FUZZYSCAN A898BT

Ultra-Rugged 2D Cordless Imager

Battery Free

Purpose built for demanding industrial applications

Engineered to fulfill demanding industrial requirements, the A898BT is crafted with an extremely sturdy construction, boasting unparalleled reliability and longevity in the harshest environments. Powered by Cino's exclusive imaging technology, high performance image sensor and dual-color lighting system, the A898BT effortlessly reads a wide range of challenging and problematic real-world barcodes with unrivaled accuracy and motion tolerance. Its broad Bluetooth connectivity, wireless charging capability, and battery-free solution contribute to reduced total ownership costs. The A898BT stands as a perfect solution for any business looking to fulfill critical missions across various demanding industrial applications.

- World-class durability with IP68 sealing
- Withstand 3m drops to concrete and over 8,000 tumbles
- Wide operating temperature from -30˚C to 60˚C
- Functional after ±30KV air discharge
- Up to 100m of communication coverage via Cino Smart Cradle
- Wireless Charging supported
- UltraCap™ Battery-Free supported
- Equipped with high performance image sensor
- Dual-color lighting system
- Diffused illumination on DPM model
- High-density, standard-range and DPM models available
- Tailor-made carbon covers available upon request
- Optimize the DPM reading by one-step tuning iTune
- Mounting kit-free smart cradle for wall installation

Unprecedented Reliability

The A898BT offers a full set of protective features in an ultra-durable design, ensuring long-lasting performance and reliability.

Extreme Shock Resistance

Designed to accompany front-line workers in harsh working environments, the A898BT easily withstands multiple 3-meter drops and over 8,000 tumbles.

IP68 Sealing Protection

With IP68 sealing, the A898BT provides exceptional protection against dust and water.

Exceptional Charging Reliability

Thanks to the wireless charging mechanism, the downtime caused by charging failure will be significantly reduced.

Enhanced ESD Protection

The A898BT withstands up to ±30KV of ESD surge.

Seamless Wireless Connectivity

Comprehensive connectivity and one-step pairing change the way you work by providing more agility, flexibility, and productivity.

Instant Cordless Migration

To pair your A898BT imager with the smart cradle without Bluetooth connectivity, Cino's instant "Plug-and-Play" cordless migration provides you with a working range of up to 100 meters.

Tailor-Made
Carbon Cover

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

Instantly pair your A898BT to its smart cradle by scanning the “Quick Pair Barcode” at base of the cradle. To pair the A898BT with your remote host, simply scan the “Quick Pair Barcode” generated by Cino ConnectWizard™.

Scan All Your Needs

Powered by Cino’s exclusive AI-driven imaging technology, the A898BT not only reads a vast array of challenging and problematic barcodes, but also those displayed on digital screens, wrinkled, dirty, soiled, curved or watermarked surfaces.

Cutting Edge Imaging Technology

Embedded with AI technology and deep learning, the A898BT delivers unrivaled readability and snappiness, as well as accuracy across most real-world barcodes.

Unsurpassed Reading Performance

Crafted with a dual-color lighting system and sophisticated optics, the A898BT delivers exceptional reading performance across various real-world barcodes.

Extensive Lineup

To meet different scanning requirements across diverse application scenarios, a lineup of models is available for selection.

Direct-Part-Marking model (DP)

In addition to being loaded with advanced DPM decoding algorithm, the A898BT is optimized with a purpose-built lighting system and diffused illumination to read challenging DPM and extremely high-density barcodes.

High-Density model (HD)

Incorporating an advanced DPM decoding algorithm, the A898BT is capable of reading very high-density and DPM codes with a moderate reading range.

Standard-Range model (SR)

The A898BT can read most real-world regular barcodes with an excellent reading range, making it ideal for a wide range of general purpose application.

Wireless Charging Solution

By leveraging Qi technology, Cino’s wireless charging solution highlights the advantages of reliability and cost-effectiveness.

Lower Total Cost of Ownership

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.

Reliable Wireless Charging

Straightforward, foolproof, and user-friendly, the A898BT fits perfectly with its wireless charging cradle, providing stable charging and ESD protection.

FUZZYSCAN DNA

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.

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. This battery-free solution not only lowers your replacement costs of battery, but also 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 in an hour.

Quick Get-Up-And-Go

Out of power? No worries. Every 1-minute quick charge is able to support 130 scans.

Eco-Friendly for a Healthier Planet

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

Value Beyond Measure

FuzzyScan DNA is a collection of useful features with added-values available for every Cino imager at no additional cost. These exclusive features not only elevate your user experience, but also help you overcome various technical limitations beyond barcode scanning.

DataWizard

A powerful feature that allows advanced formatting on GS1 and UDI data. By using data scripts, it is able to perform sophisticated data validation and complex data processing, such as US driver's license parsing or medical data parsing

iCode

A useful macro command barcode for enabling configuration with a single scan

iTune

A one-step smart-tuning function for optimization of readability

Multilingual Edge

A comprehensive function for converting data output into your desired languages

Smart Scene

A series of preset configurations for easy adaptation to specific scenarios

Security Plus

A programmable security script for preventing unauthorized access

FuzzyScan Enabling Solution

A suite of software utilities and SDK that enables easy integration, management, and deployment of scanners

SPECIFICATIONS

Performance Characteristics

Image Sensor	1280 x 1080 Pixels
Print Contrast	15% minimum reflective difference
Light Source	2 red and 2 white LEDs
Imager Field of View	39˚H x 25˚V
Min. Resolution	**DP** 2.0mil Code 39, 4 mil DM **HD** 2.3 mil Code 39, 4.5 mil DM **SR** 2.7 mil Code 39, 4.8 mil DM
Reading Range *1	**DP** 13 mil (0.33mm) UPC/EAN up to 9.5” **HD** 13 mil (0.33mm) UPC/EAN up to 22.5” **SR** 13 mil (0.33mm) UPC/EAN up to 31”
Roll, Pitch, Skew	Roll: 360˚; Pitch: ± 75˚; Skew: ± 65˚
Frame Rate	120fps
Motion Tolerance	Steadily read over 153 cm/s, with a max speed up to 646 cm/s (254 in/s)
Configuration Setup	FuzzyScan Barcode commands FuzzyScan iCode FuzzyScan PowerTool FuzzyScan Serial Command
Data Processing	DataWizard
User Interfaces	3 LEDs for power, good read and status indications Programmable beeper Built-in vibration function
Image Capture	BMP format

Electrical Characteristics

Operating Voltage	5 VDC ± 10%
Operating Current	Scanner with Smart Cradle Charging: Maximum 1.36A Standby: Maximum 136 mA

Physical Characteristics

Dimensions	126 mm (L) x 77.4 mm (W) x 180.1mm (D) 4.96 in. (L) x 3.05 in. (W) x 7.09 in. (D)
Weight	335g(with Li-Ion Battery) 306g(with UltraCap™)
Color	Tiffany Blue

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 80 minutes of use per full charge Over 4,200 scans per full charge Over 130 scans after one minute charge

1. The Reading Range is measured under manufacturing preset 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 or laser beam.

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 at 3m (9.8ft) to concrete
Tumble	8,000 (3.3ft)/1.0m tumbles
Environmental Sealing	IP68
Operating Temperature	-30˚C to 60˚C (-22˚F to 140˚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 ~ 108,000 Lux
ESD Protection	Functional after ±30KV air discharge and ±12KV contact discharge

Safety & Regulatory

EMC & Radio	CE, UKCA, FCC, BSMI, RCM, KC, NCC, VCCI, MIC, SRRC
Safety *3	LED IEC 62471/EN 62471, Exempt Group Laser IEC 60825/EN 60825-1
Environmental	Compliant with RoHS 2.0 and REACH

Communication Characteristics

RF Standard	Bluetooth Version 4.x
RF Frequency Band	2.402~2.4830 GHz unlicensed ISM band
Radio Links Modes	PAIR, PICO, SPP, HID
Communication Range	Up to 100 meters in open space when working with Smart Cradle, line of sight
Supported Profles	HID (Keyboard), SPP (Serial Port)

Accessories

Smart Cradle RF Standard Host Interfaces	HB8133 Smart Cradle Bluetooth Version 4.x USB HID (USB Keyboard) USB VCOM (USB COM port emulation) USB OEM POS Standard RS232
Cables	RS232 Serial Cable USB-A Cable USB-C Cable
Others	UC2210 UltraCap™ (750 Farads) BT2100 Battery Pack (2,550mAh) Power Supply Unit (5VDC, 2A outlet)