# A670 seies 

## A superior cost-performance 2D Area-imaging Scanner

Read most popular 1D, 2D bar codes and postal codes

Snappy reading and superior first-time read

The ability to read bar codes on paper and LCD display

Omni-directional scanning
Superior readability on most of real world bar codes

Read 2.7 mil high-density bar codes
Support multi-barcode capture with a single triggering

Versatile operation modes support both handheld and presentation scanning

Automatically switch between presentation scanning and hand-held scanning while working with Cino SmartStand

Compact and ergonomic design provides maximum user comfort

Durable design withstands multiple drops to concrete from 1.8 meter

DataWizard Premium for advanced data formatting and cost-free security

Optional vibrator is ideal for noisy and quiet environments


Powered by the cutting-edge FuzzyScan Imaging Technology 3.0, the A670 can read most widely-used linear and 2D bar codes on paper, plastic card and LCD display. The convergence of remarkable reading performance, compact and durable construction yet versatile features empower A670 to fulfill the most demanding high-volume scanning applications, such as retail, commercial, pharmaceutical and hospital. The FuzzyScan A670 provides an exceptional cost-performance solution to step into the world of area-imaging for gaining the superior return on investment and lowering the total cost of ownership.

## Superior readability

The adoption of 2D bar codes has been growing rapidly because of the advantages of 2D bar codes and many emerging applications. The A670 is capable of fulfilling the increasing demands of 2D barcode scanning in various market segments by reading most popularly-used linear, 2D bar codes and postal codes.

## Excellent reading performance

The A670 is designed to meet the needs of various barcode scanning applications. A670-HD can read 2.7 mil high-density linear bar code and 5 mil 2D bar code. The A670 performs superior adaption to most real world bar codes, such as poorly printed, distorted, smudged and damaged barcodes. More than this, it can read bar codes printed on paper, plastic card or displayed on the screen of mobile phone.

## Omni-directional scanning capability

The A670 presents superb omni-directional scanning of both 1D and 2D bar codes. Users can read bar code in any orientation without having to align the bar code or pause between scans. This scanning capability improves the first-time read, resulting in faster and efficient bar code reading.

## Specifications

| Performance Characteristics |  |  |
| :---: | :---: | :---: |
| Image Sensor | WVGA 752x480 Pixels |  |
| Print Contrast | 20\% minimum reflectance difference |  |
| Light Source | Aiming Pattern : 630nm LED |  |
|  | Illumination : 630nm LED |  |
| Min. Resolution | MR Model |  |
|  | 3 mil Code 39 |  |
|  | 6.7 mil DM |  |
|  | HD Model |  |
|  | 2.7 mil Code 39 |  |
|  | 5 mil DM |  |
| Roll, Pitch, Skew | Roll: $360^{\circ}$; Pitch: $\pm 75^{\circ}$; Skew: $\pm 65^{\circ}$ |  |
| Motion Tolerance | Up to 25 inch/ 63.5 cm per second |  |
| Reading Range | MR Model |  |
|  | $5 \mathrm{mil}(0.13 \mathrm{~mm}) \mathrm{C} 39$ | 3.6-18.3cm (1.4"-7.2") |
|  | $13 \mathrm{mil}(0.33 \mathrm{~mm})$ EAN | 2.3-32.7cm (0.9"-12.9") |
|  | $10 \mathrm{mil}(0.25 \mathrm{~mm})$ DM | 2.5-14.2cm (1.0"-5.6") |
|  | HD Model |  |
|  | $3 \mathrm{mil}(0.076 \mathrm{~mm}) \mathrm{C} 39$ | 2.2-9.6cm (0.9"-3.8") |
|  | $5 \mathrm{mil}(0.13 \mathrm{~mm}) \mathrm{C} 39$ | $2.8-11.5 \mathrm{~cm}\left(1.1^{\prime \prime}-4.5^{\prime \prime}\right)$ |
|  | $13 \mathrm{mil}(0.33 \mathrm{~mm})$ EAN | $1.8-20.3 \mathrm{~cm}\left(0.7^{\prime \prime}-8.0^{\prime \prime}\right)$ |
|  | $5 \mathrm{mil}(0.13 \mathrm{~mm})$ DM | $2.8-7.5 \mathrm{~cm}\left(1.1^{\prime \prime}-3.0\right.$ ") |
|  | $10 \mathrm{mil}(0.25 \mathrm{~mm})$ DM | 1.2-12.0cm (0.5"-4.7") |
| Operating Modes | Trigger, Toggle, Force, Level, Diagnostic, Alternative, Low power, Presentation, Multiple read |  |
| Host Interfaces | PC/AT, PS/2 (DOS V) keyboard wedge PC/AT, PS/2 (DOS V) keyboard direct link TL RS232 serial USB HID (USB Keyboard) USB COM port emulation |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
| Image Capture | Graphic Format: BMP |  |


| User Environment |  |
| :--- | :--- |
| Drop Specifications | Withstand 50 drops at $1.6 \mathrm{~m} / 5.2 \mathrm{ft} \mathrm{to} \mathrm{concrete}$ <br> Withstand 10 drops at $1.8 \mathrm{~m} / 6.0 \mathrm{ft}$ to concrete |
| Environmental Sealing | $\mathrm{IP41}$ |
| Operating Temperature | $-10^{\circ} \mathrm{C}$ to $50^{\circ} \mathrm{C}\left(14^{\circ} \mathrm{F}\right.$ to $\left.122^{\circ} \mathrm{F}\right)$ |
| Storage Temperature | $-40^{\circ} \mathrm{C}$ to $70^{\circ} \mathrm{C}\left(-40^{\circ} \mathrm{F}\right.$ to $\left.158^{\circ} \mathrm{F}\right)$ |
| Humidity | $5 \%$ to $95 \%$ related humidity, non-condensing |
| Ambient Light Immunity | $0-100,000$ lux |
| ESD Protection | Functional after 15 KV discharge |


| Supported Symbologies |  |
| :--- | :--- |
| 1D Linear Codes | Code 39, Code 39 Full ASCII, Code 32, Code 128, <br> GS1-128, Codabar, Code 11, Code 93, <br> Standard \& Industrial 2 of 5, Interleaved \& Matrix 2 of 5, <br> IATA, UPC/EAN/JAN, UPC/EAN/JAN with Addendum, <br> Telepen, MSI/Plessey \& UK/Plessey, <br> GS1 DataBar, Linear \& Linear Stacked |
| 2D Codes | PDF417, Micro PDF417, Codablock F, Code 16K, <br> Code 49, Composite Codes, DataMatrix, MaxiCode, <br> QR Code, Aztec, MicroQR |
| Postal Codes | Australian Post, US Planet, US Postnet, Japan Post <br> Dutch KIX code, Intelligent Mail, British Post |


| Physical Characteristics |  |
| :--- | :--- |
| Dimension | 97.0 mm (L) $\times 65 \mathrm{~mm}$ (W) $\times 156 \mathrm{~mm}$ (D) <br>  <br> $3.81 \mathrm{in}$. (L) $\times 2.55 \mathrm{in}. \mathrm{(W)} \times 6.14 \mathrm{in}. \mathrm{(D)}$ |
| Weight | 125 g (cable excluded) |
| Color | Black, Light Gray |
| User Interfaces | 3 LEDs for power, good read and status indications <br> Programmable beeper <br> Optional vibrator |
| Input Voltage | 5VDC $\pm 10 \%$ |
| Current | Operating : Typical 350 mA @5VDC <br> Standby : Typical 180 mA @5VDC |

## Safety \& Regulatory

EMC
CE, FCC, BSMI, C-Tick, KC, VCCI
Safety ${ }^{2}$

LED Eye Safety IEC62471 Exempt group
Environmental Compliant with RoHS directive

| Accessories |  |
| :--- | :--- |
| Cables | PS/2 (DOS V) Keyboard Wedge Cable <br>  <br>  <br>  <br>  <br> RS232 Serial Cable <br> USB Cable <br> USB Power Steal Cable |
| Others | Hand-free SmartStand <br> Universal Holder |

## Accessories



1. The working distances are measured in 400 lux office environment using Grade A bar codes. 2. Don't stare into the LED.

Part number :YMAUG00150030R0. ©Copyright PC Worth Int' I Co., Ltd. - Cino Group, all rights reserved. Due to Cino's continuing product improvement program, specifications and features herein are subject to change without notice. Cino is a registered trademark of PC Worth Int'I Co., Ltd. Any reproduction, duplication or other use of the contents of this catalog, in part or in full, without the prior permission of PC Worth Int'I Co., Ltd. is strictly forbidden.

