



Barcode Reader (Stand-Alone)

SmartX-ALL Series Specification Sheet

SX-ALL- STD / HD Barcode Reader

Small Size
(35 x 24 x 48 mm)

LED Light
Aimer(+ View Finder)
Buzzer



Decoding Engine
[1D] 27 / [2D] 7

WVGA(720x480)
30 FPS

. Application

- ⊙ 1D / 2D 30 types of barcode reading
- ⊙ Marking Type: Label / Printed / LCD Display
- ⊙ Product / Component
- ⊙ Electronic Devices
- ⊙ Medicine / Medical Devices
- ⊙ Food / Beverages / Warehouse

. Specification

- ⊙ Sensor : CMOS / WVGA(720 X 480)
- ⊙ Frame Rate : Up to 30fps
- ⊙ Illumination : LED RED X 4EA
- ⊙ Indicator : Laser Aimer + DoE(View Finder)
- ⊙ Field of View : H 36° / V 28°
- ⊙ Interface : RS232, USB2.0
- ⊙ Extra I/O : Trigger / Buzzer / LED(G/R)
- ⊙ Dimension : 35 X 24 X 48mm
- ⊙ Weight : 75g

Intuitive ! Convenient !

Barcode Reading for Various Circumstance

■ Intuitive Configuration

- Real-time monitoring makes it possible to set optimum conditions for recognition.
- Offers a PC configuration tool with intuitive GUI.
- Can be set by barcode scanning

■ User-friendly Host Interface

- Host PC receives result of barcode reading through RS232 communication.
- Supports a USB HID mode (recognizes the results of barcode readings as results from a keyboard) and includes programming to conform to the needs of customers.
- Using serial communication and command set, customer application program can control the barcode reader.

■ Powerful Performance Under various Circumstances

- Contains an dedicated processor for reading 30 types of 1D and 2D barcode symbols(Even without any complex SW porting process, you can check results with only a trigger).
- Able to read barcodes of various sizes, from a micro 4mil to larger size
** 4.2 mil (55-100mm), 20 mil (60 ~ 340mm) in Code39 standard **

■ All-in-One: Illumination, Aimer and Buzzer

- Contains four LED lights; no extra illumination is required.
- Includes a laser aiming guide and a view finder, so you can verify readings visually.
- Contains a buzzer so results can be verified by ear after a reading.

■ Compact Barcode Reader

- Built at the compact size of 35x24x48 mm(75 g), the reader only requires a small space.

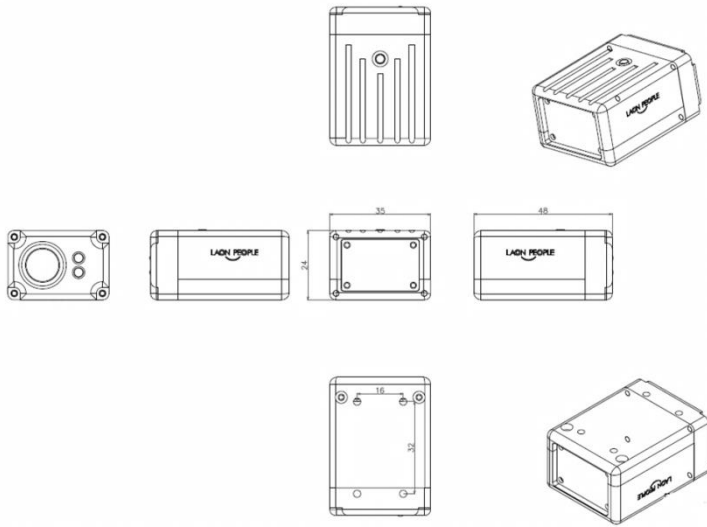
[Decoding] International Standard Symbologies, POST Codes, Other Legacy Symbologies



- UPC-A/E/E1 (including supplement 2 and 5)
- EAN-8/13 (including supplement 2 and 5), EAN-128
- Code39, Code39 Italian Pharmaceutical, Code39 Full ASCII, Code93, Code128, Code11
- Tri-Optic, Matrix 2of5, GS1 DataBar
- Industrial 2of5, Interleaved 2of5, Interlaved 2of5 with bearer bars
- Codabar, Codabar ABC, Codabar CX
- Industrial 2of5, IATA, Telepen, MSI/Plessey, UK/Plessey
- Korean postal, POSTNET, Chinese Post, Intelligent Mail Barcode
- Datamatrix ECC200
- QRCode, Micro QRCode
- PDF417, MicroPDF417
- Aztec, Aztec runes

❖ SX-ALL-Series Specification & Information

• Mechanical Specifications



• Optical specifications

Image sensor	CMOS sensor WVGA(720x480)
Frame rate	Up to 30 frames/sec
Pitch/Skew/Roll	±60°/±60°/360°
Illumination	LED RED x 4EA
Indicator	Laser Aimer + DOE(View Finder & Large Cross)
Field of view	Horizontal: 36° Vertical: 28°

• Physical specifications

Model Name	SX-ALL-STD or SX-ALL-HD
Main core	ARM9 266MHz
Interface	RS-232, USB2.0
Connectors	SAMWOO SNH-10-12(RPCB)
Voltage	9V ~ 24V DC
Current	Normal (Red 조명) 90mA @12V Idle (USB HID) 50mA Idle (RS232 only) 30mA
Dimensions	35 x 24 x 48 mm
Extra I/O	Strobe/trigger Photo coupler isolation
Operation Temperature	-20°C ~ 80°C
Weight	75g

• Connector Description

No.	Name	Description
1	DC 12V	Power (12V ~ 24V)
2	GND	Ground
3	RS232 TX	RS-232 TX
4	RS232 RX	RS-232 RX
5	Input P	Photo Diode Anode(+) DC 12~24V
6	Input N	Photo Diode Cathode(-) GND
7	Output P	Photo TR Collector(Max. 100mA)
8	Output N	Photo TR Emitter
9	NC	NC
10	USB DM	USB Data -
11	USB DP	USB Data +
12	USB GND	USB Ground

• Working Distance

Working distance (mm)	High Density		Standard	
	Min	Max	Min	Max
Code39 (4.2 mil)	50	110	70	100
Datamatrix (7.5mil)	40	90	60	80
Datamatrix (10mil)	30	130	30	140
UPC-A(13mil)			65	260
Code39 (20mil)			60	340
QR code (20mil)			40	260
Datamatrix (20mil)			30	270