FUZZYSCAN A890

Ultra-Rugged 2D Corded Imager

Designed for high demanding and industrial applications

The A890 comes in a polished yet extremely reliable construction, purpose-built to meet high demanding and industrial requirements in harsh environments. Powered by Cino's exclusive AI-driven imaging technology and dual-color lighting system, the A890 delivers unrivaled reading performance across a wide range of challenging and problematic real-world barcodes with exceptional motion tolerance. An extensive selection of models is available to fulfill the needs of various applications. The A890 sets a new standard for boosting productivity in every extreme condition and scanning scenario.

- Heavy-duty construction 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
- 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
- Built-in vibration function for tactile confirmations
- Inherit Cino's powerful FuzzyScan DNA

Ultimate Reliability

High reliability is a top priority in industrial environments. The A890 prioritizes this with its sturdy design and a full set of reliable features.

Extreme Shock Resistance

The A890 not only withstands multiple 3-meter drops to concrete, but also over 8,000 tumbles with ease.

IP68 Sealing Protection

The A890 features advanced IP68 sealing, providing exceptional protection against dust, spray and water.

Wide Operating Temperature

To ensure adaptability in diverse conditions, the A890 can operate across a broad temperature from -30˚C to 60˚C.

Enhanced ESD Protection

Thanks to the enhanced ESD protection, the A890 withstands up to ±30KV of surge.

Scan All Your Needs

Powered by Cino's exclusive AI-driven imaging technology, the A890 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.

Tailor-Made
Carbon Cover

Cutting Edge Imaging Technology

Embedded with AI technology and deep learning, the A890 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 A890 delivers exceptional reading performance across various real-world barcodes.

An 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 A890 is optimized with a purpose-built ring illumination and light diffuser to read challenging DPM and extremely high-density barcodes in a flash.

High-Density model (HD)

Incorporating an advanced DPM decoding algorithm, the A890 reads very high-density and DPM codes with a moderate reading range.

Standard-Range model (SR)

The A890 is capable of reading most real-world regular barcodes with an excellent reading range, making it ideal for a wide range of general purpose application.

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 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	Operating : Typical 504 mA @5VDC Standby : Typical 189 mA @5VDC

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	268g (cable excluded)
Color	Tiffany Blue
Host Interfaces	USB HID (USB Keyboard) USB VCOM (USB COM port emulation) USB OEM POS Standard RS232

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 code [*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 3.0m (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	CE, UKCA, FCC, BSMI, RCM, KC, VCCI
Safety [*3]	LED IEC 62471/EN 62471, Exempt Group Laser IEC 60825/EN 60825-1
Environmental	Compliant with RoHS 2.0 and REACH

Accessories

Interface Cables	RS232 Serial Cable with Cable Clip USB-A Cable with Cable Clip USB-C Cable with Cable Clip
Others	Power Supply Unit (5VDC, 2A outlet)