Smart Slot J

Since 1990, the Smart Slot J has been the reader of choice for thousands of users and OEMs throughout the world. Its versatility allows it to be used with a variety of systems including controllers, PCs, and networks.

Features & Options

- Programmable LEDs
- Character masking (insertion & deletion)
- Infrared or visible optics
- 5V, 12V, or 24V operation
- Networking
- Alphanumeric Display
- Good read beep
- Internal Relay
- Sense Inputs
- Power over ethernet
- Weatherproofing
- Reads Kronos & CAC cards

Interfaces

- Wiegand
- Magstripe emulation (ABA)
- Rs232
- Rs232 Wedge
- TCP / IP
- TTL ASCII or Inverted TTL ASCII
- Wand emulation
- Rs422
- PC Wedge (keyboard emulation)
- DTMF
- USB
- VT320

HIGHPOWER SECURITY PRODUCTS

Specifications

Barcode Scanning Speed:	3"-30" per second (7.62cm–76.2cm/sec)
Scanning Direction:	Bidirectional
Symbologies:	Code 39, I 2 of 5, 2 of 5, IND 2 of 5, Code 128, Codabar, EAN13, UPCA
Magnetic Stripe:	Tracks 1, 2 or 3 (high or low density, high or low convercity)
Interfaces:	Wiegand, ABA, Rs232, Rs232 Wedge, Rs422, TCP / IP, TTL ASCII, INV TTL ASCII, Wand emulation, PC Wedge, DTMF, USB
Resolution:	5 mil (high) / 10mil (low)
Good Read Beep:	Programmable
Slot Width:	0.050" (127mm)
Displays:	8 character alpha display (optional)
Sense Inputs:	2 TTL sense inputs (optional)
Power Consumption[1]:	5V 145mA typical 250 max / 12V 90mA typical 140 max / 24V 45mA typical 75 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	6oz (170.1 grams)
Read Height:	.4" standard (1.02cm) / .465 (1.19cm) (optional)
Indicators	2 programmable LEDs (optional)
Relay[2]	30V DC 500mA Isolated form C relay (optional)
Trigger Output:	TTL trigger output (optional)
Light Source:	630nm visible / 940nm infrared
Temperature	-40°C to +85°C standard
Standard Wiring:	3ft (91.5cm) cable, flying leads or connectors depending on interface

[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 -

ABA Interface (Gray cable)

Red	+8-15VDC
Blue	GND
White	Clock
Green	Media
Orange	Data
Yellow	Red LED
Brown	Green LED

Relay Wiring (All Readers)[1]

Yellow	Normally Closed
Green	Normally Open
Red	Common

ABA Interface (Black cable)

Red	+VDC
Blue	GND
Green	Media (card present)
White	Clock
Orange	Data
Yellow	Green LED

Sense Input Wiring

Black	Sense Input 1
Brown	Sense Input 2

Wiegand

Red	+VDC
Blue	GND
Green	Data 0
White	Data 1
Yellow	Red LED
Orange	Green LED

The above wiring connections apply to standard readers only.
Contact Highpower for non-standard wiring connections.

[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

OPTICS | RESOLUTION | INTERFACE[1] | RELAY/TRIGGER OUTPUT | LEDs[*] | DISPLAY[*] | SENSE INPUTS[*] | EXTERNAL KEYPAD[*] | WEATHERPROOFING[*] | MOUNTING | WIRING | VOLTAGE[2] | ADDITIONAL[3] OPTIONS

S Slot J – ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ – ☐
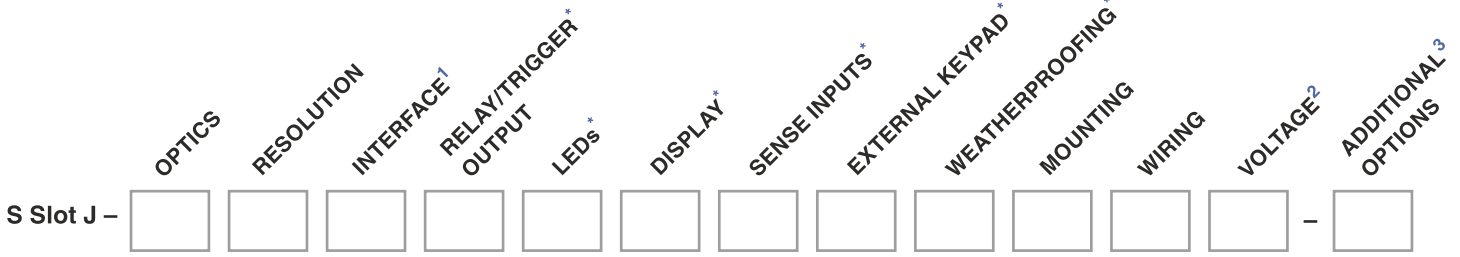
[*]Options at additional cost [1]USB, TCP, DTMF & VT320 additional cost [2]12V, 24V & POE additional cost [3]Noryl additional cost

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

OPTICS
Visible – V
Infrared – I

RESOLUTION
Low – L
High – H

INTERFACE
Rs232 – S[4]
Rs232 Wedge – A
TCP / IP – C
TTL ASCII – T
INV TTL ASCII – I
Magstripe Emulation – M[5]
Wand Emulation – W[5]
Rs422 – 2[4]
PC Wedge XT/AT – P
PC Wedge PS2 – 1
(Continued in next column)

INTERFACE (Continued)
Wiegand – G[5]
VT320 Wedge – V
DTMF – D
USB – U

RELAY
No relay – 0
Relay – R
Trigger Output – T

LEDs
None – 0
Both LEDs – L
Red LED – R
Green LED – G

DISPLAY
No display – 0
Alphanumeric Display – A

SENSE INPUTS
No sense inputs – 0
Sense inputs – S

EXTERNAL KEYPAD
No external keypad – 0
Ext. keypad support – K

WEATHERPROOFING
No weatherproofing – 0
Weatherproofing – W

MOUNTING
#6 – 6
3mm – M

WIRING
Rear – R
Side – S
6-pin rear mod. jack – 6

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

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

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

[5]Units may be specially ordered to support all three emulation modes.

Examples

Wiegand Interface

Smart Slot J–IHG0L000W6R2

Smart Slot J with:
Infrared Optics – I
High Resolution – H
Wiegand – G
2 LEDs – L
Weatherproofing – W
#6 Mounting – 6
Rear wire exit – R
12V DC supply – 2

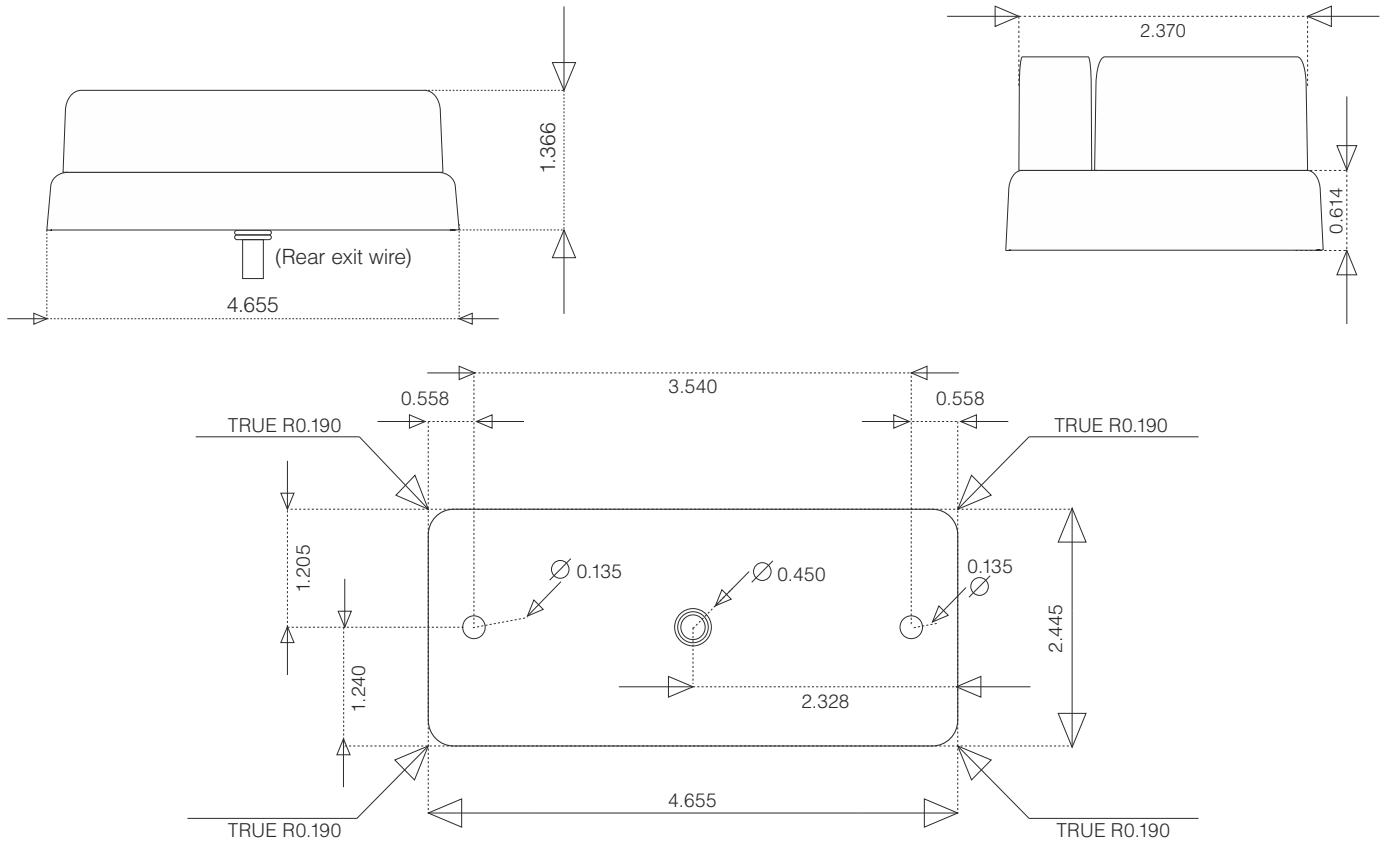## Rs232 Interface

Smart Slot J–IHSRL00006R2

Smart Slot J with:
Infrared Optics – I
High Resolution – H
Rs232 Interface – S
Relay – R
2 LEDs – L
#6 Mounting – 6
Rear wire exit – R
12V DC supply – 2

TCP / IP Interface

Smart Slot J–IHCRL000W6RP

Smart Slot J with:
Infrared Optics – I
High Resolution – H
TCP / IP – C
Relay – R
2 LEDs – L
Weatherproofing – W
#6 Mounting – 6
Rear wire exit – R
POE – P

Dimensional Diagrams

1.366

(Rear exit wire)

4.655

2.370

0.614

0.558   3.540   0.558

TRUE R0.190   TRUE R0.190

1.205

⌀ 0.135   ⌀ 0.450   0.135   ⌀

1.240

2.328

2.445

4.655

TRUE R0.190   TRUE R0.190

Notes for Ordering Smart Slot J Readers

POWER

Standard J Series readers are powered with 5V DC. 12V DC and 24V DC are optional. 12V DC is recommended when connecting to panels.

WIRING

Readers can be ordered with a side wire exit, rear wire exit, or RJ12 rear jack, depending on the interface. 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 all emulation outputs (wand, magstripe, wiegand) is a 3' cable with flying leads. 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.

Readers with sense inputs contain a separate wire for the 2 sense inputs. Readers with an external keypad interface contain a separate wire for connection to an external keypad. 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.

RELAY

Readers with a relay 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. The relay option is not available with readers ordered with an RJ12 jack.

LEDs

Readers can be ordered with 1 green LED, 1 red LED, or red and green LEDs.

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 Highpower.