Smart Cac

Outdoor Barcode Reader for CAC, USID, and TWIC Cards with Wiegand Output

Read and process the PDI or EDI from all versions of USID and CAC cards, and the Credential Number from 16 character TWIC cards.

Issue Codes are supported for 18 character CAC and USID.

Features

- Reads CAC, USID, and TWIC cards
- 2 LEDs
- Programmable output formats
- Good Read Beep
- Bi-directional reading
- Weatherproofed for outdoor operation
- 8-30VDC operation
- 0.465" read height
- High resolution infrared optics
- Reads Issue Codes
- Chemical resistant enclosure

Interfaces (user programmable)

- Wiegand
- Magstripe emulation (ABA)
- F2F
- Wand Emulation

ibc ®

International Bar Code

Specifications

Cards Supported:	24 character USID, 21 character USID, 18 character USID, 18 character CAC, 16 digit TWIC
Barcode Scanning Speed:	3"-30" per second (7.62cm–76.2cm/sec)
Scanning Direction:	Bidirectional
Symbologies:	Code 39
Interfaces:	Wiegand, ABA, Wand emulation, F2F
Resolution:	5 mil
Good Read Beep:	Programmable
Slot Width:	0.050" (127mm)
Power Consumption:	8-30VDC, 90ma typical, 140ma max
Material:	Noryl
Dimensions:	4.6" L x 2.4" W x 1.4" H (11.68cm L x 6.10cm W x 3.56cm H)
Weight	6oz (170.1 grams)
Read Height:	.465 (1.19cm) (optional)
Indicators	2 programmable LEDs
Light Source:	940nm infrared
Temperature	-40°C to +85°C
Standard Wiring:	3ft (91.5cm) cable, flying leads

Wiring

Wiring Connections for various Interfaces.

Wiegand		**ABA**		**Wand Emulation**		**F2F**	
Red	+VDC	Red	+VDC	Red	+VDC	Red	+VDC
Blue	GND	Blue	GND	Blue	GND	Blue	GND
White	Data 1	White	Mag Data	White	Data	White	F2F
Green	Data 0	Green	Mag Clock	Green	unused	Green	unused
Orange	Green LED	Orange	Green LED	Orange	Green LED	Orange	Green LED
Yellow	Bi-color LED	Yellow	Bi-color LED	Yellow	Bi-color LED	Yellow	Bi-color LED

The above wiring connections apply to standard readers only.

Contact IBC for non-standard wiring connections.

SCAC – [FIRMWARE] [WIRE EXIT] – [X RESERVED]

Reserved for special configurations or wiring. Keep blank unless IBC assigns you a code for this field.
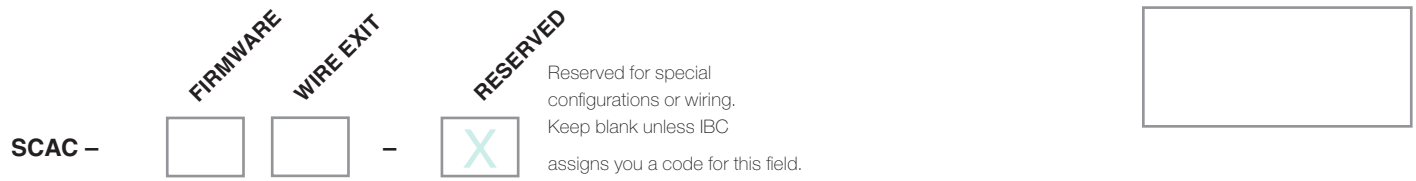
Standard Firmware Ordering Codes

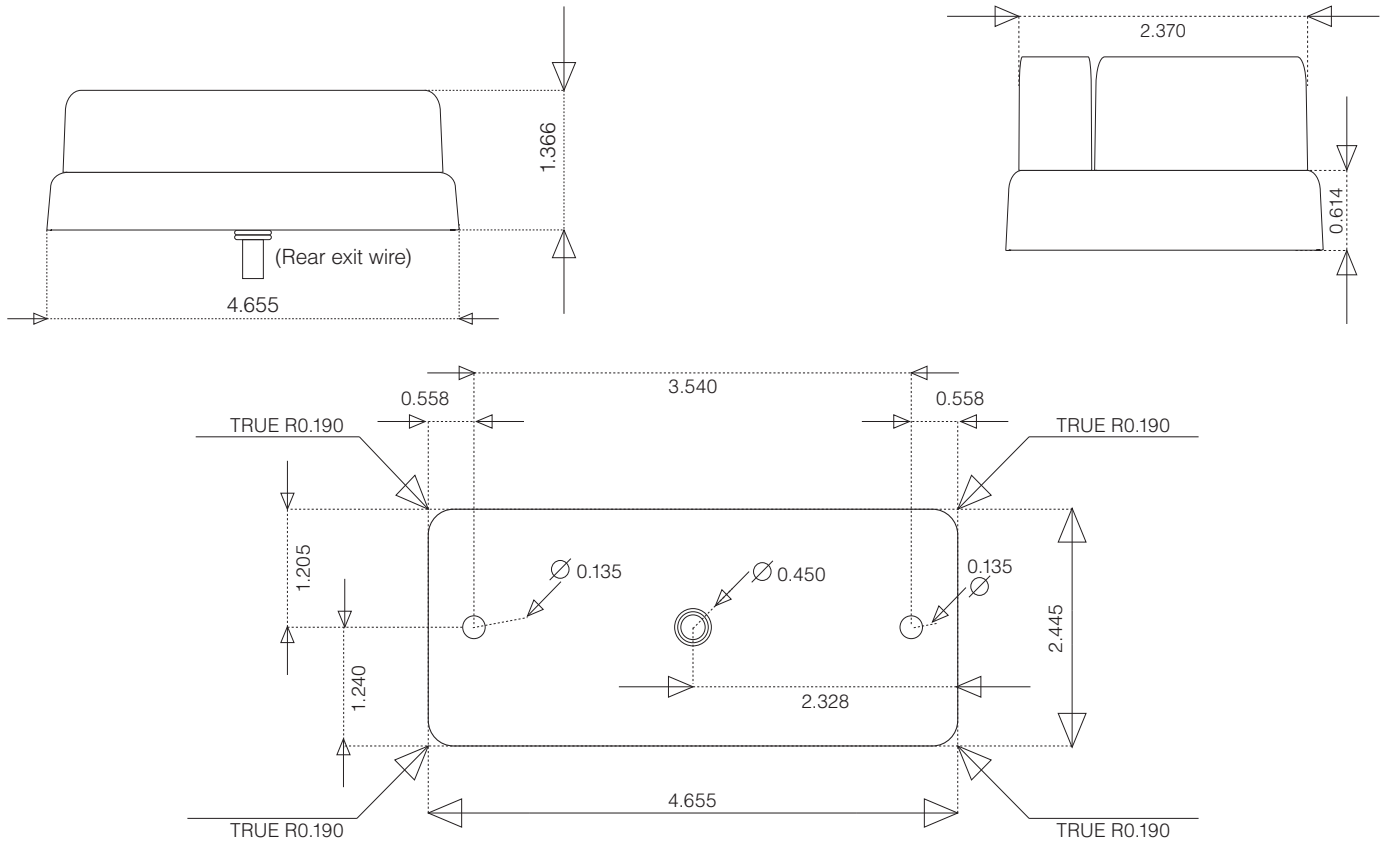| WIEGAND OUTPUT:	
001:	30 bits, Read PDI from all cards, no dependents
002:	34 bits, Read PDI from all cards. Read dependent EDI from 18 character cards
003:	34 bits, Read PDI from 24 and 21 character cards, EDI from 18 character cards, no dependents
004:	34 bits, Read PDI from 24 and 21 character cards, EDI from 18 character cards
005:	38 bits, Read PDI + Issue Code from all cards, no 18 character dependent cards
006:	38 bits, Read PDI + Transposed Issue Code (0-35) from all cards, no 18 character dependent cards
007:	42 bits, Read PDI for 24 and 21 char cards, EDI+ Issue Code on 18 char cards
008:	42 bits, Read PDI for 24 and 21 char cards, EDI+ Transposed Issue Code(0-35) on 18 char cards
009:	30 bits for PDI from all cards, 34 bits for EDI from 18 character dependent cards
010:	30 bits for PDI, 34 bits EDI for all 18 character cards
011:	38 bits for PDI+Issue from all cards, 42 bits for EDI+Issue from 18 character dependents cards
012:	34 bits, read EDI from 18 character cards only
013:	42 bits, read EDI + Transposed Issue (0-35) from 18 character cards only
014:	30 bits, read Credential Number from TWIC card
ABA/WAND/F2F OUTPUT:	
015:	9 digit PDI for all cards, no dependents
016:	9 digit PDI for all cards + 3 digit Transposed Issue Code, no dependents
017:	10 digit PDI for 24 and 21 character cards, 10 digit EDI for 18 character cards
018:	10 digit PDI + 000 for 24 and 21 char cards, 10 digit EDI + Transposed Issue for 18 character cards
019:	8 digit Credential Number from TWIC card

Wire Exit Ordering Codes

R - Rear Exit
S - Side Wire Exit

Notes

Firmware definitions shown are the most commonly ordered firmware versions. Additional firmware versions are available. The Smart Cac readers are fully programmable on site to select which data elements to process (PDI, EDI, TWIC, Issue Code) for all card types, and output format options. The Issue Codes for 24 and 21 character cards are set to 0. Readers to read CAC, USID, and TWIC are also available with additional interfaces (Rs232, Tcp/ip, USB, and others). For more information look at IBC's Smart Slot Jx series. Readers to read the RF from CAC and TWIC cards are also available. For more information look at IBC's Smart PIV series.

Dimensional Diagrams

2.370

1.366

0.614

(Rear exit wire)

4.655

3.540

0.558

0.558

TRUE R0.190

TRUE R0.190

1.205

⌀ 0.135

⌀ 0.450

0.135
⌀

1.240

2.445

2.328

4.655

TRUE R0.190

TRUE R0.190

Notes for Ordering Smart Cac Readers

POWER
Smart CAC Series readers can be powered with any voltage from 8 to 30 VDC.

WIRING
Standard wiring is a 3' cable with flying leads. The wires can exit out the rear of the reader, or the side.

MOUNTING
The reader mounts from behind into 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.