Smart Prox SA

For stand alone Access Control

The Smart Prox SA is a stand alone proximity reader with optional barcode and magnetic stripe support. It is available as a fixed mount or portable reader. Access is controlled by validation of badge numbers stored in the internal memory of the reader. Valid numbers can be downloaded into the reader from a PC or scanned into the reader by hand.

Features & Options

- Reads Farpointe and HID Cards
- Programmable LEDs
- Character masking (insertion & deletion)
- Tracks 1, 2 or 3
- Infrared or visible optics
- 5V, 12V, or 24V operation
- Networking
- Scheduling
- Good read beep
- Internal Relay

- Power over ethernet
- Weatherproofing
- Reads Kronos & CAC cards
- Portable version available

Interfaces

- Rs232
- TCP / IP
- Rs422
- USB

ibc ®

International Bar Code

Specifications

Magnetic Stripe:	Tracks 1, 2 or 3 (high or low density / high or low coercivity)
Reading Direction:	Bi-directional
Symbologies:	Code 39, I 2 of 5, 2 of 5, IND 2 of 5, Code 128, Codabar, EAN13, UPCA
Resolution:	5 mil
Interfaces:	Rs232, Rs422/485, TCP / IP, USB
Good Read Beep:	Programmable
Slot Width:	0.050" (1.27mm)
Power Consumption[1]:	5V 150mA typical 250 max / 12V 90mA typical 140 max / 24V 45mA typical 80 max / POE 90mA
Material:	Black polycarbonate / Noryl (chemical resistant case) (optional)
Dimensions:	4.6" L x 2.4" W x 1.4" H (11.68cm L x 6.10cm W x 3.56cm H)
Weight	7oz (198.5g)
Read Height:	.4" standard (1.02cm) / .465 (1.19cm) (optional)
Indicators	2 programmable LEDs
Relay[2]	500 MA, 35V DC / 1 common lead / 1 lead normally closed / 1 lead normally open
Light Source:	630nm visible / 940nm infrared
Temperature	-40°C to +85°C
Standard Wiring:	3ft (91.5cm) cable with DB9 female (RS232), flying leads (RS422) or RJ45 (TCP / IP) / 3ft cable for relay
Memory:	64K standard / 256K (optional)
External Prox. Interface:	Wiegand / ABA
Internal Prox. Capability:	Pyramid / HID

[1]Maximum power consumption does not include alphanumeric displays. 5V DC readers have a voltage tolerance of +/-5%.
12V DC readers may be operated from 8VDC–15VDC. 24V DC readers may be operated from 15V DC–30V DC.

[2]POE readers can also be ordered with a 12V switched relay 500mA directly connected to POE (non-Isolated form C)

Wiring

Wiring Connections for various Interfaces.

Rs232 Interface

Red	+VDC
Blue	GND
Green	Reader Transmit
Yellow	Reader Receive

Rs422 Interface

Red	+VDC
Blue	GND
Green	Reader Transmit +
White	Reader Transmit -
Yellow	Reader Receive +
Orange	Reader Receive -

Relay Wiring[1]

Yellow	Normally Closed
Green	Normally Open
Red	Common

[1]For POE (power over ethernet) readers, without an isolated relay, the **green wire** (normally open) will have 12V DC available when the relay is **ON**. The **yellow wire** (normally closed) will have 12V DC power when the relay is **OFF**.

How to Order

Order Smart Prox SA with a code to indicate options required.

SPROX-SA – ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ – ☐

OPTICS | RESOLUTION | MAGSTRIPE TRACK | INTERFACE[1] | MEMORY* | DISPLAY* | WEATHERPROOFING* | MOUNTING | WIRING | VOLTAGE[2] | ADDITIONAL OPTIONS[3]

*Options at additional cost [1]TCP / IP additional cost [2]12V, 24V & POE additional cost [3]Noryl additional cost
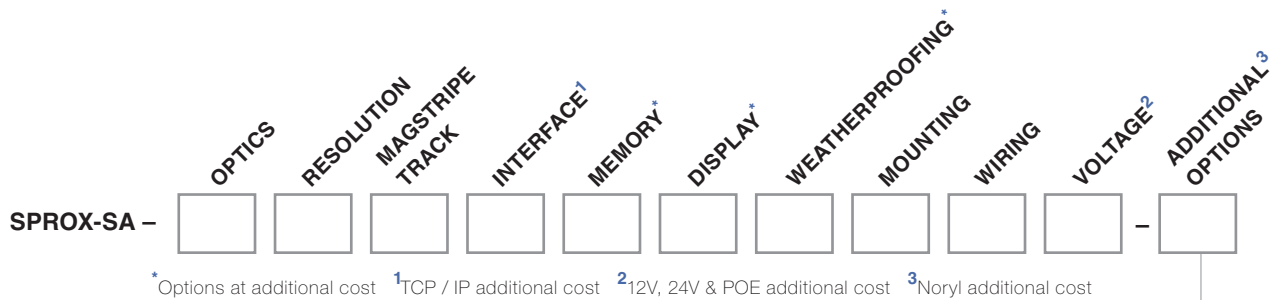
OPTICS
Visible – V
Infrared – I
None – 0

RESOLUTION
High – H
None – 0

MAGSTRIPE TRACK
Track 2 – 2
Tracks 1 & 2 – 1
Tracks 2 & 3 – 3
None – 0

INTERFACE
Rs232 – S[4]
Rs422 / 485 – 2[4]
TCP / IP – C

MEMORY
64K – 1
256K – 5

DISPLAY
No display – 0

WEATHERPROOFING
No weatherproofing – 0
Weatherproofing – W

MOUNTING
#6 – 6
3mm – M

WIRING
Rear – R
Side – S
Internal battery (portable) – I
Side internal jacks (portable) – J
Internal battery / External AC – A
Rear exit with side headset
    jack[5] – 4

VOLTAGE
5V DC – 5
12V DC – 2
24V DC – 4
POE – P

ADDITIONAL OPTIONS
Noryl (chemical resistant
    case) – N
Isolated Relay – IR
HID Compatible – H

Specify one letter for each additional option. Leave blank if no additional options are desired.

[4]Serial units may be reprogrammed for network / protocol mode.

[5]4 Position side headset jack available for communications on fixed mount units only. Power and relay wiring remains in the rear.

Examples

Examples of ordering codes for Smart Prox SA in popular interfaces.

Rs232

SPROX-SA–000S10W6R2

Smart Prox SA with:

Optics – 0

Resolution – 0

Magstripe Track – 0

Rs232 – S

64K Memory – 1

No display – 0

Weatherproofing – W

#6 Mounting – 6

Rear wire exit – R

12V DC supply – 2

TCP / IP

SPROX-SA–IH0C50W6R2-H

Smart Prox SA with:
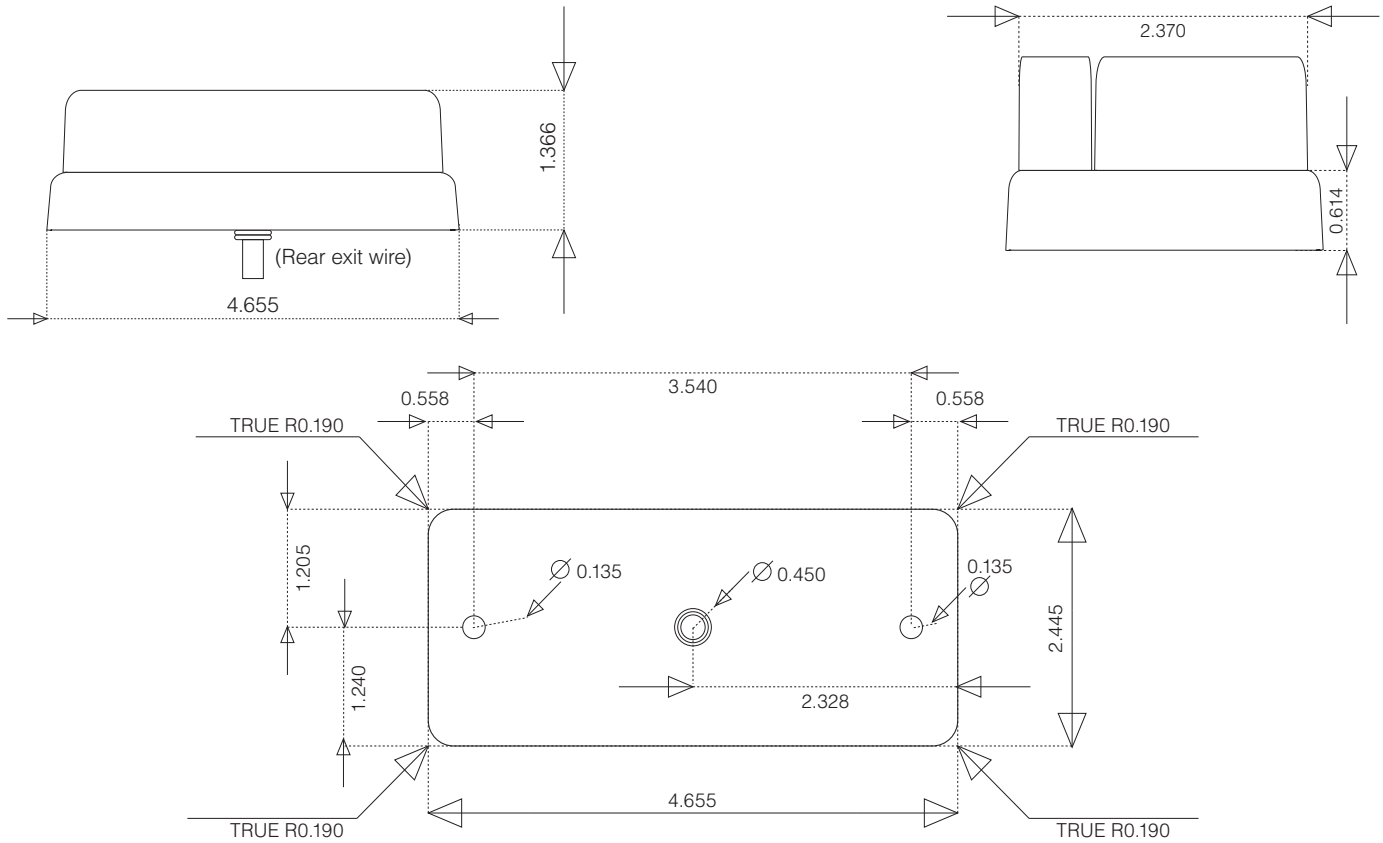
Infrared – I

Resolution – H

Magstripe – 0

TCP / IP Interface – C

256K Memory – 5

No display – 0

Weatherproofing – W

#6 Mounting – 6

Rear wire exit – R

12V DC supply – 2

HID compatible – H

Rs232 Portable

SPROX-SA–IH1S1006I

Smart Prox SA with:

Infrared – I

Resolution – H

Track 1 – 1

Rs232 – S

64K Memory – 1

No display – 0

No weatherproofing – 0

#6 Mounting – 6

Internal battery – I

Dimensional Diagrams

1.366

4.655

(Rear exit wire)

2.370

0.614

0.558   3.540   0.558

TRUE R0.190   TRUE R0.190

1.205

1.240

∅ 0.135   ∅ 0.450   0.135   ∅

2.445

2.328

4.655

TRUE R0.190   TRUE R0.190

Notes for Ordering Smart Prox SA

POWER
Standard SA and STA series readers are powered with 5V DC. 12V DC, 24V DC and POE are optional.

WIRING
Readers can be ordered with a side wire exit or rear wire exit. Standard wiring for 5V Rs232 and all Rs422 readers is a 3' cable with flying leads. 5V Rs232 readers can be ordered with a DB9 connector and power wired to one of the pins. 12V and 24V Rs232 readers contain a 3' cable with a DB9 female connector, and a power pigtail for connection to an AC adaptor; which is included. Standard wiring for tcp readers is a 5' cable with a RJ45 jack and a RJ45 coupler. Standard wiring for USB readers is a 6' cable with a usb type A plug for direct connection to a PC.

Power pigtails and an AC adaptor can be provided for all 12V and 24V readers that are ordered with flying leads. Custom wiring is available for most configurations. For custom wiring or firmware contact IBC.

RELAY
SA and STA readers contain a separate wire with flying leads for the relay connections. The relay is isolated for all configurations except POE. POE readers supply power directly to the relay, unless an isolated relay option is specified.

PORTABLE
Portable SA and STA readers can be ordered with a DC power jack on the side, an internal 9-volt battery housing, or both. When ordered with a DC power jack, you can connect an AC adaptor for power, or connect a 9 volt battery using a short adapter cable. The AC adaptor and cable are provided. If ordered with the internal 9 volt battery housing, the reader is powered by an internal replaceable 9-volt battery. Readers may be ordered with both options, allowing use with either the internal battery, or AC adaptor. All portable versions contain a jack for serial communications and a serial cable is provided.

MOUNTING
The reader mounts from behind and is available with a 3mm screw insert or a 6-32 screw insert. The reader may be mounted from the front using the IBC Mounting Kit (Part No. MK-L).

For custom wiring or firmware contact IBC.