Smart Mag STA

For stand alone Access Control and Time and Attendance

The Smart Mag STA is a stand alone magstripe reader with internal memory, timeclock and audit trail. It is available as a fixed mount or portable reader.
The fixed mount reader contains an internal relay which is used for door control. The portable version is meant for use at monitored stations such as guard shacks, and uses LEDs to signal access granted or denied. 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

- Programmable LEDs
- Character masking (insertion & deletion)
- Tracks 1, 2 or 3
- 5V, 12V, or 24V operation
- Networking
- Time display
- Scheduling
- Good read beep
- Internal Relay
- Audit trail
- Power over ethernet
- Weatherproofing
- Reads Kronos & CAC cards
- Portable version available

Interfaces

- Rs232
- TCP / IP
- Rs422
- USB

ibc®
International Bar Code

International Barcode 160 Oak St. Glastonbury, CT 06033 **phone:** 860.659.9660 **fax:** 860.657.3860 **e-mail:** sales@interbar.com **web:** http://interbar.com

Specifications

Magnetic Stripe:	Tracks 1, 2 or 3 (high or low density / high or low coercivity)
Reading Direction:	Bi-directional
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:	128K standard / 512K (optional)
Displays:	8 character alpha display (optional)

[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 -

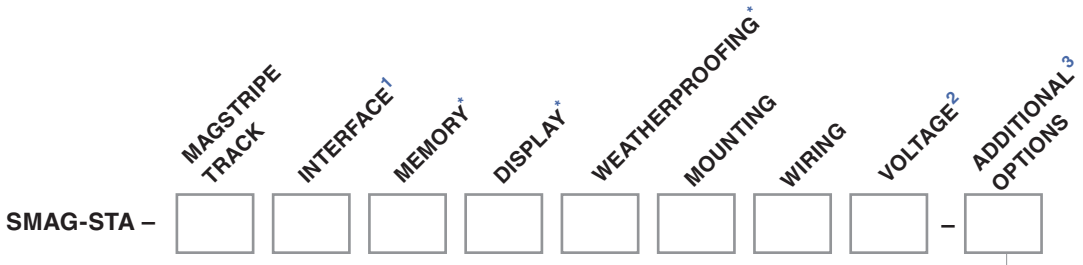
Relay Wiring[1]

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 Mag STA with a code to indicate options required.



*Options at additional cost [1]TCP / IP additional cost [2]12V, 24V & POE additional cost [3]Noryl additional cost

MAGSTRIPE TRACK
- Track 2 – 2
- Tracks 1 & 2 – 1
- Tracks 2 & 3 – 3

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

MEMORY
- 128K – 1
- 512K – 5

DISPLAY[5]
- No display – 0
- Alphanumeric display – A

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[6] – 4

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

ADDITIONAL OPTIONS
- Noryl (chemical resistant case) – N
- Isolated Relay – IR

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]Display not available with portable versions.

[6]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 Mag STA in popular interfaces.

Rs232

SMAG-STA–2S10W6R2

Smart Mag STA with:
- Track 2 – 2
- Rs232 – S
- 64K Memory – 1
- No display – 0
- Weatherproofing – W
- #6 Mounting – 6
- Rear wire exit – R
- 12V DC supply – 2

TCP / IP

SMAG-STA–2C50W6R2

Smart Mag STA with:
- Track 2 – 2
- TCP / IP Interface – C
- 256K Memory – 5
- No display – 0
- Weatherproofing – W
- #6 Mounting – 6
- Rear wire exit – R
- 12V DC supply – 2

Rs232 Portable

SMAG-STA–1S1006I

Smart Mag STA with:
- Track 1 – 1
- Rs232 – S
- 64K Memory – 1
- No display – 0
- No weatherproofing – 0
- #6 Mounting – 6
- Internal battery – I

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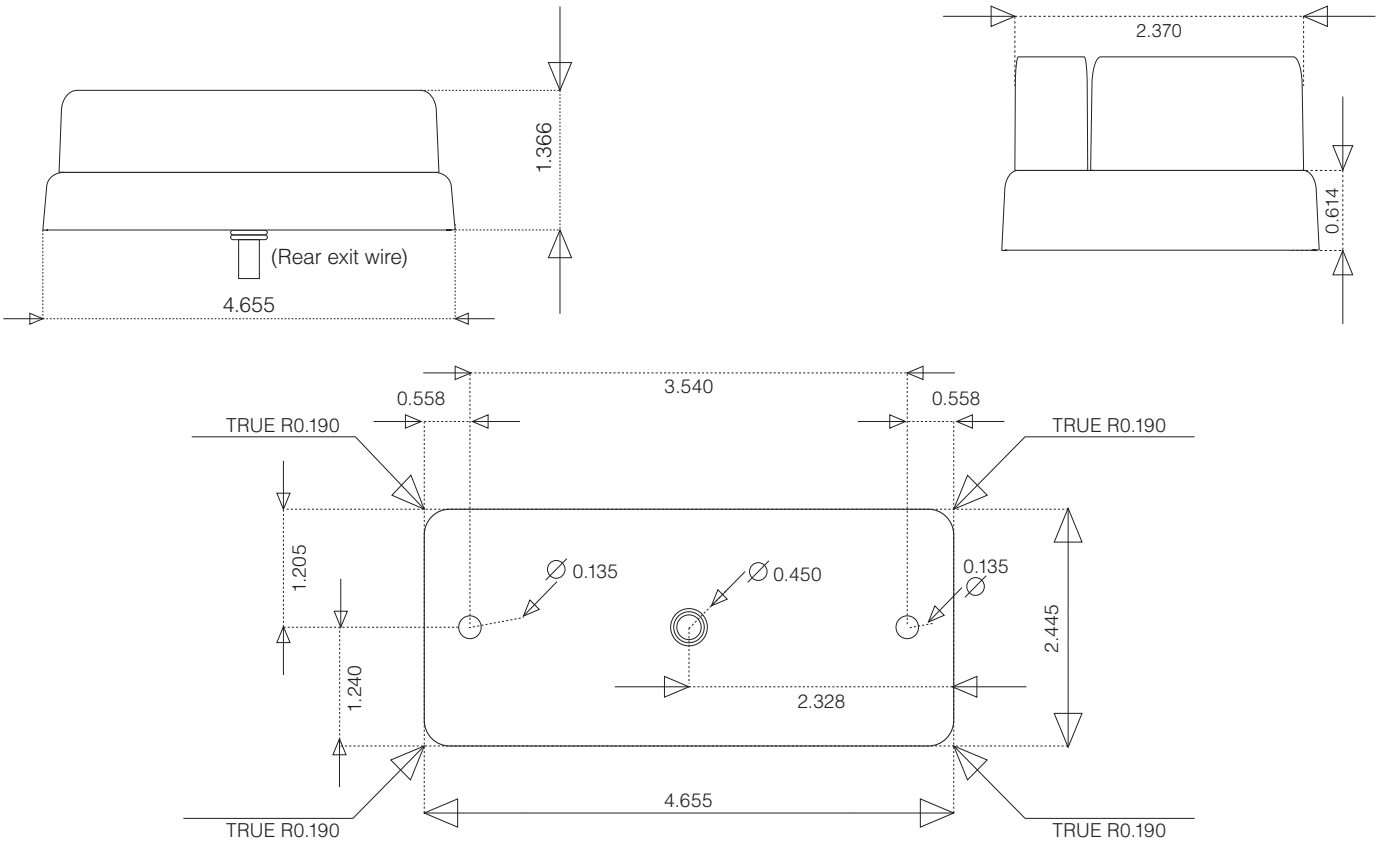
Dimensional Diagrams

Dimensional Measurements for the standard (non-portable) Smart Mag STA.



Notes for Ordering Smart Mag STA

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.