QSCAN

Outdoor 2-D Barcode Scanner

- Reads QR codes
- Fast Decoding
- Programmable formatting options allow you to choose which data to read from the barcode and how to transmit it
- Available with a 2x16 lcd display readable in direct sunlight
- 12-24Vdc operation
- Optional Relay
- Optional digital inputs for door sensing or an arming loop
- Optional RF (prox, Iclass, Mifare) including IBC Ec1 support
- Optional IBCBlue Nfc/Bluetooth support
- Available in large or small enclosure.

Qscan is the perfect outdoor reader to read print-at-home event tickets, driver's licenses, and even qr codes from smartphone displays.

Qscan reads over 30 barcode sybologies, including Code39, Interleaved 2 of 5, PDF417, Datamatrix, Aztec, and QR.

Proximity, iClass©, Mifare, and Nfc/Bluetooth are available as optional add-ons.

Options:	125K proximity	Relay
	13.5 Mhz iclass, mifare	Sense inputs
	Nfc/Bluetooth	

Interfaces:	Wiegand	F2f
	Rs232	Wand emulation
	Aba	Usb
	Tcp/ip	

ibc®
International Bar Code

Specifications

Barcode Read Range:	3"-18" depending on size of barcode
Symbologies (1D):	Code 39, I 2 of 5, 2 of 5, 5, Code 128, Codabar, Ean8, Ean13, Jan8, Jan13, Upce, Upca, M2of5, K3of5, Postnet, Postbar, Kix, Planet, Msi, Code11, Code93
Symbologies (2D):	Pdf417, QR, Aztec, Datamatrix
Interfaces:	Wiegand, aba, f2f, wand, Rs232, TCP/IP,USB
RF (optional, option H):	125khz prox (Ibc,Hid,Awid,Casi,Farpointe,EM)
RF (optional, option I):	13Mhz (Iclass, Iclass SE, Iclass SR, Seos, Mifare CSN, PIV$_1$)
RF (optional, option B):	125khz prox (Hid,Awid,EM$_1$), 13Mhz (Iclass, Iclass SE, Iclass SR, Seos, Mifare CSN, PIV$_1$)
Relay (optional):	Form C, 500ma max
Display (optional):	LCD, 2 lines by 16 characters, viewable in direct sunlight
Digital Inputs (optional):	2, one may be programmed for an arming loop
Tcp/ip:	10/100 autodetect
Power Consumption:	450ma max, 250ma typical @12vdc, Acceptable supply voltage 12-24vdc
Material:	Black polycarbonate
Dimensions:	8.2" L x 4.7" W x 2.35" H
Weight:	1 lb.
Outdoor Rating:	IP65
Mounting:	Front Side Flange
Indicators:	2 programmable LEDs
Temperature:	-40°C to +85°C
Standard Wiring (Fixed):	3ft (91.5cm) cable with DB9 female (RS232), flying leads (wiegand, aba, wand, f2f) or RJ45 (TCP / IP)
Nfc/Bluetooth:	IBCBlue support, available with wiegand (G) output only$_2$

Specifications Subject to change without notice

$_1$Must be specified at time of order. These cards are not supported by default

$_2$NFC/Bluetooth not available in smaller case

Wiring

Wiring Connections for various Interfaces.

For color codes refer to back of reader.

Rs232 Interface
+VDC
GND
Reader Transmit
Reader Receive

Wiegand / ABA / Wand Interface / 5v F2F
+VDC
GND
Data 1 / Mag Data / Wand /f2f
Data 0 / Mag Clock
Green LED/Sense Input 1
Bi-color LED/Sense Input 2

Wiegand (readers with BLE) - see notes on right
+VDC
GND
Barcode/RF Data 1
Bluetooth Data 1
Data 0
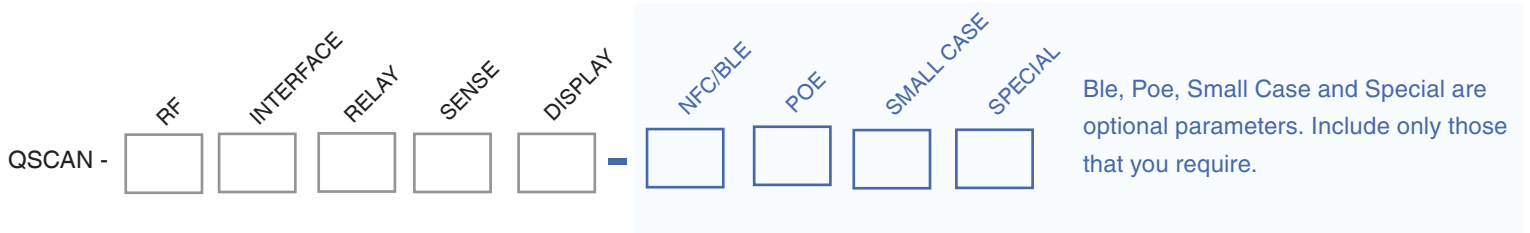Green LED
Bi-color LED
Flash Update

12v F2F
+VDC
GND
Green LED//Sense Input 1
Bi-color LED//Sense Input 2
F2F

Relay Wiring
Normally Closed
Normally Open
Common

Sense Input Wiring
Sense Input 1 or Arming Loop
Sense Input 2

TCP
RJ45 Plug

Special note for wiegand output readers that also contain the BLE option:

In order to provide easy flash updates, readers that contain the Bluetooth option have 2 additional wires. For normal operation the white and brown wires are connected together. They are separated to provide flash updating and programming capability.

How to Order

Use the following codes to construct the part number.

Read subscripts for more information on specific options.

QSCAN - [RF] [INTERFACE] [RELAY] [SENSE] [DISPLAY] - [NFC/BLE] [POE] [SMALL CASE] [SPECIAL]

Ble, Poe, Small Case and Special are optional parameters. Include only those that you require.

RF
No RF - 0
IBC,Hid, Farpointe,Awid,Casi, EM Prox – H $_1$
Iclass- I $_2$
Iclass & Hid,Awid Prox - B $_3$
Mifare CSN– M $_4$
PIV - P $_5$

INTERFACE
Rs232 – S
TCP / IP – C
Wiegand/aba/wand/f2f(5v) - G
F2F(12v) - F
USB Serial - U $_6$

RELAY
No Relay – 0
Relay - R

SENSE INPUTS
No Sense Inputs - 0
Sense Inputs - S $_7$

DISPLAY
No Display - 0
Display - D $_6$

BLE (Nfc/Bluetooth)
No Bluetooth - leave out
Bluetooth - B $_{6,8}$

POE
No POE - leave out
POE - P $_9$

SMALL CASE
No - leave out
S - Small Case

SPECIAL
Used for custom configurations for which IBC has assigned you a number. Include only if IBC has assigned you a special number, i.e. X123

1 Cards Supported (125k): Ibc, Hid, Farpointe, Awid, Casi, EM. Awid support 26 bit only. Casi support 40 bit Proxlite only. EM support 32 bit and 40 bit.

2 Cards Supported (13.5m): Iclass, Iclass SE, Seos. Mifare CSN can be added as a special configuration (see notes on page 4.

3 Cards supported (125k): Hid, Awid.
Cards Supported (13.5m): Iclass, Iclass SE, Seos. Mifare CSN can be added as a special configuration (see notes on following page). EM can be added as a special configuration (see notes on page 4).

4 Cards Supported: Mifare. CSN output only, 32 bits and 56 bit.

5 Cards Supported: 13.5m Piv.
Additional card formats (13.5m Iclass, Seos, Mifare CSN) may be added as a special configuration (see notes on page 4).

6 Not available in small case.

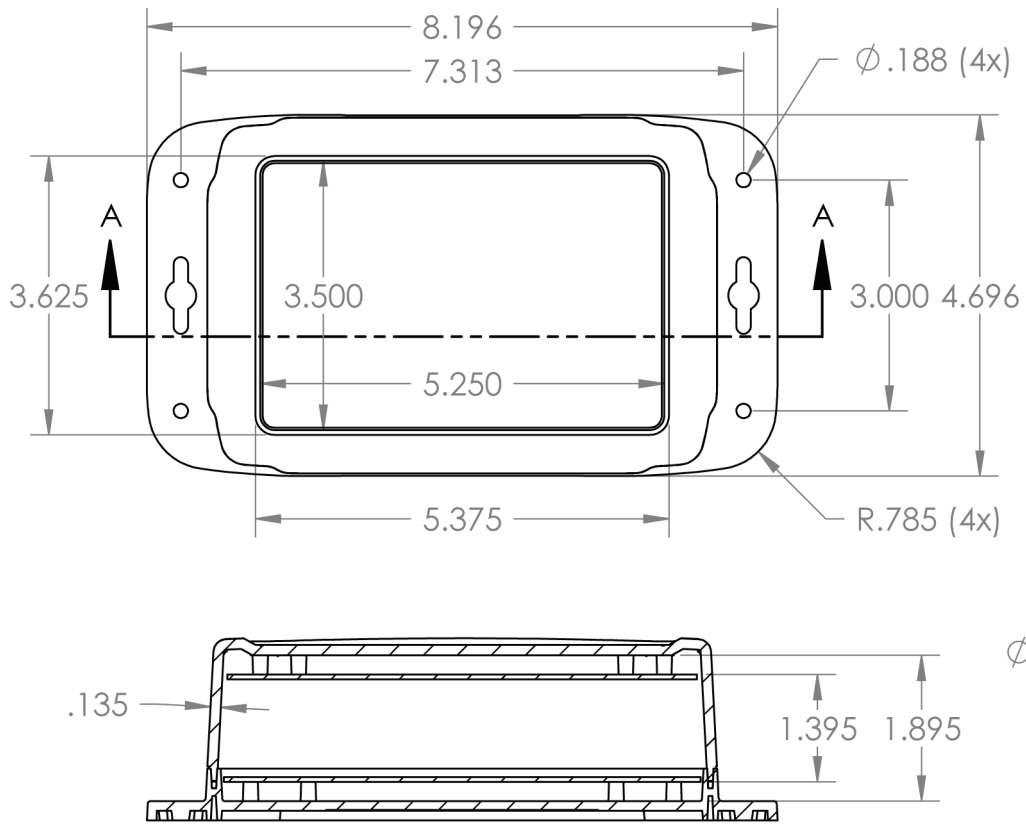**7** Sense inputs are standard with wiegand and f2f interface.

8 Bluetooth available with wiegand interface only.
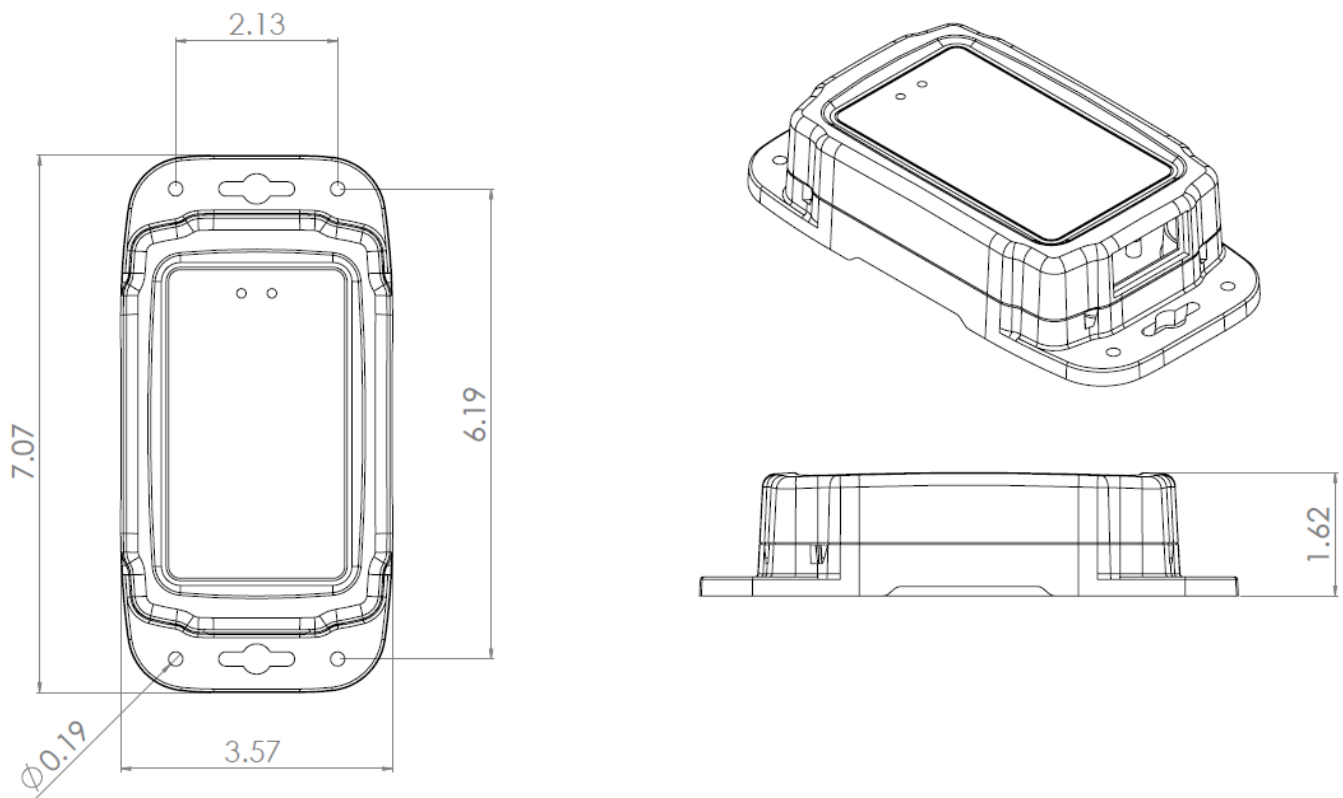
9 Available with TCP interface only.

EXAMPLES:

Part Number	Description
QSCAN-0G000	Qscan with wiegand interface, barcode only
QSCAN-HCR00	Qscan with 125K prox option H,tcp interface, relay
QSCAN-BG000	Qscan with 125K prox and 13.5mhz iclass option B, wiegand interface
QSCAN-0G000-S	Qscan in small enclosure, barcode only
QSCAN-BCRSD-P	Qscan with 125K prox and 13.5mhz iclass option B, tcp, relay, sense inputs, display, poe
QSCAN-0G000-B	Qscan, wiegand interface, barcode only, bluetooth
QSCAN-BG000-SX125	Qscan with 125K prox and 13.5mhz iclass option B, small case, , wiegand, special build # 125

See notes on page 5 for additional ordering information

Dimensional Diagrams - Standard Enclosure

8.196

7.313

Ø .188 (4x)

A

A

3.625

3.500

3.000 4.696

5.250

5.375

R.785 (4x)

.135

1.395 1.895

Dimensional Diagrams - Small Enclosure

2.13

7.07

6.19

Ø0.19

3.57

1.62

01/24-1-4

Notes for Ordering Qscan

POWER

Qscan readers are powered by 12Vdc. You can use your own power source or request an AC adapter from IBC when ordering. AC adaptors are provided with RS232 interface.

WIRING

Standard wiring for Qscan readers with wiegand, aba, wand, or f2f is a 3' cable containing all data wires and power wires.

Standard wiring for RS232 readers is a 3' cable with a DB9 female connector. The pinout is a direct connect to a pc. Connected to the DB9 connector is a short power pigtail for applying power or connecting an ac adapter.

Standard wiring for Qscan readers with tcp/ip is a 3' cable with an rj45 plug.

RF

Qscan can be ordered with embedded proximity to read Ibc, Hid, Awid, Casi, and Farpointe cards. Qscan can also be ordered with embedded 13mhz support to read Hid Iclass and Seos cards, Mifare csn, and/or cards containing PIV-II applications (Cac, Twic, etc..) Qscan can be ordered to support both 125k and 13.5 mhz (option "B"). See the specifications above for a listing of the cards supported under each option. With wiegand interface readers, the rf data can be pass-through or converted by the reader.

SENSE INPUTS

2 digital inputs may optionally be ordered. The sense inputs can be used for a door sense or gate sense, or for an arming loop to enable/disable reading. Sense inputs are standard with wiegand and f2f interfaces. You don't need to specify "S" as an option. The sense inputs can also be used to toggle programmed prompts on the display.

RELAY

The optional relay is a form C dry and has a separate wire exiting the rear of the reader containing the isolated relay lines. In some configurations, if both relay and sense inputs are ordered, they may be combined in the same cable.

DISPLAY

The optional 2 line x 16 character display is an IBC proprietary FSTN LCD display, and is able to be read in direct sunlight and at wide angles. The display is not available in the small case, only the large case. Display data is programmed using serial commands through the RS232 or Tcp interface. The display can also show preprogrammed messages based on the status of the 2 sense inputs.

NFC/BLUETOOTH

Bluetooth can be ordered as an option only on readers with a wiegand output. Not all configurations are possible with the Bluetooth option. Contact IBC for more information.

TCP

TCP is not available in the small housing.

POE

POE is available only with readers that have a tcp interface..

SPECIAL CONFIGURATIONS

If you need a special configuration, such as custom firmware, hardware, labeling, or wiring. contact IBC for a special ordering code. We will assign a code of the format "Xyyy" which is suffixed to the standard part number to identify your custom configuration.