

# FUZZYSCAN F688BT

1D Cordless Imager



## The premium yet compact linear cordless imager with wireless charging

Powered by Cino's exclusive FuzzyScan imaging technology, the F688BT series not only can read most real-world challenging and problematic 1D barcodes, but also can capture PDF417, GS1, and UDI codes. Incorporating broad Bluetooth connectivity and a compact yet durable design, the F688BT is an optimal solution for a vast range of enterprise and general purpose applications. Moreover, both battery-free and wireless charging solutions help reduce total ownership costs, while versatile functionality, and FuzzyScan DNA make F688BT an excellent cordless handheld imager with top-tier performance.

- Instant cordless migration via Cino Smart Cradle
- Up to 100m of communication coverage while working with Cino Smart Cradle
- One-step & hassle-free pairing
- Supports PDF417, GS1, and UDI codes
- 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
- 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 F688BT.

### 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 F688BT.

### Enhanced ESD & Sealing Protection

Electrostatic discharges often result in damage to electronic components. Thanks to the contactless design, both the scanner and cradle have 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 F688BT 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 F688BT 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 F688BT. To pair the F688BT with your remote host, you can easily scan the "Quick Pair Barcode" generated by Cino **ConnectWizard™** to simplify the Bluetooth pairing process.

## Scan All Your Needs

Powered by exclusive FuzzyScan Imaging technology, the F688BT imager is capable of reading a vast array of challenging and problematic barcodes. The F688BT imager is capable of scanning wrinkled, dirty, or soiled 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 scanners deliver unrivaled scanning speed and accuracy across all types of real-world barcodes.

### Reads PDF417, GS1, and UDI Barcodes

The F688BT series can capture regular barcodes from a long distance, as well as very high-density barcodes within an optimal depth of field. In addition to a vast array of linear barcodes, it supports linear-stacked, PDF417, composite, GS1, and UDI codes.

## Practical Functionalities

The advantages of Cino cordless imagers go beyond the maximum mobility delivered via Bluetooth technology. Powered by more practical functions, the FuzzyScan F688BT imager enables you to complete various business tasks and maximize productivity.



## Battery-Free Solution

### “On the Spot” Data Transmissions

“Online Scanning” automatically 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.

### 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 F688BT imager can store a maximum of **80,000 EAN** barcodes per batch. Moreover, you can add a quantity value following each scanned data.

### Verifying Data Uniformity Made Easy

“Validation Scanning” enables the F688BT 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 **17,500 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 **700 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.



## FUZZYSCAN DNA

### Enhanced User Experiences

Designed with sharp aiming and multifaceted notification feedback via visual, audio, as well as tactile indications, the F688BT delivers superior usability and a great user experience.

#### Clear Audio and Visual Feedback

The F688BT 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.

#### Tactile Feedback Option

Beeeping 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.

#### Built-in USB Port

The scanner's built-in USB port enables convenient charging from any power source. When out of power, connect your scanner to a power bank for on-the-go charging to avoid downtimes.

### 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

Optical System	High performance linear imaging engine
Print Contrast	15% minimum reflective difference
Light Source	630nm red LED
Minimum Resolution	3 mil (Code 39, PCS 0.9)
Reading Range *1	13 mil (0.33mm) UPC/EAN up to 24 " 20 mil (0.5mm) Code 39 up to 34 "
Scan Rate	Dynamic scanning rate up to 500 scans per second
Roll, Pitch, Skew	Roll: 360 °; Pitch: ± 75 °; Skew: ± 65 °
Configuration Setup	Command Barcode commands FuzzyScan iCode FuzzyScan PowerTool
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	2,550mAh 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 5 hours of use per full charge Over 17,500 scans per full charge Over 700 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 mm (D) 3.81 in. (L) x 2.55 in. (W) x 6.14 in. (D)
Weight	202g (With Battery) 175g (With UltraCap)
Color	Classic Black, Ivory White

## Supported Symbolologies

1D Linear Codes	Code 39, Code 39 Full ASCII, Code 32, Code 39 Trioptic Code 128, GS1-128, Codabar, Code 11, Code 93 Standard & Industrial 2 of 5, Interleaved & Matrix 2 of 5 German Postal Code, China Postal Code, IATA UPC/EAN/JAN, UPC/EAN/JAN with Addendum Telepen, MSI/Plessey & UK/Plessey GS1 DataBar (formerly RSS) Linear & Linear Stacked.
Linear-stacked *2	PDF417, Micro PDF417, Composite Codes, Codablock F
Postal Barcodes	German Post, Korean Post, China Post

## User Environment

Drop Specifications	Withstands multiple drops from 1.8m (6.0ft) 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 ~ 100,000 lux
ESD Protection	Functional after 15kV discharge

## Safety & Regulatory

EMC & Radio	CE, UKCA, FCC, BSMI, RCM, KC, NCC, VCCI, MIC, SRRC
Safety	LED Eye Safety IEC62471, Exempt Group
Environmental	Compliant with RoHS 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 Ranges are measured under manufacturing preset test environmental condition.
2. Codablock F is available upon request.

