FUZZYSCAN FA470
2D Fixed Mount Imager

2D fixed mount imager for stand-alone or embedded applications

Small and compact, the FA470 can be easily integrated with other equipment or used as a stand-alone scanning device. Whether embedded in a kiosk machine or mounted on the conveyor line, this imager will rapidly decode a vast array of 1D, stacked and 2D symbologies. Furthermore, the FA470 integrates heat-dissipation technology to lower its temperature levels and optimize performance.

- Small in size and easy to mount
- Durable housing with IP54-level protection
- Heat-dissipation technology
- Supports external and serial triggers
- OK and NG output signals for accurate reading control
- "Standard Range" and "High Density" models
- Choice of "USB", "RS232" or "Universal" interface cable
- Available with a front or side scan-window
- "Test" mode offers assistance with scanner positioning
- Superior reading performance on low contrast, soiled, or damaged barcodes
- Reads a vast array of 1D, stacked and 2D barcodes
- Advanced data formatting with DataWizard Premium
- System security development using DataWizard Premium

Scan All Your Needs

Capture a Wide Range of Symbologies

This scanner is designed to capture a vast array of 1D, stacked and 2D symbologies, whether displayed on paper, plastic or digital screen. Stacked-linear barcodes that can be read by this scanner include PDF417, GS1 Databar Stacked, and composite codes.

Ready for Challenges

Empowered by the FuzzyScan imaging platform, this device is primed to read various challenging and problematic barcodes. For example: low contrast, soiled, or damaged barcodes.

Scanner Positioning Support

"Test" mode helps users find the best angle and distance to position their device for optimal scanning results. When test mode is activated, the scanner will automatically perform a number of scans and output the ratio of successful reads. Different positions can thus be tested and compared to determine the most suitable one.

Complete Lineup to Fulfill Diverse Requirements

Scanning applications are increasingly diverse, and specialized tools may be needed to get the job done. For this reason, Cino has made this scanner available in different models: "Standard Range" and "High Density".

The "Standard Range" model is designed to fulfill most scanning requirements. Enabled by advanced technologies, this model offers superior reading performance on both regular and high-density barcodes. It is suitable for a wide range of applications that would normally require different types of scanners.

The "High Density" model, on the other hand, is built to read very small, high-density 2D barcodes that appear on items such as electronic components, jewelry tags, or medical equipment. Users can choose the model that best suits their needs.
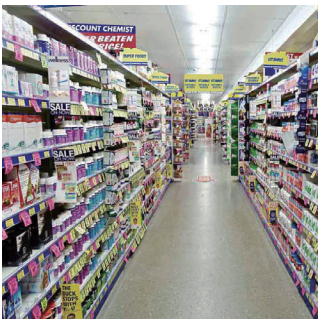
Manufacturing

Warehousing

Distribution Center

Retail

Practical Features

Useful Operation Modes

Five operation modes are available to help you fulfill various application requirements: "Trigger", "Alternative", "Level", "Presentation" and "Force" modes.
Each mode offers distinct functionalities that are designed to make your work easier. Under "Presentation" and "Force" modes, readings are performed automatically by the scanner when it detects barcode-like images. If the scanner is set to "Trigger", "Alternative" or "Level" mode, scans will be initiated by an external trigger or serial trigger command.

User-Defined Serial Trigger Command

Serial trigger commands can be defined by users in accordance with their system requirements, thereby lessening the impact of scanner integration on existing programs.

Designed for Excellence

Small, Compact and Easy to Install

Small and compact, this scanner is ideal for applications with space constraints. Its sturdy over-mold construction offers IP54-level protection and guards it against inadvertent drops. Furthermore, M3 mounting holes simplify installation by providing an easy way to secure the device.

Various Scan-Window and Interface Options

Space limitations will dictate the ways in which a piece of equipment can be mounted. To accommodate various integration needs, this scanner is available with either a front or side scan-window.
A choice of interface cables is also offered: "USB", "RS-232" or "Universal". The "Universal" interface supports external triggers, as well as OK and NG outputs. Furthermore, it can be attached to USB or RS-232 converter cables with trigger wires.

Value Beyond Measure

Customized Functionalities

DataWizard Premium lets you write data or security scripts which can then be used to program Cino scanners for customized tasks. The script language is similar to BASIC and easy to learn for experienced programmers.
This exceptional feature is included in the FuzzyScan PowerTool and offered to Cino clients without extra charge.

Advanced Data Formatting

Data scripts can be used to configure your scanners for intricate formatting procedures that would otherwise be assigned to the host device. For example: parsing raw data captured from a driver's license, adding prefixes or suffixes, and more.

System Security

Cino devices can be programmed via security scripts to participate in system protection. Set your host system to prompt scanners for an algorithm-generated key, and to refuse connection if such key is not provided. Develop a security script containing the said algorithm so that it may deliver the correct key. Install the security script on approved scanners only. This set-up will help prevent unauthorized scanners from connecting with the host system.

SPECIFICATIONS

Performance Characteristics

Scan Pattern	Area Imaging
Print Contrast	20% minimum reflective difference
Light Source	Aiming Pattern: 630nm LED Illumination: 630nm LED
Min. Resolution	**SR Model** 3.3 mil Code 39 7 mil DM **HD Model** 2.7 mil Code 39 5 mil DM
Roll, Pitch, Skew	Roll: 360˚; Pitch: ± 75˚; Skew: ± 65˚
Motion Tolerance	Up to 25 inch/63.5 cm per second
Reading Range *1	**SR Model** 5 mil (0.13mm) C39 6.0 - 19.5 (2.4"- 4.3") 13 mil (0.33mm) UPC/EAN 4.2 - 40.0 (1.7" - 15.7") 10 mil (0.25mm) DM 4.7 - 18.0 (1.9"- 7.1") **HD Model** 3 mil (0.07mm) C39 5.5 - 11.0 (2.2" - 4.3") 5 mil (0.13mm) C39 4.5 - 13.5 (1.8" - 5.3") 13 mil (0.33mm) UPC/EAN 4.5 - 22.0 (1.8" - 8.7") 10 mil (0.25mm) DM 3.0 - 13.0 (1.2" - 5.1") 10 mil (0.25mm) QR 3.5 - 13.5 (1.4" - 5.3")
Operating Modes	Trigger, Alternative, Level, Force, Presentation
Host Interfaces	RS232 serial USB HID (USB Keyboard) USB COM port emulation
User Interfaces	3 LEDs for power, Status, OK/NG indications Test button Programmable beeper
Configuration Setup	3 LEDs for power, Status, OK/NG indications Test button Programmable beeper
Data Editing	DataWizard Condensed DataWizard Premium
Image Capture	Graphic Format: BMP

Physical & Electrical Characteristics

Dimensions	47.6 mm (L) x 40.6 mm (W) x 25.6 mm (H)
Weight	120g (RS232 or Universal version) 95g (USB version)
Scan Window	Choice of front or side scan-window
Connector	9-pin D-sub female (RS232 version) USB 4-pin Type A (USB version) 15-pin D-sub HD female (Universal version)
Input Voltage	5VDC ± 10%
Current	Operating: Typical 285 mA @5VDC Standby: Typical 160 mA @5VDC

Supported Symbologies

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, Aztec, MicroQR
Postal Barcodes	Australian Post, US Planet, US Postnet, Japan Post Dutch KIX code, Intelligent Mail, British Post

User Environment

Drop Specifications	Withstands drops from 1.5m (5ft) to concrete
Environmental Sealing	IP54
Operating Temperature	-10˚C to 50˚C (14˚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
ESD Protection	Functional after 15KV discharge

Safety & Regulatory

EMC	CE, FCC, BSMI, VCCI, KC
Safety *2	LED Eye Safety IEC62471, Exempt Group
Environmental	Compliant with RoHS directive

Accessories

Cables	USB Power Supply 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.