

# FUZZYSCAN F890 Ultra-Rugged Linear Corded Imager



# Built for demanding and industrial applications

Crafted with unprecedented sturdiness and durability in a heavy-duty construction, the F890 is specially designed for working in harsh environments, easily resisting multiple drops and tumbles, as well as harmful water and dust elements. Powered by Cino's exclusive FuzzyScan imaging technology, the F890 reads challenging and problematic real-world barcodes with exceptional motion tolerance, boasting unrivaled reading performance across diverse demanding applications.

- Best-in-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
- Equipped with high performance image sensor
- Read most challenging and problematic barcodes
- Tailor-made carbon covers available upon request
- Built-in vibration function for tactile confirmations
- Inherit Cino's powerful FuzzyScan DNA

# **Ultimate Reliability**

Reliability is a must for scanning operations in heavy, industrial work settings. The F890 is optimized for these with a full range of enterprise-level protective features.

## Extreme Shock Resistance

Thanks to its super robust design, the F890 withstands **3-meter** drops to concrete and over **8,000** tumbles.

## **IP68 Sealing Protection**

With **IP68** sealing, the F890 is water and dust protected, and operates under a wide range of temperatures from -30°C to 60°C.

## Enhanced ESD Protection

The F890 withstands up to ±30KV of ESD surge.

# Scan All Your Needs

Powered by Cino's exclusive FuzzyScan Imaging technology, the F890 not only reads a vast array of challenging and problematic barcodes, but also those displayed on digital screens, wrinkled, dirty, soiled, or watermarked surfaces.

#### Cutting Edge Imaging Technology

Embedded with AI technology and deep learning, the F890 delivers unrivaled readability and snappiness, as well as accuracy across most real-world barcodes.

#### Unsurpassed Reading Performance

The F890 brings exceptional reading performance and motion tolerance on both regular and difficult-to-read barcodes. The snappiness also dramatically improves user's experience. The first-time, every-time scanning makes F890 ideal for a wide range of applications.



Tailor-Made Carbon Cover

# 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

## 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

Optical System	High performance linear imaging engine
Print Contrast	10% minimum reflective difference
Light Source	630 nm red LED
Minimum Resolution	3 mil (Code 39, PCS 0.9)
Reading Range <sup>*1</sup>	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 800 scans per second
Pitch / Skew / Tilt	±65°/±65°/±55°
Motion Tolerance	Up to 90 cm/s (35.43 in/s)
User Interfaces	3 LEDs for power, good read and status indications Programmable beeper Built-in vibration function
Configuration Setup	FuzzyScan Barcode commands FuzzyScan iCode FuzzyScan PowerTool FuzzyScan Serial Command
Data Editing	DataWizard

#### **Electrical Characteristics**

Operating Voltage	5VDC ± 10%
Operating Current	Operating : Typical 180 mA @5VDC Standby : Typical 80 mA @5VDC

#### **Physical Characteristics**

Dimensions	126 mm (L) x 77.4 mm (W) x 180.1 mm (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 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, Composite Codes, Codablock F, Code 16K, Code 49, Linear-stacked	
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 $\pm 30$ KV air discharge and $\pm 12$ KV contact discharge

#### Safety & Regulatory

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EMC	CE, UKCA, FCC, BSMI, RCM, KC, VCCI
Safety *3	LED IEC 62471/EN 62471, Exempt Group
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)

