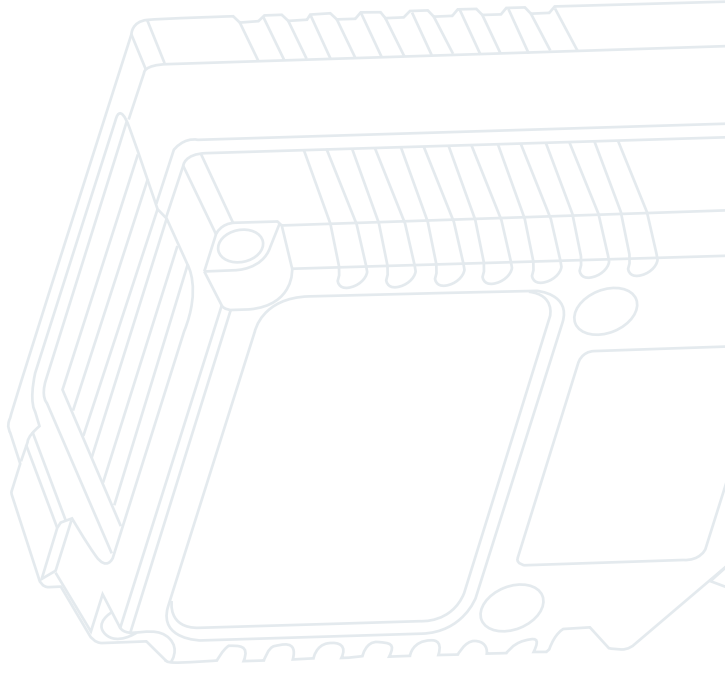# FA470 Series

A future-proof area-imaging fixed mount scanner for boosting enterprise's productivity

Powered by FuzyScan 3.0 imaging technology, IP54 ultra-compact yet durable over-molded construction, the CINO FA470 series fixed mount scanner comes with industry-leading scanning performance, functionality and reliability. The FA470 area-imaging fixed mount scanner delivers a future-proof and superior cost-performance solution to help enterprises increasing their efficiency and productivity.

cino®

Ultra-compact and easy mounting design for flexible integration

IP54 durable over-molded construction

Useful test mode helps to identify the optimal mounting position easily

Flexible user-defined serial trigger command supported

Support RS232, USB HID, USB COM host interfaces

Support serial command trigger and external trigger

Universal model supports OK and NG output signals for precise reading control

Read most of popular 1D, 2D barcodes and postal codes

Aggressive decoding ability on reading low contrast, soiled, poorly-printed or damaged barcodes

Digital image capture capability

High-density and standard range model are offered to satisfy various data capture needs

Choice of Front-view or side-view version

Status at a glance

FA470 series is equipped with multiple and intuitive status LED indicators and loud beeper. The operation status is clear and crystal at a glance.

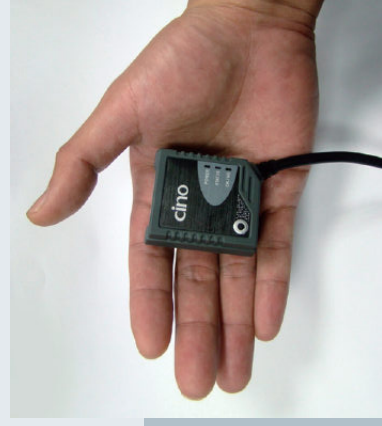

Intuitive User Interface

Size does matter

Size of a product plays a very important role in system integration and space-constrained environment. With the ultra compact design of FA470 series, space allocation will not an issue to worry about.

Ultra Compact Design

Durable for harsh environment

Thanks to IP54 over-molded design, FA470 can protect internal components from dust and water ingression. It also can withstand multiple drops to concrete from 1.2 m in any orientation. So the high reliability is guaranteed.

Robust Construction
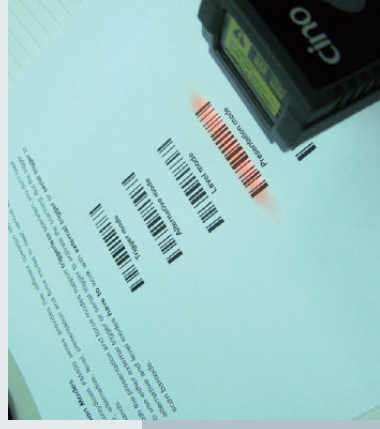
Various interface options

Both RS232 and USB host interfaces are available in different models, including USB model, RS232 model and universal model. The universal model supports both USB and RS232 interfaces, allow system integrators to customize their specific applications.
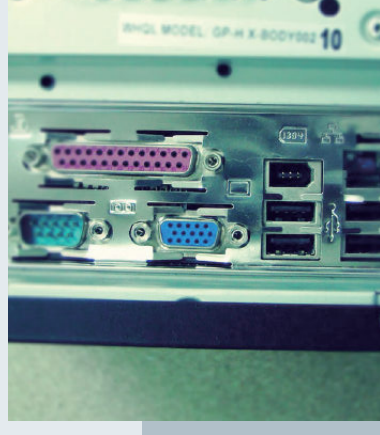

RS232 and USB I/F Options

Useful operation modes

The FA470 provides five operations modes, including trigger, alternative, level, presentation and force modes. Both the presentation and force modes support triggerless operation, you don't need to use either external trigger or serial trigger to activate the scanning. You can choose the specific operation mode to meet the requirement of your application.

Five Operation Modes

User-defined serial trigger for easy replacement

If you want to phase out your current expensive fixed-mount scanner and replace them with FA470, the useful user-defined serial trigger function provides you a flexible solution without impacting your existing application programs. You can simulate the other brands' serial trigger command through the setting of FuzzyScan PowerTool, then activate the scanning by using the simulated serial trigger command.

Value-added Universal Mode

Practical test mode

Once you determined desired location to install the scanner, the thoughtful test mode helps system integrator to identify the most optimal mounting position easily and quickly.

Test Mode

Multiple triggering methods

In addition to the built-in physical trigger button, the models which support RS232 and USB COM port emulation interfaces can be triggered by sending serial command. Furthermore, the universal model also supports external trigger. The FA470 provides an ideal solution for machine-controlled applications.

Universal model brings added value

The universal model offers more useful functionality. It not only supports RS232, USB HID and USB COM port emulation host interfaces, but also provides external trigger function. Moreover, it provides OK/NG signal output for more precise reading control.

Superior reading performance

Base on the exceptional decoding capability, FA470 series is capable of reading low contrast, poorly-printed, or soiled, damaged barcodes. This makes the whole scanning process more efficiently and extra handling cost will be minimized.

All you can scan

Built with the advanced FuzzyScan 3.0 imaging technology, FA470 series is capable of reading most of major 1D, 2D symbologies and postal codes omnidirectionally. Besides, it also supports digital image capture which may be used for vision-related applications.

Diverse Triggering

Series Trigger Simulation

FuzzyScan 3.0 Technology

No Worry for Poor Barcodes

Application Examples

FA470 series is the perfect solution for embedded and stand-alone applications.

Stand-alone Applications

MES (Manufacturing Execution System)
WIP (Work in Process)
Physical Distribution
Warehousing

Embedded Applications

Kiosk
Vending Machine
Price Checker
Access control
Gaming/lottery Machine
Ticket Reader
Medical Laboratory

Two choices of scan orientation

FA470 Series offers front-view and side-view versions for satisfying various scanning and mechanical design requirements. The side-view version is an ideal solution for the environment where space is constrained.

High density and standard range models are available

FA470 series offers High Density and Standard Range models to fulfill various applications. So, no matter what the resolution of the barcode or the reading range is, the FA470 series can satisfy your different demands.

Capable of reading barcode on LCD display

Beside hard-copy printed barcode, FA470 series can decode barcodes on LCD display such as notebook, PAD or smart phone. This makes FA470 ideal for various barcode scanning applications.

Front-view and Side-view

HD and SR Models

Read Barcode on LCD

SPECIFICATIONS

Performance Characteristics

Scan Pattern	Area Image
Print Contrast	20% minimum reflectance difference
Light Source	Aiming Pattern : 630nm LED Illumination : 630nm LED
Min. Resolution	**SR Model** 4 mil Code 39 7 mil DM **HD Model** 3 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 5.7-16.7(2.24"-6.57") 13 mil (0.33mm) UPC/EAN 4.7-39.7(1.85"-15.63") 10 mil (0.25mm) DM 4.7-17.2(1.85"-6.77") **HD Model** 3 mil (0.07mm) C39 4.7-9.7(1.85"-3.82") 5 mil (0.13mm) C39 4.7-12.7(1.85"-5.0") 13 mil (0.33mm) UPC/EAN 4.2-18.2(1.65"-7.17") 5 mil (0.13mm) DM 5.2-10.7(2.05"-4.21") 10 mil (0.25mm) QR 5.2-9.7(2.05"-3.82")
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	Bar code command, Serial command Windows utility - FuzzyScan PowerTool
Data Editing	Condensed DataWizard via bar code command Full-feature DataWizard via FuzzyScan PowerTool DataWizard Premium via FuzzyScan PowerTool
Image Capture	Graphic Format : BMP, JPEG, TIFF, PNG

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 Codes	Australian Post, US Planet, US Postnet, Japan Post Dutch KIX code, Intelligent Mail, British Post

Physical Characteristics

Dimension	49.4 mm (L) x 40.6 mm (W) x 23.1 mm (H)
Weight	101g
Scan Window	Choice of front-view or side-view model
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

User Environment

Drop Specifications	Withstand 1.2m/4ft. drop 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% related 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 Steal Cable
Others	5VDC Power Suply Unit

1. The reading range is measured under Cino's test environmental condition.
2. Class 1M LED product. Do not view directly with optical instruments.

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