FUZZYSCAN SM5000 SERIES
2D OEM Scan Module

Compact 2D OEM scan modules for embedded applications

The SM5000 series packs all the functionalities of barcode scanners onto a tiny footprint. These coin-size modules not only capture barcodes in a flash, but are also built to overcome real-world challenges, such as distorted or damaged barcode labels, and electronic coupons on digital screens. Thanks to an all-in-one design, each module comes ready for use and is easy to integrate, reducing your engineering efforts for greater cost savings.

- All-in-one design for total cost savings
- Capture challenging and problematic barcodes
- Smart Scenes™ for rapid adaptations
- Advanced data processing with DataWizard Premium
- Multilingual output support
- Single scan setup via iCode
- Security Plus protects your business investments

Scan All Your Needs

Powered by Cino's exclusive imaging technology, this series delivers unparalleled reading performance on virtually any barcode, in any condition. They are ideal solutions for enterprises that require dependable and high-throughput barcode scanning.

Best-in-class reading performance

These compact modules deliver excellent reading performance on a wide range of barcodes. They also capture a great number of challenging and problematic barcodes, such as dense, soiled, distorted, damaged, or overwrapped barcode labels, and electronic coupons on digital screens.

Different solutions for different needs

The SM5000 series is available in different models to meet various challenges. Built for demanding requirements, the SM5800 is available in Standard-Range and High-Density models. The SM5600 offers an economical alternative for cost-sensitive applications.

Ready For Use

Flexible Integration

Smart Scenes™

DataWizard Premium

All-in-One Solution and Easy-to-Integrate

This series offers all the functionalities of barcode scanners on a tiny footprint. A compact, all-in-one design makes these modules easy to integrate, which translates to greater cost savings through lower development expenses and a shorter time-to-market.

Self-contained and ready for use

The modules come with a built-in decoder, trigger button, LED indicators, and beeper. Thanks to this self-contained design, they can be evaluated straight out of the box, saving you development costs and efforts.

Flexible integration

The scan engine can be detached from its main board while remaining joined by a ribbon cable. This provides users with additional flexibility when installing their modules.

Broad Connection Support

Cino's SM5000 series can be connected to various host interfaces, Including USB HID, USB VCOM, and standard RS232. Additionally, each module may be wired to support an external trigger, as well as OK and NG signal outputs.

Optimize module positioning with test mode

Users can leverage their modules' built-in test mode to find the optimal mounting position. This mode allows various angle and distances to be tested with remarkable efficiency.

Freedom to define your serial trigger commands

These modules support user-defined serial commands. Hence, they can adopt the commands utilized by predecessors, reducing the amount of integration work required.

Smart Scenes™ for rapid adaptation

Smart Scenes offers a variety of scene options which are fine-tuned and pre-programmed to yield optimized settings for diverse scenarios. This feature works just like a digital camera's scene mode. It enables users to achieve the best scanning results for selected applications with minimal efforts.

Advanced imaging control

Advanced imaging parameters, such as exposure time and digital gain, can be adjusted if needed. This enables users to optimize their settings in accordance with application requirements.

Features That Bring Maximum Value

This series comes with all the advantages of Cino's FuzzyScan DNA, delivering exceptional usability and added-value.

DataWizard Premium, powerful data processing

DataWizard Premium is a unique feature designed for FuzzyScan products. It allows them to execute advanced data formatting and processing tasks, fulfilling a wide range of requirements. This also reduces the need for costly or time-consuming changes to your host application.

Multilingual Edge

Multilingual Edge, no more language barriers

Cino 2D scanners can be configured to output virtually any language, including Arabic, German, Greek, Russian, and Turkish, etc. Asian languages such as simplified Chinese, traditional Chinese, Japanese and Korean are also covered. Through the Multilingual Edge feature, users are able to communicate without linguistic barriers, expanding their business horizons.

iCode, single scan setup

The iCode is a command barcode designed to streamline and accelerate your setup process. Instead of configuring their scanners with multiple barcodes, users can achieve identical results with a single iCode. This functional simplicity lowers the risk of misconfiguration, expedites deployments, and reduces field service expenses.

Security Plus, cost-free business protection

Security Plus guards your host application by restricting access to authorized Cino scanners only. This powerful security mechanism blocks connection attempts by unrecognized scanners, thereby preventing unsanctioned use. Security Plus delivers peace of mind by offering a reliable solution that protects businesses at no extra cost.

SPECIFICATIONS

Performance Characteristics

Image Sensor	**SM5800** 1280 x 800 Pixels **SM5600** 640 x 480 Pixels
Print Contrast	**SM5800** 15% minimum reflective difference **SM5600** 20% minimum reflective difference
Light Source	660nm LED
Imager Field of View	**SM5800** 41.5˚ H x 25.9˚ V **SM5600** 36˚ H x 27˚ V
Min. Resolution	**SM5800-SR-x** 2.7 mil Code 39 4.8 mil DataMatrix **SM5800-HD-x** 2.4 mil Code 39 4.5 mil DataMatrix **SM5600-x** 3.0 mil Code 39 5.0 mil DataMatrix
Reading Range *1	**SM5800-SR-x** 13 mil (0.33mm) UPC/EAN up to 19.6" **SM5800-HD-x** 13 mil (0.33mm) UPC/EAN up to 14.1" **SM5600-x** 13 mil (0.33mm) UPC/EAN up to 15.6"
Roll, Pitch, Skew	Roll: 360˚; Pitch: ± 75˚; Skew: ± 65˚
Motion Tolerance	**SM5800** Up to 617 cm/s (243 in/s) **SM5600** Up to 627 cm/s (247 in/s)
Host Interfaces	USB HID (USB Keyboard) USB VCOM (USB COM port emulation) Standard RS232 serial
Configuration	FuzzyScan iCode FuzzyScan Barcode commands FuzzyScan PowerTool
Data Processing	DataWizard Premium
Image Capture	BMP format

Physical & Electrical Characteristics

Dimensions	38 mm (L) x 33.6 mm (W) x 18.8 mm (H) 1.50 in. (L) x 1.32 in. (W) x 0.74 in.(H)
Weight	15g
Connector	15-pin board-to-wire
Input Voltage	5VDC ± 10%
Current	**SM5800** Operating: Typical 360 mA @5VDC Standby: Typical 220 mA @5VDC **SM5600** Operating: Typical 305 mA @5VDC Standby: Typical 195 mA @5VDC

Decode Capabilities

1D Linear Codes	Code 39, Code 39 Full ASCII, Code 32, Code 128, GS1-128, Codabar, Code 11, Code 93, Standard & Industrial 2 of 5, Interleaved & Matrix 2 of 5, IATA, UPC/EAN/JAN, UPC/EAN/JAN with Addendum, Telepen, MSI/Plessey & UK/Plessey , GS1 DataBar, Linear & Linear Stacked
2D Codes	PDF417, Micro PDF417, Codablock F, Code 16K, Code 49, Composite Codes, DataMatrix, MaxiCode, QR Code, MicroQR, Aztec
Postal Barcodes	Australian Post, US Planet, US Postnet, Japan Post, Posi LAPA 4 State Code

User Environment

Operating Temperature	-20˚C to 50˚C (-4 ˚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 ~ 100,000 Lux

Safety & Regulatory

Safety *2	LED Eye Safety IEC62471, Exempt Group
Environmental	Compliant with RoHS directive

Accessories

Cables	USB Cable RS232 Cable Universal Cable
Others	5VDC Power Supply Unit

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