

FUZZYSCAN FA580

Premium Fixed-Mount Scanner



Effortless integration, Superior Performance

Built for easy integration, the FA580 Series features multiple mounting holes, making it ideal for a variety of embedded and standalone applications, including self-service kiosks, reverse vending machines (RVMs), automated teller machines (ATMs), and industrial automation systems. Powered by Cino's exclusive AI-driven imaging technology, the FA580 delivers outstanding reading performance even on the most challenging real-world barcodes, while its purpose-built **Auxiliary Illumination** further enhances motion tolerance and scan accuracy. To meet diverse scanning needs, a range of models are available. The UW model features a large field of view, enabling high motion tolerance and fast reading of large barcodes at close range. Designed with ruggedness and durability in mind, the FA580 features IP65 sealing and a secure cable-locking clip, delivering the ultimate reliability for demanding outdoor applications, even across a wide working temperature range of -30°C to 60°C . The FA580's seamless integration, exceptional reading performance, and proven reliability ensure efficient workflows and maximize operational productivity.

- Cino's exclusive imaging technology powered by AI
- Enhances motion tolerance and scan accuracy with Auxiliary Illumination
- Durable design with IP65 protection
- Operating temperature range of -30°C to 60°C
- Large FOV and high motion tolerance with UW model
- Reads high-density barcodes with HD model
- Multiple mounting holes for flexible integration
- Supports both USB and RS232 connections
- Detachable cable design

Scan All Your Needs

Powered by AI-driven imaging technology and a high-resolution global shutter image sensor, the FA580 reliably decodes even the most challenging barcodes, including those that are wrinkled, curved, low-contrast, contaminated, or partially damaged.

An Extensive Lineup

To meet different scanning requirements across diverse application scenarios, the FA580 offers a range of models for selection.

Ultra-Wide-Angle Model (UW)

The UW model provides an exceptionally large scanning field, enabling fast reading of large barcodes at close range. It also offers high motion tolerance to capture fast-moving barcodes.

High-Density Model (HD)

The HD model is optimized to read high-density barcodes and DPM-like codes with a moderate reading range.



Exclusive FuzzyScan Imaging Technology

Standard-Range Model (SR)

Ideal for various general-purpose applications, the SR model reads most real-world barcodes with an excellent reading range, providing unmatched efficiency and ease of use.

Smart Training with iTunes

The dedicated AI-powered iTunes button automatically optimizes scanner settings to ensure reliable barcode capture, eliminating the need for manual adjustments. It streamlines operations and sets a new benchmark for scanning performance.

Auxiliary Illumination

The Auxiliary Illumination enhances motion tolerance and scan accuracy. In addition, it enables the scanner to decode difficult barcodes in various scenarios, helping businesses enhance overall productivity.

Proven Reliability and Easy Integration

The FA580 combines durability and flexibility, enabling seamless integration into diverse embedded applications, even in demanding outdoor environments. Its robust construction ensures reliable operation, while multiple mounting holes and broad interface support simply integration across various systems.

Seamless Integration

With compatible dimensions and mounting design, the FA580 offers a drop-in replacement for other popular scanners. Seamlessly integrated into self-service kiosks and factory machines, it is ready to scan with minimal setup, saving valuable time for businesses.

Durable Design

The FA580 is rated IP65 for protection against dust and water splashes. Designed to withstand temperatures from -30°C to 60°C, it delivers dependable operation in harsh indoor and outdoor environments.

Flexible Connection and Easy Maintenance

The FA580 supports USB and RS232 interfaces with a detachable cable design for easy integration and maintenance. A sliding cable clip keeps the cable securely in place, ensuring stable and reliable operation.



FUZZYSCAN DNA

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 complex data processing, such as US driver's license parsing

iCode

A useful macro command barcode for enabling one-step 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

Image Sensor	1280 x 800 Pixels
Print Contrast	15% minimum reflective difference
Light Source	Red or warm white LED
Imager Field of View	FA580-SR 41.5° H x 25.9° V FA580-HD 41.5° H x 25.9° V FA580-UW 75.6° H x 50.9° V
Min. Resolution	FA580-SR 2.7mil Code 39, 4.8mil DM/QR FA580-HD 2.4 mil Code 39, 4.5 mil DM/QR FA580-UW 4.0 mil Code 39, 7.0 mil DM/QR
Reading Range *1	FA580-SR 13 mil (0.33mm) UPC/EAN up to 23.2" FA580-HD 13 mil (0.33mm) UPC/EAN up to 16.5" FA580-UW 13 mil (0.33mm) UPC/EAN up to 12.1"
Roll, Pitch, Skew	Roll: 360°; Pitch: ± 75°; Skew: ± 65°
Motion Tolerance	FA580-SR Steadily read over 153 cm/s, with max. speed up to 617 cm/s (243 in/s) FA580-HD Steadily read over 153 cm/s, with max. speed up to 617 cm/s (243 in/s) FA580-UW Steadily read over 460 cm/s, with max. speed up to 920 cm/s (362 in/s)
Configuration Setup	FuzzyScan Barcode commands FuzzyScan iCode FuzzyScan PowerTool
Host Interfaces	USB HID (USB Keyboard) USB VCOM (USB COM port emulation) Standard RS232 serial
User Interfaces	3 LEDs for power, good read, status indications Programmable beeper
Data Processing	DataWizard
Image Capture	BMP or JPEG format

Physical & Electrical Characteristics

Dimensions	48 mm (L) x 55 mm (W) x 28mm (H) 1.89in.(L) x 2.17in.(W) x 1.10in.(H)
Weight	51g (cable excluded)
Connector	USB Type C
Input Voltage	5VDC ± 10%
Current	Operating: Typical 239 mA @5VDC Auxiliary Illumination on: 501 mA @5VDC Idle: Typical 146 mA @5VDC

Decode Capabilities

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
OCR *3	OCR A/B, MICR-E13B, US Currency

User Environment

Drop Specifications	Withstands drops from 1.5m (5ft) to concrete
Environmental Sealing	IP65
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 ~ 100,000 Lux
ESD Protection	Functional after 15KV discharge

Safety & Regulatory

EMC	CE, UKCA, FCC, BSMI, VCCI, KC
Safety *4	LED Eye Safety IEC62471, Exempt Group
Environmental	Compliant with RoHS 2.0 and REACH

Accessories

Cables	USB-A Cable RS232 serial Cable
Others	Power Supply Unit (5VDC, 2A outlet) USB Power Cable

1. The Reading Range are measured under Cino's test environmental condition.
2. Codablock F, Code 49, Han Xin Code, and DotCode are available upon request.
3. MICR-E13B and US Currency are available upon request.
4. Don't stare into the LED beam.

