FUZZYSCAN



FA470 Series

A future-proof Area Imaging fixed mount scanner for boosting enterprise's productivity

Equipped with FuzzyScan Imaging Technology 3.0, 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 increase their efficiency and productivity.



Ultra-compact and easy mounting design for flexible integration

IP54 durable over-molded construction

Patent-pending heat-dissipating technology ensures product reliability

Support RS232, USB HID, and USB COM host interfaces

Support both serial trigger command and external trigger

Useful user-defined serial trigger command

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

Easily identify the optimal mounting position with test mode

DataWizard Premium for scanned data manipulation and security protection

High-density and standard range models satisfy various data capture needs

Side-view model for space-limited applications

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 1.5 meters. So, high reliability is guaranteed.

Size does matter

The size of a product plays a crucial role in system integration in an environment where space is constrained. With the ultra-compact design of FA470 series, space allocation will not be an issue.

Status at a glance

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







Practical test mode

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

User-defined serial trigger

If you want to use FA470 to replace the current scanners, the useful user-defined serial trigger function provides a flexible solution without impacting your existing application programs.

Useful operation modes

The FA470 provides five operation 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.

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. These options allow system integrators to customize their specific applications.









Heat dissipating

Thanks to the patent-pending heat-dissipating feature. The FA470 series is ideal for various applications where intensive and uninterrupted scanning is needed.

Versatile universal model

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

All you can scan

Powered by the innovative FuzzyScan Imaging Technology 3.0, FA470 series reads most popular 1D, stacked, and 2D bar codes omnidirectionally. Besides, it is capable of capturing barcodes accurately in a flash, whether the bar codes are printed on paper, plastic card or displayed on the screen of mobile phone.

Superb reading performance and readability

Superb reading performance and readability. Thanks to the exceptional decoding capability, FA470 series performs outstanding scanning performance and superior adaption to read most real-world bar codes, such as low contrast, damaged, smudged, distorted and poorly printed barcodes. This makes the whole scanning process more efficient, and minimize extra handling cost.







FuzzyScan 3.0 Technology



DataWizard Premium

Powered by DataWizard Premium, FA470 series not only provides advanced data formatting capability,the embedded Security Mechanismbut also offers a simple way for your host application to work with the preset FA470 to protect your business investment without additional cost.

High density and standard range models

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

Two choices of scan direction

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







Application Examples

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

Stand-alone Applications

Manufacturing Execution System Work in Process Physical Distribution Warehousing



Embedded Applications

Information Kiosk Auto Vending Machine Price Checker Access control System Gaming/lottery Machine Parking Ticket Machine Medical Laboratory



SPECIFICATIONS

| Performance Characteristics | | |
|---|---|---|
| Scan Pattern | Area Image | |
| Print Contrast | 20% minimum reflectance di | fference |
| 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°; Ske | ew: ± 65° |
| Motion Tolerance Up to 25 inch/63.5 cm per second | | |
| Reading Range *1 | SR Model 5 mil (0.13mm) C39 13 mil (0.33mm) UPC/EAN 10 mil (0.25mm) DM HD Model 3 mil (0.07mm) C39 5 mil (0.13mm) C39 13 mil (0.33mm) UPC/EAN 10 mil (0.25mm) DM 10 mil (0.25mm) QR | 6.0 - 19.5 (2.4" - 4.3") 4.2 - 40.0 (1.7" - 15.7") 4.7 - 18.0 (1.9" - 7.1") 5.5 - 11.0 (2.2" - 4.3") 4.5 - 13.5 (1.8" - 5.3") 4.5 - 22.0 (1.8" - 8.7") 3.0 - 13.0 (1.2" - 5.1") 3.5 - 13.5 (1.4" - 5.3") |
| Operating Modes | Trigger, Alternative, Level, Fo | rce, 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 | ion Setup Bar code command, Serial command Windows utility - FuzzyScan PowerTool | |
| ata Editing Condensed DataWizard via bar code command Full-feature DataWizard via FuzzyScan PowerTool DataWizard Premium via FuzzyScan PowerTool | | |
| Image Capture | Graphic Format : BMP | |

| 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 | 47.6 mm (L) x 40.6 mm (W) x 25.6 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 Environm | er Environment | |
|-----------------------|--|--|
| Drop Specifications | Withstand 1.5m/5ft. drop to concrete | |
| Environmental Sealing | g IP54 | |
| Operating Temperatur | e -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 Immuni | ty 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 |

| ı | Accessories | |
|---|-------------|-----------------------|
| | Cables | USB Power Steal Cable |
| | Others | 5VDC Power Suply Unit |

- 1. The reading range is measured under Cino's test environmental condition.
- 2. Do not stare into the LED.

- Part No.: YMAUG70030070R0
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