

# FuzzyScan Series



## FuzzyScan

### **Extend-Range/Low-Power 60/80mm CCD Scanner**

- ☆ All-in-one universal host interface ( for more than 60 host machine )
- ☆ Long distance bar code image capture ( from contact up to 12" )
- ☆ Extremely low power consumption ( under 45mA during operating )
- ☆ Versatile notebook computer, including IBM ThinkPad, handshaking protocol built-in
- ☆ Windows-95/NT host editing utility included
- ☆ Embedded flash memory for program upgrade
- ☆ Outstanding data editing functions --- DataWizard
- ☆ +/- 200% bar code image tolerance readability
- ☆ Up to triple-layer compose-key emulation
- ☆ Function key emulation feature
- ☆ Automatic caps-lock detection capability
- ☆ Name brand ODM/OEM reference for quality and performance warranty

*FuzzyScan* series CCD bar code scanner has set up a new standard in the bar code scanner industry by providing the most unique data capture solution in the world.

Highly acclaimed by customers and users worldwide, The *FuzzyScan* series are the integration of the most contemporary electronics, precise optics, and most advanced computer technologies.

Designed with real applications in mind, by the most experienced engineers and marketing staff, *FuzzyScan* series are equipped with the following specialties to give you long lasting and pleasant use.

#### ■ Extend-range/Low-power CCD Engine

Equipped with PC Worth's newest Extend-range/Low-power CCD engine, traditionally conflicted specifications on power consumption and reading distance have reached perfect harmony on this new scanner. Our breakthrough made on a customized CCD chip also gives excellent resolution response on labels read. As a surprising achievement, this new Extend-range/Low-power CCD scanner can give the following performance which surpassing every extend-range CCD scanner in the market.

** <i>Reading Distance</i>	0 ~ 25mm	5 mil., PCS=0.9
	0 ~ 250mm	40 mil., PCS=0.9
** <i>Resolution</i>	4-mil., max.	PCS=0.9
** <i>Power Consumption</i>	45mA, during operation;	
	0.1mA, low-power stand-by mode.	

#### ■ 0-Cost After Service

To eliminate after service cost for our customers worldwide, *FuzzyScan* series are embedded with our newest flash-memory ASIC. Via versatile Internet and our powerful GIS ( *Global Internet Support* ) system, technical supports in the following can be done with the cost of one local phone call.

- ◆ Trouble-shooting;
- ◆ Software upgrade;
- ◆ Remote-programming;
- ◆ Custom-configuration.

We also regard all these commitments as " 100% investment guaranty " which is coming with every piece of the *FuzzyScan* scanners.

## ■ NeuroFuzzy Decoding

*FuzzyScan* series is the first in the world implemented with NeuroFuzzy technology for bar code decoding. Designed to read real world bar codes, *FuzzyScan* gives crisp and accurate readings on poor quality bar code labels which are commonly seen in daily life.

## ■ Host Editing

Giving extra freedom of programming *FuzzyScan* on screen, under Windows 95/NT environment. Via this feature, easy and accurate resource management can be achieved by the MIS people in the company.

## ■ DataWizard

Removing any barrier when integrating *FuzzyScan* into any existing database system. It is an Artificial Intelligence based expert system, the most powerful data editing tool ever available on bar code scanner.

## ■ Postal Code Readability

Another powerful market opener for customers specialize in government projects in Mainland China or Germany.

## ■ Compose-Key Emulation

*FuzzyScan* can do even more like a keyboard entry by emulating triple-layer key stroke input, like " ctrl-alt-shift ". No one is as friendly as *FuzzyScan*.

## ■ Keyboard Replacement Mode

To beat any competition in the field of notebook PC applications. With *FuzzyScan*, you will never need an external standard keyboard to complete the communication protocol because *FuzzyScan* will successfully emulate the external keyboard while busy reading and transmitting data to the notebook PC.

## ■ Auto Caps-Lock Detection

*FuzzyScan* will always follow the way you set up your keyboard output ( lower case or upper case ). We know exactly what the keyboard is doing.

## ■ IBM SureOne Compatibility

*FuzzyScan* is equipped with proven compatibility with the newest PC-based IBM SureOne POS system, both through the serial port or keyboard port. This is a potential big market expansion for our customers.

## ■ +/- 200% Bar Image Tolerance

*FuzzyScan* is made for reading real world bar codes, not just standard testing charts. To cover all possible printing tolerance, ribbon condition, and printing media variations, *FuzzyScan* is equipped with +/- 200% tolerance with self-correction algorithm in order to give crispy and accurate readings.

## ■ Universal Linking Interface

Giving all the flexibility you need in various applications, *FuzzyScan* is equipped with our generic Universal Linking Interface which also cuts all your inventory pressure down to just various cable converters, not many different models of scanners. Distributors or resellers will never have to prepare big inventories for different interface demands coming from the customer side. All inventory needed will be interface cable converters plus one type of CCD scanners.

Instead of using just a modular plug/jack architecture, *FuzzyScan* GOLD is using an attractive junction box holding special interface circuitry inside plus modular plug/jack. This junction box provides firm connections between the scanner and host system. Also, special label place is spared on the junction box for custom logo or special numbering needs.



## FuzzyScan Specification

<b>■ OPTICAL</b>	
PCS	Typical 0.45, Max. 0.3, ( 0.26mm Resolution )
Resolution	Contact: Typical 0.127mm(5 mil), Max0.1mm(4 mil)., ( PCS=0.9 )
Depth Of Field	120mm, PCS=0.9, Resolution = 0.5mm 250mm, PCS=0.9, Resolution = 1.0mm
Scan Rate	100 Scans/Sec.
<b>■ POWER CONSUMPTION</b>	
0-Power Standby	0.1mA, Max.
Full Operating	45 ~ 50mA, Typical
<b>■ FEATURE AND FUNCTION</b>	
<b>Host Interface</b>	
<ul style="list-style-type: none"> <li>● K/B Wedge: 3620/3820</li> <li>● RS-232: 3630/3830</li> <li>● Wand Emulation: 3610/3810</li> <li>● IBM PC/AT K/B Wedge,</li> <li>● IBM PS/2 K/B Wedge,</li> <li>● RS-232 Serial I/F,</li> <li>● RS-232 Serial Wedge I/F,</li> <li>● Wand Emulation,</li> <li>● NEC 98 K/B Wedge</li> <li>● Wyse, DEC, IBM, Bull Terminal Wedge (*)</li> <li>● IBM PS/55 K/B Wedge</li> <li>● IBM 5550 K/B Wedge</li> <li>● DOS/V K/B Wedge</li> <li>● Various OCIA (*)</li> <li>● Apple ADB K/B Wedge,</li> <li>● Power Mac K/B Wedge,</li> <li>● K/B Replacement,</li> <li>● Inverted RS-232,</li> <li>● IBM SureOne K/B Wedge,</li> <li>● IBM SureOne RS-232 Serial I/F,</li> <li>● Omnikey Bar Code Input I/F.</li> <li>● IBM ThinkPad K/B Wedge</li> <li>● Compaq Prolinear K/B Wedge</li> <li>● Compaq Presario K/B Wedge</li> <li>● Hitachi Flora K/B Wedge</li> <li>● NEC VersaPro K/B Wedge</li> <li>● IBM 4683/4694 (*)</li> <li>● USB K/B Interface</li> </ul>	
<b>Operating Mode</b>	
<ul style="list-style-type: none"> <li>● Trigger Mode,</li> <li>● Flash Mode,</li> <li>● Force Mode,</li> <li>● Diagnostic Mode</li> <li>● Alternative Mode,</li> <li>● Low-Power Trigger Mode,</li> <li>● Level Mode, Toggle Mode,</li> </ul>	
<b>Programming Style</b>	
<ul style="list-style-type: none"> <li>● On-Screen Windows-95/NT Base Configuration Utility</li> <li>● Bar Code Menu Reading</li> </ul>	
<b>Symbologies</b>	
<ul style="list-style-type: none"> <li>● Code 39,</li> <li>● Telepen,</li> <li>● Code 93,</li> <li>● WPC/UPC/EAN/JAN/CAN w/Addendum,</li> <li>● ITF 2 of 5,</li> <li>● Code 11,</li> <li>● UCC/EAN-128,</li> <li>● Full ASCII Code 39,</li> <li>● Code 128 ( Set A, B, C ),</li> <li>● German ITF Postal Code,</li> <li>● Standard &amp; Industrial 2 of 5,</li> <li>● Mainland China Postal Code,</li> <li>● IATA,</li> </ul>	
<b>Data Editing</b>	
<ul style="list-style-type: none"> <li>--- Via Bar Code Menu Reading</li> <li>--- On-Screen Windows-95/NT Base Utility, DataWizard</li> <li>● Data Verifier</li> <li>● Data Formatter</li> </ul>	
<b>Common Functions</b>	
<ul style="list-style-type: none"> <li>● Preamble,</li> <li>● Post-Amble,</li> <li>● Record Suffix,</li> <li>● Inter-Character Delay,</li> <li>● Inter-Message Delay,</li> <li>● Inter-Function Delay,</li> <li>● Data Length Setting,</li> <li>● Scanning Tolerance Setting,</li> <li>● Symbology ID Transmission,</li> <li>● User-Define Symbology ID,</li> <li>● Double-Scan Verification,</li> <li>● Auto Power-Off Control,</li> <li>● Redundancy Setting,</li> <li>● Multilingual Selection 9 16 Languages ( for K/B Wedge Only ),</li> <li>● Auto Caps-Lock Detection (**),</li> <li>● Function-Key Emulation (**),</li> <li>● Compose-Key Emulation (**).</li> </ul>	

**[ IMPORTANT NOTICE ]**

1. All (\*) items require minimum quantity per shipment commitment.
2. All (\*\*) functions are special bonus for enhanced bar code applications.
3. Universal linking interface requires optional interface cable converters for each individual host machine.



## Ordering Information

Model No.	Description	Remark
FBC-3620/3820	60/80mm <i>FuzzyScan Lite</i> series PC-AT/PS-2 keyboard wedge CCD scanner	
FBC-3630/3830	60/80mm <i>FuzzyScan Lite</i> series RS-232 interface CCD scanner	
FBC-3660/3860	60/80mm <i>FuzzyScan GOLD</i> series universal interface CCD scanner w/o cable converter (*)	Optional cable converter required
FBC-3670/3870	60/80mm <i>FuzzyScan JADE</i> series Japanese interface CCD scanner w/o cable converter (*)	Optional cable converter required
FBC-3680/3880	60/80mm <i>FuzzyScan DIAMOND</i> series universal interface CCD scanner w/o cable converter (**)	Optional cable converter required

**[ IMPORTANT NOTICE ]**

(\*) : *FuzzyScan GOLD/JADE series CCD scanners are universal interface models. These scanners are coming with main cable attached but require interface cable converter to work with each host machine. Cable converters are optional and are packed separately.*

(\*\*) : *FuzzyScan DIAMOND series are special models for terminal interface applications. Please forward terminal type, connector type, pin assignment, and communication data format to our Customer Support Dept. for verification first. Minimum quantity will be required if the interface requested is feasible.*

## Unit Box Content

### A. FuzzyScan Standard Package

Description	Remark
FuzzyScan CCD Scanner W/Main Cable	1 pc
FuzzyScan Family User's Manual	1 pc

### B. FuzzyScan Starter Package

Item	Description	Item	Description
Standard Package	1 set	PowerTool Solution Pack	Software Utility x 1 set
Evaluation Accessory	Combo PC/AT & PS/2 Keyboard Wedge Cable Converter x 1pc		RS-232 Interface Cable Converter ( D-Sub-9F ) x 1 pc
	USB Interface Cable Converter x 1pc		Download Cable ( 8P RJ-45M / 8P RJ-45M ) x 1 pc
			PS/2 Power Stealer Cable x 1 pc
			PowerTool Instruction Manual x 1 pc

Each unit is packed in the unit box including the scanner with main cable and the user's manual. Optional accessories like cable converters and power adapters are packed separately.

*Distribution: stethos Systemhaus GmbH, Weimarer Str. 48, D-71065 Sindelfingen, Phone: [+49] (0)7031-860910, info@stethos.com*