FUZZYSCAN A780BT

2D Cordless Imager

Wireless 2D scanner designed for high performance and freedom of movement

The A780BT blends our FuzzyScan imaging platform with Bluetooth's wireless technology. It is built to rapidly scan a variety of 1D and 2D barcodes, whether displayed on paper, plastic, or electronically. When paired with the smart cradle, this imager delivers a cordless working range of over 100 meters. Moreover, its durable housing can withstand 2.0-meter drops onto concrete. These superior attributes make Cino's A780BT a tool of choice for the stringent demands of enterprise use.

- Integrated with the latest Bluetooth wireless technology
- Smart cradle offers radio coverage of over 100m
- Up to 7 scanner connections supported by smart cradle under PICO mode
- Works with most Android, iOS and Windows mobile devices
- Batch Scanning for simple stocktaking
- Reads various challenging and problematic barcodes
- Reads electronic barcodes from smartphone screens
- Withstands drops from 2.0m to concrete
- Standard-Range, High-Density and Extended-Range models
- Clear audio and visual feedback
- Optional vibrator for tactile confirmations

Wireless Convenience

Movement and Compatibility

Integrating Bluetooth's wireless technology, this barcode scanner offers the convenience and mobility of cordless operation.

Furthermore, it can be easily paired with a wide range of Bluetooth-enabled devices, such as Windows, iOS or Android phones. Pairing can be done through HID or SPP mode.

The Cradle Advantage

This scanner can also be paired with Cino's smart cradle, which is Bluetooth-enabled and yields a cordless working distance of over 100 meters. The smart cradle can serve as an instant wireless solution if your host device lacks Bluetooth capabilities.

Under PICO mode, the smart cradle can support up to 7 scanners at once. This allows you to centralize the data transmission process, gathering multiple connections onto a single cradle.

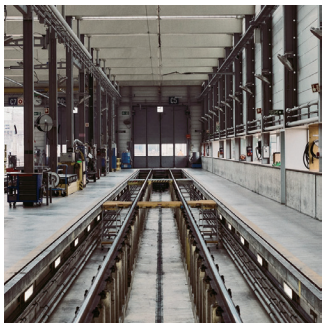
Practical Features

"On-the-Spot" Data Transmissions

When set to "Online Scanning" mode, this imager will send captured data to its host device immediately after each scan.

If the "Out-of-range scanning" function is enabled, up to 5,000 scans of EAN barcodes can be retained in the imager when it loses radio connection with the host device. Upon reconnection, the imager will automatically send out all stored data.

- Configuration can be done through iCode
- Advanced data formatting with DataWizard Premium
- System security development using DataWizard Premium



Manufacturing

Warehousing

Distribution Center

Retail

Efficient Stocktaking

"Batch Scanning" mode can be selected for inventory work. Barcode data will be kept in the imager after each scan, and will only be sent as a batch to its host device after transmission has been activated.

100,000 scans of EAN barcodes can be stored in the imager under this mode. Quantity value and time-stamp may be added to data immediately following capture.

Data Verification Made Easy

"Validation Scanning" mode enables the imager to record master data, which will be compared to information that is subsequently captured. Should they not be a match, the imager will emit warning beeps. This mode can be used in data validation tasks, such as verifying product uniformity in a lot before shipment.

Power that Lasts

This scanner integrates an advanced power management system which maximizes the number of scans per charge. Depending on usage, a full charge may be sufficient for a whole day's work. Battery status can be obtained simply by scanning the proper command barcode. These features will help you focus on the tasks at hand, and not on the next recharge.

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.

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, High-Density and Extended-Range.

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.

The Extended-Range model helps users capture regular barcodes from a longer distance. For example, reading barcodes of oversized products kept in carts without leaving the checkout counter, or scanning boxes that are stored on high shelves directly from ground level.

Users can choose the model that best suits their needs.

DataWizard Premium

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 and Visual Feedback

Status information on the device is given through audio and visual indicators. This scanner's beeper offers an adjustable sound volume, while its LED lights emit conspicuous, multi-color signals. These features, along with the optional vibrator, contribute to an enhanced user experience.

Optional Vibrator for Quiet or Noisy Environments

An optional vibrator is available to provide tactile feedback. It is ideal when the scanner's beeping sounds might be considered disruptive, such as in hospital rooms where patients are resting, or in a library. The vibrator is also useful where loud background noises may drown out the scanner's audio indications.

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. 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	HD Model 2.4 mil Code 39, 4.5 mil DM SR Model 2.7 mil Code 39, 4.8 mil DM ER Model 3.5 mil Code 39, 7 mil DM
Reading Range *1	**HD Model** 13 mil (0.33mm) UPC/EAN up to 14.1” **SR Model** 13 mil (0.33mm) UPC/EAN up to 19.6” **ER Model** 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)
Configuration Setup	FuzzyScan Barcode commands FuzzyScan iCode FuzzyScan PowerTool
Data Processing	DataWizard Premium
Image Capture	BMP

Electrical Characteristics

Battery	3.7V, 2600mAH Li-ion rechargeable battery
Battery Charge Time	Approx. 4-5 hours per full charge
Scans per full Charge	More than 67,600 scans and transmissions
Operating Voltage	5 ± 10% VDC
Operating Current	Charging: Max.750 mA Standby: Max.175 mA (Scanner with Smart Cradle)

Communication Characteristics

RF Standard	Bluetooth v4.0
RF Frequency Band	2.402~2.4830 GHz unlicensed ISM band
Radio Link Modes	PAIR, PICO, SPP, HID
Communication Range	More than 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 (Battery included)
Color	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	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 2.0m (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

Safety & Regulatory

EMC & Radio	CE, FCC, BSMI, RCM, KC, NCC, VCCI, MIC, SRRC
Safety *2	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 Interfaces	USB HID (USB Keyboard) USB VCOM (USB COM port emulation) Standard RS232
Charging Cradle	
Battery Charging:	Fast charge
User Interface:	1 blue power indicator
Interface Cables	RS232 Serial Cable USB Cable
Others	5VDC Power Supply Unit USB Power Cable BT2100 Battery Pack (2600mAh) US100 SmartStand US50 Hands-Free Stand

1. The Reading Range are measured under Cino’s test environmental condition.
2. Don’t stare into the LED beam.