Solution

### 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 A678BT 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 A678BT 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”.

## UltraCap™ Battery-Free Solution

The Cino Battery-Free solution is powered by the UltraCap™ Capacitor. This alternative power source is purpose-built with cost-saving and environmental sustainability in mind. 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 a standard Li-ion battery, but also compatible with all FuzzyScan cordless hand-held imagers.

### Lower Total Cost of Ownership

With just one UltraCap™’s lifespan, you would otherwise use more than 25 standard Li-ion batteries. Therefore, this battery-free solution not only significantly lowers your battery replacement costs but also minimizes the potential loss of productivity caused by dead batteries.

### Extended Working Time

With a capacity of 750 Farads, the UltraCap™ boasts the largest capacity among its type, and provides the longest working time by far compared to all its competitors. Each full charge is able to support more than **4,200 scans**. Even with 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

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

## Enhanced User Experiences

Designed with sharp aiming and multifaceted notification feedback via visual, audio, as well as tactile indications, the A678BT delivers superior usability and a great user experience.

### Clear Audio and Visual Feedback

The A678BT imager uses audio and visual indicators to indicate its various statuses. The Imager has a loud beeper with an adjustable volume and tone. The LED lights emit conspicuous and programmable multi-color signals to help users clearly identify the current status at a quick glance.



## FUZZYSCAN DNA

### 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 suitable for both quiet and noisy environments.

### Stylish and Ergonomic

Combining style and ergonomics, this model provides an outstanding user experience on all levels. Elegant in appearance, it will easily blend into any commercial decor. The Imager's sleek handle is ergonomically designed to afford a natural, comfortable grip. Furthermore, its robust enclosure can withstand 1.8-meter falls onto concrete, granting reliable protection from unintentional drops.

### Multi-functional USB Port

With a built-in USB port, your scanner can operate with corded functionalities including corded transmissions, firmware upgrades, and scanner configuration for superb flexibility. Alternatively, it can be connected to a power source while working to further reduce downtimes and productivity losses.

## Value Beyond Measure

FuzzyScan DNA is a collection of unique features that come with every Cino imagers at no additional cost. It delivers exceptional value beyond barcode scanning. Aside from the exclusive FuzzyScan imaging technology, Cino's scanners provide the following distinctive features to elevate user's experience:

### DataWizard

DataWizard is a unique feature to perform advanced data formatting and complex data processing.

### iCode

The iCode feature is a macro command barcode that allows one-step configuration with a single scan.

### Multilingual Edge

Multilingual Edge is a useful feature that enables data output in your desired language.

### Smart Scene

Smart Scene offers a choice of several preset configurations for various application scenarios to achieve optimal scanning performance.

### Security Plus

Security Plus is a user-defined security mechanism that prevents the access of unauthorized barcode scanners.

### FuzzyScan Enabling Solution

FuzzyScan Enabling Solution is a suite of software utilities that enables easy integration, management, and deployment of scanners.

# SPECIFICATIONS

## Performance Characteristics

Image Sensor	1120 x 768 Pixels
Print Contrast	18% minimum reflectance difference
Light Source	Warm white LED
Imager Field of View	36.5° H x 24.9° V
Minimum Resolution	3.0 mil Code 39 5.0 mil DM
Reading Range *1	13 mil (0.33mm) UPC/EAN up to 17.1"
Roll, Pitch, Skew	Roll: 360°; Pitch: ± 75°; Skew: ± 65°
Motion Tolerance	Up to 370 cm/s (145 in/s)
Configuration Setup	FuzzyScan iCode FuzzyScan Barcode commands FuzzyScan PowerTool FuzzyScan Serial Command
Data Processing	DataWizard
User Interfaces	Blue link indicator and 2-color status indicator Programmable beeper Optional vibrate function

## Electrical Characteristics

Operating Voltage	5 ± 10% VDC
Operating Current	Scanner with Smart Cradle Charging: Maximum 1.3A Standby: Maximum 190 mA

## Power

Li-Ion Battery	2550mAh capacity 3-4 hour charge time over PSU 9-10 hour charge time over Scanner USB Scan-ready at 30% power: 3 hr charge over Scanner USB
UltraCap™ Capacitor	750 Farads Less than 50 minute charge time over PSU Less than 60 minute charge time over Scanner USB Over 80 minutes of use per full charge Over 4200 scans per full charge Over 130 scans after one minute charge

## Communication Characteristics

RF Standard	Bluetooth Version 4.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	HID (Keyboard), SPP (Serial Port)

## 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	215g (With Battery) 188g (With UltraCap™)
Color	Classic Black, Ivory White

## 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 *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 1.8m (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	0% to 95% relative humidity, non-condensing
Ambient Light Immunity	0 ~ 106,000 lux
ESD Protection	Functional after 15kV discharge

## Safety & Regulatory

EMC & Radio	CE, UKCA, FCC, BSMI, RCM, KC, NCC, VCCI, MIC, SRRC
Safety *3	LED Eye Safety IEC 62471/EN 62471, Exempt Group
Environmental	Compliant with RoHS 2.0 and REACH

## Accessories

<b>Smart Cradle</b> RF Standard Host Interfaces	HB4132 Smart Cradle Bluetooth Version 4.x USB HID (USB Keyboard) USB VCOM (USB COM port emulation) USB OEM POS Standard RS232
<b>Cables</b>	RS232 Serial Cable USB-A Cable USB-C Cable USB Power Cable
<b>Others</b>	UC2210 UltraCap™ (750 Farads) BT2100 Battery Pack (2,550mAh) US100 SmartStand Power Supply Unit (5VDC, 2A outlet)

1. The Reading Range are measured under Cino's test environmental condition.
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.

