

# F780BT Series

A Ruggedized, High Performance Cordless Image Scanner  
for Industry and General Purpose Applications

Ruggedized over-mold design to withstand multiple drops to concrete from 2.0 meter

Bluetooth v4.0 wireless technology with more than 100 m communication coverage

Plug-and-play cordless migration by working with smart cradle

Support multiple connections up to 7 scanners in PICO mode

Support both HID and SPP profiles to connect with most Bluetooth-enabled hosts

Memory storage up to 80,000 EAN-13 scans for batch scanning

Batch scanning function is ideal for inventory application

Data validation mode is useful for valid-data checking

Support out-of-range scanning and auto-reconnection features

Outstanding reading capability on 3 mil barcode with more than 3" depth of field

Up to 34" reading range on general barcodes

Unsurpassed readability on low contrast, smudged, poorly-printed or damaged barcodes

GS1 DataBar Linear-stacked, PDF, MicroPDF and composite code are supported



Thanks to the convergence of the new innovative FuzzyScan 3.0 Imaging Technology and Bluetooth® v4.0 wireless technology, the new FuzzyScan F780BT series Cordless Image Scanner from Cino impresses the user with high reading performance and ultimate freedom of cordless operation. The F780BT expertly combines ruggedized construction with versatile features, providing an ideal cordless solution for industrial or general applications.

#### High Reliability for Low TCO

To deliver the highest level of dependability, the F780BT is built with compact and robust over-mold housing. It is rugged enough to withstand multiple drops from 2.0 meter to concrete. It also supports wide and flexible operating and storage temperature range. The cradle contact pin is with high durability over 1,000,000 times. F780BT provides an ideal solution to meet your day-to-day scan-intensive use anywhere.

#### Superior wireless connectivity

F780BT provides several radio link modes to communicate with most host devices. When Bluetooth-enabled host device is not available, it can work with the smart cradle in PAIR mode or PICO mode. This provides an instant plug-and-play cordless migration to your existing non-Bluetooth-enabled IT assets. Moreover, the PICO mode supports multiple connections up to 7 scanners with one smart cradle, reducing your total cost of ownership. Furthermore, you also can use F780BT with Bluetooth-enabled host devices via SPP or HID service in SPP mode or HID mode.

#### All-around functionality for diverse applications

To suit diverse business applications, F780BT is feature-rich to represent its best value in its class. When enabling Batch Scanning function, F780BT can collect more than 80,000 EAN-13 barcode data. This makes F780BT ideal for inventory application. The Out-of-range scanning feature allows F780BT to continue scanning data even when it loses radio connection. Once the Presentation Scanning Auto-sense function is enabled for hand-free application, the F780BT switches from trigger mode to presentation mode automatically when it is placed on SmartStand or smart cradle.

# Specifications

## Performance Characteristics

Optical System	High performance Linear Imaging Engine
Print Contrast	15% minimum reflective difference
Minimum Resolution	Typical 3 mil (Code 39, PCS 0.9)
Working Distance *1	Up to 24 inches on 100% UPC/EAN symbols Up to 34 inches on 20 mil Code 39
Light Source	630nm visible red LED
Scan Rate	Dynamic scanning rate up to 500 scans per second
Reading Direction	Bi-directional (forward and backward)
Pitch/Skew/Tilt	± 65° / ± 65° / ± 55°
Operating Modes	Trigger, Presentation
Configuration Setup	Bar code command Windows utility - FuzzyScan PowerTool
Data Editing	Condensed DataWizard via bar code command Full-feature DataWizard via FuzzyScan PowerTool
User Interfaces	Blue link indicator and 2-color status indicator Programmable beeper Optional vibrator

## Electrical Characteristics

Battery	3.7V, 2600mAh Li-ion rechargeable battery	
Battery Charge Time	Approx. 4-5 hours per full charge	
Scans per full Charge *2	More than 126,000 scans and transmissions	
Hours of Operation *2	Per full charge: 120 hours	
Voltage & Current (Scanner and Cradle)	Voltage 5 ± 10% VDC	Current (Charging/ Non Charging) Max.680 mA / 85mA with external power

## Communication Characteristics

RF Standard	Bluetooth v4.0
RF Frequency	Band 2.402~2.4830 GHz unlicensed ISM band
Data Rate	24.0 Mbit/s
Radio Link Modes	PAIR mode, PICO mode, SPP mode, HID mode
Communication Range	More than 100 meters in open space when working with smart cradle, line of sight
Supported Profiles	SPP, HID

## Supported Symbolologies

1D Linear	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	PDF417, Micro PDF417, Codablock F, Composite (available for F788BT only)

## User Environment

Drop Specifications	Withstand 50 drops at 6.0ft / 1.8m to concrete Withstand 10 drops at 6.6ft / 2.0m 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% related humidity, non-condensing
Ambient Light Immunity	0 ~ 100,000 lux
ESD Protection	Functional after 15kV discharge

## Physical Characteristics

Dimension	97.8 mm (L) x 70.5 mm (W) x 156.2 mm (D) 3.85 in. (L) x 2.77 in. (W) x 6.15 in. (D)
Weight	230g (battery included)
Color	Light Gray or Black

## Safety & Regulatory

EMC & Radio:	CE,FCC,BSMI,C-Tick,KC,NCC,VCCI,MIC
Safety *3	LED Eye Safety IEC62471, Exempt Group
Environmental	Compliant with RoHS directive

## Accessories

Smart Cradle	RF Standard : Bluetooth v4.0 Battery charging : Fast charge User Interfaces : 1 blue link indicator 2-color status indicator Beeper, Paging/Reset button Host Interface : PS/2 (DOS V) Keyboard Wedge, TTL RS232 Serial, USB HID, USB COM
Charging Cradle	Battery charging : Fast charge User Interface : 1 blue power indicator
Interface Cables	PS/2 (DOS V) Keyboard Wedge Cable RS232 Serial Cable USB Cable
Others	5VDC Power Supply Unit Battery Pack BT2100 (2600mAh) US100 Hand-free SmartStand US50 Hand-Free Stand Universal Holder

1. The reading distances are measured under Cino's test environmental condition.
2. The test is carried out under factory preset test criteria.
3. Don't stare into the LED beam.