INO×Smart



ISK-B300

Installation Manual & User Guide

Smart All-Inclusive Access Control Unit

> PM-ISK-UM V06212023

ISK-B300 Installation Manual and User Guide

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Introduction

The ISK-B300 is a Smart All-Inclusive Access Control Device that supports multiple credential technologies including high-frequency RFIDs, secured cloud-generated passcodes and mobile user credentials.

- Integrates with cloud-connected wireless communication technology
- Provides intuitive and convenient smartphone access management
- Combines all functionalities of a controller, reader, monitor and user management system

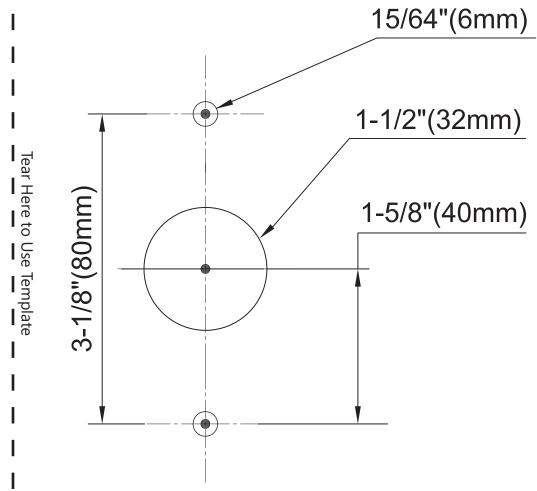
Specifications

- Type: Back Lit Digital Touchscreen
- Style: Mullion
- Frequency: 13.56MHz / 125KHz
- Input Voltage: 12/24 V DC
- RF Output: 13.56MHz or 125KHz (reader) 26-Bit Wiegand
- Read Interface: EM / MIFARE
- Read Range: ~3/4" 2-1/2"
- Working Current: < 80mA (12v) ~ < 40mA (24v)
- Standby Current: < 30mA (12v) ~ < 20mA (24v)
- Passcode/PIN Length: 4 8 digits
- User Capacity: 2000: Mobile Credential 1000, RF/Passcode 1000
- Working Humidity: 0% to 98%
- Working Temperature: -20°F to 140°F
- Water Resistant: IP66

Features

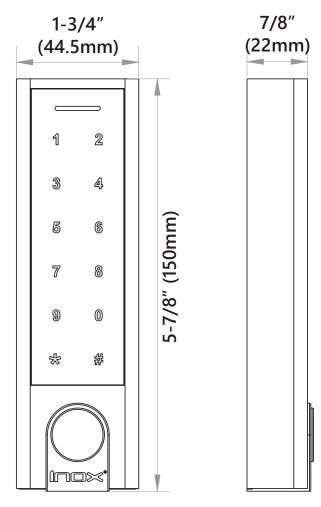
- · All-inclusive device: Reader, Controller, Keypad, and Monitor
- Multi-credential support: Passcodes, RFID FOB/Card/Wristband, and Smart Phone
- Remote Access and Management via Wi-Fi and Low Energy Bluetooth
- Cloud-based APP with a simple yet robust hierarchy of user roles
- Customizable permissions and levels for managing e-keys, users, and devices
- Passage Mode: Enjoy free access during scheduled periods
- Privacy Mode: Keep privacy and security when needed
- Real-time Audit trail and backup email
- Door position sensor for monitoring open/closed status
- Latchbolt or Deadbolt Monitoring Sensor for monitoring locking status
- Modern, water-resistant indoor/outdoor touchscreen keypad with IP66 rating

Template for ISK-B300 Smart Keypad



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Dimensions





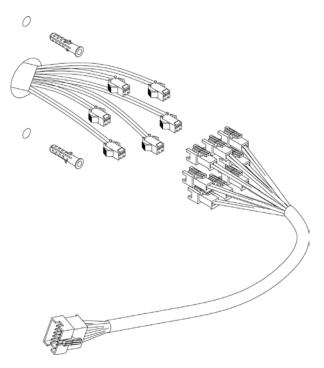
Installation Instructions



Prep the mounting location by drilling holes as shown in the template.

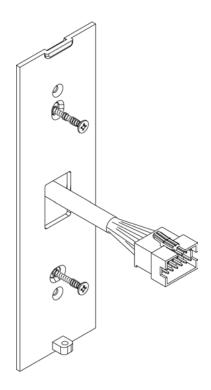


Installation Instructions



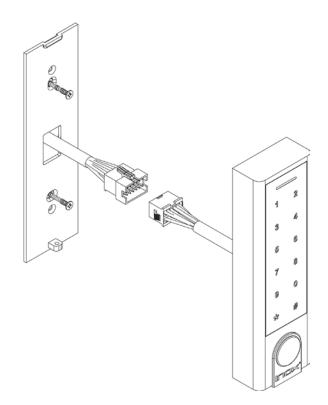
Install anchors. Pull molex wires through the center hole and connect according to wiring diagram. Keep any unused wires isolated and protected.





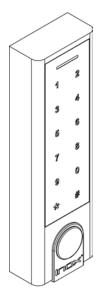
Install screws to mount the sub-plate.





Connect the molex from the ISK-B300 with the molex from the locking device.







Use the tool provided to fix the smart controller to the sub-plate by installing the tamper resistant screw into the bottom of the unit.

Colored Wire and Function Chart

Wire Color	Function	Notes	
Basic Standalone Wiring			
Red	DC+	12-24VDC Power Input	
Black	GND	Negative Pole of DC Power Input	
Blue	Relay NO	Normally Open Relay Output (install diode provided)	
White	Relay Common	Common Connection for Relay Output	
Brown	Relay NC	Normally Closed Relay Output (install diode provided)	
Orange	REX/Open	Request to Exit (REX) Input	
Pass-Through	Pass-Through Wiring (Wiegand Reader or Controller)		
Green/Black	Data 0	Wiegand Output (Pass-Through) Data 0	
White/Black	Data 1	Wiegand Output (Pass-Through) Data 1	
Advanced Input and Output Features			
Grey	Alarm Output	Negative Contact for Alarm	
Yellow	DPS Input	Door/Gate Contact Input (Normally Closed)	
Green	DBM Input	Deadbolt Open Detection Input	

Device Category 1: Description and Wiring Diagram

The ISK-B300 Smart Access Controller can be connected to Electromagnetic locking devices as EL (Fail Safe) or EU (Fail Secure). These include but are not limited to:

- Electrified Mortise Locks
- Electrified Cylindrical Locks
- Electric Strikes
- Electrified Exit Trims
- Maglocks

1. Connect Power to the devices and power supply with the correct voltage.

2. Connect the Common and Normally Open (NO) or Normally Closed (NC) with the devices.

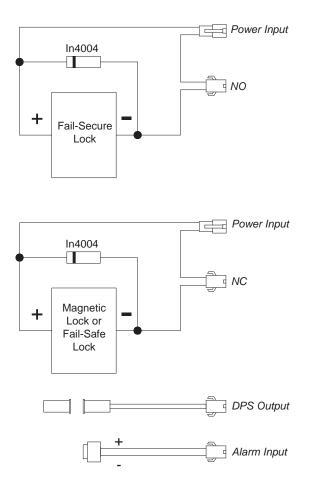
3. For Electrically-Unlocked (EU)/Fail Secure devices, connect NO and Common lines.

4. For Electrically-Locked (EL)/Fail Safe devices, connect NC and Common lines.

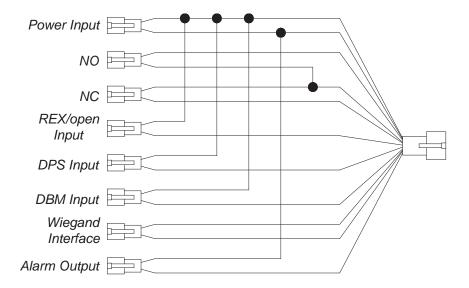


The default timing on the closing circuits is 5 seconds. In the Smart Mode, this timing is adjustable from 5 seconds to 5 minutes using the Smart APP in Device Settings.

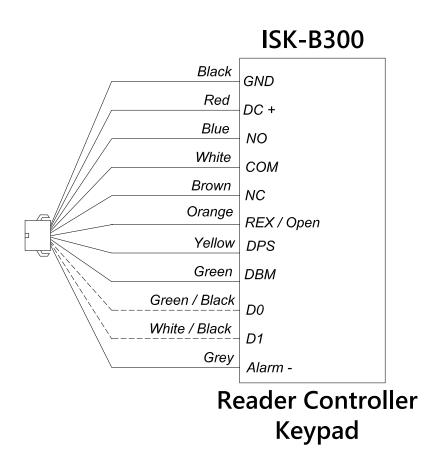
Category 1 Wiring



Category 1 Wiring (Cont.)



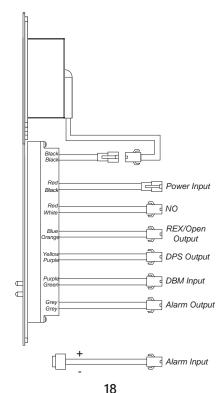
Category 1 Wiring (Cont.)



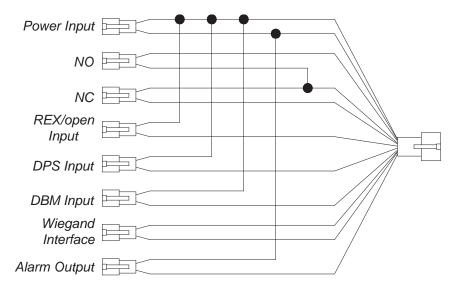
Device Category 2: Description and Wiring Diagram

- Motor-driven Mortise Lock, i.e. INOX PD9700
- Motorize Latch Retraction Exit Device, i.e. INOX ED93-QLR
- Motorize Latch Retraction Mortise Lock

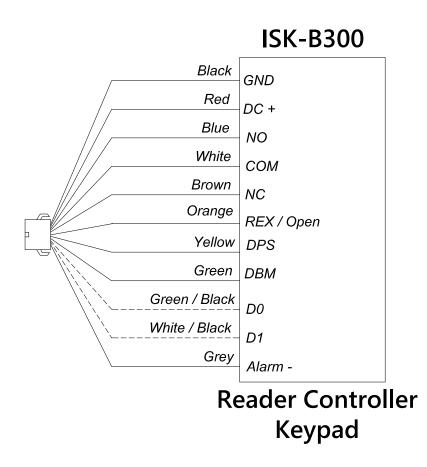
Category 2 Wiring



Category 2 Wiring (Cont.)



Category 2 Wiring (Cont.)



Operational Details

Operating Voltage	12~24VDC
Working Current	≤150mA
Idle Current	≤60mA
Proximity Card Reader	EM / EM + Mifare
Radio Technology	125KHz / 125KHz + 13.56MHz
Read Range	2~6cm
PIN Length	4-8 Digits
Wiring Connections	Relay Output, Exit Button, Alarm, Door Contact, Wiegand Input, Weigand Output
Relay	One (NO, NC, Common)
Adjustable Relay Output Time	0-99 Seconds (5 Seconds Default)
Lock Output Load	2 Amp Maximum
Wiegand Interface	EM Card: Wiegand 26~44 bits input & output Mifare Card: Wiegand 26~44 bits, 56 bits, 58 bits input and output (Factory Default: Wiegan 26 bits for EM card, Wiegand 34 bits for Mifare card)
Environment	Meets IP66
Operating Temperature	(-40°F~140°F)
Operating Humidity	0%RH~98%RH
Physical	Zinc-Alloy
Color	Black, Painted Aluminum
Dimensions	148mmL x 43.5mmW x 22mmD
Unit Weight	330g
Shipping Weight	405g

Basic Programming

Sound and Light Indication

Operation Status	LED	Buzzer
Standby	Solid red light	
Enter Program Mode	Flashing red light	One beep
In Program Mode	Solid orange light	One beep
Operation error		Three beeps
Exit Program Mode	Flashing red light	One beep
Unlocked	Solid green light	One beep
Alarm	Flashing red light	Continuous beeping

Basic Configuration

Programming Step	Keystroke Combination
Enter Program Mode	* (Master Code) # (Factory default is 123456)
Exit Program Mode	*

Set Master Code¹ (Complete this step for full App functionality)

Programming Step	Keystroke Combination
1. Enter Program Mode	* (Master Code) #
2. Update Master Code	0 (New Master Code) # (Repeat New Master Code) # (Master Code is any 6 digits)
3. Exit Program Mode	*

¹ Adding passcodes through the INOX Smart App will not be available until Master Code is changed from Factory Default.

Simplified Local Programming

Definitions:

Programming Locally: Credentials are saved & stored locally at the device level. User ID's and PIN Numbers should be documented as they cannot be accessed through the INOX Smart App.

Programming Through App: Credentials are saved & securely stored on the cloud. User's information is accessible through the INOX Smart App and actions will recorded on the Audit Log within the App.

Simplified Instruction		
Programming Step	Keystroke Combination	
Enter Program Mode	* (Master Code) # (Factory default is 123456) - then perform additional operations below	
Select a Specific ID (allows the device to define a specific User ID to associate the PIN to)	1 (UserID) # (PIN) # The UserID is 0-999 The PIN is any 4-6 digits except 8888 which is reserved	
Exit Program Mode	*	

Delete Users		
Programming Step	Keystroke Combination	
Enter Program Mode	* (Master Code) # (Factory default is 123456) - then perform additional operations below	
Delete User - By ID Number	2 (UserID) #	
Delete All Users	2 (Master Code) #	
Exit Program Mode	*	

Set Access Mode

For multi-user Access Mode, each entry cannot exceed five seconds, or the device will exit to Standby Mode automatically.

Programming Step	Keystroke Combination
1. Enter Program Mode	* (Master Code) #
2. Card Access OR	40#
2. PIN Access OR	41#
2. Card + PIN Access OR	42#
2. Card or PIN Access	4 3 #
3. Exit Program Mode	*

Set the Working Mode

The device has 3 working modes to choose from: Standalone Mode, Smart Mode, and Wiegand Reader Mode (factory default is Standalone Mode / Smart Mode).

Programming Step	Keystroke Combination
1. Enter Program Mode	* (Master Code) #
2. Standalone / Smart Mode OR	7 7 # (Factory Default)
2. Wiegand Reader Mode	78#
3. Exit Program Mode	*

Set Strike-out Alarm

The strike-out alarm will engage after 10 failed entry attempts (factory setting is OFF). It can be set to deny access for 10 minutes after engaging, or disengage only after entering a valid card/PIN or Master Code / card.

Unpair the Device with the INOX Smart App Once the ISK-B300 is paired with an opening on the INOX Smart App, it cannot be paired with a different opening unless it is unpaired first.

To unpair on the local device:

* (Master Code) # - 9 - (Master Code) #

To unpair on INOX Smart App:

Delete the device from the Device Information Screen

NOTE: After unpairing the Device with the INOX Smart App, the user information will be removed from the App.

Reset ISK-B300 to Factory Default

- Connect REX wire (orange) and black negative terminal
- Power off
- Power on
- There will be two audible beeps
- Wait 8 seconds for another audible beep and green light flash
- Then the Master Code is reset to factory default (123456)

How to Unlock the Door

Card User	Read Card
PIN User	Input PIN

Smart Initialization for DPS and DBM Sensors

DPS may be added to Electro Magnetic Locking Devices (Category 1) DPS & DBM may be added to Motor Driven Locking Devices (Category 2)

Open Door Detection (DPS - Door Position Sensor)

When the lock is used with an optional magnetic contact or built-in magnetic contact and the door is opened normally and remains open for more than one minute, the inside buzzer will sound automatically as a reminder to close the door. The buzzer will stop if the door is closed, or if valid credentials are used. Otherwise the buzzer will continue to sound for the programmed alarm time.

DBM - Deadbolt Monitoring Detection

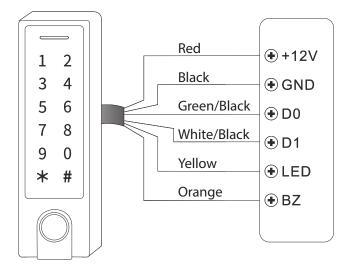
When the lock is used with an optional magnetic contact or built-in magnetic contact and the door is opened by force, the inside buzzer and the external alarm (if installed) will sound automatically. They will stop if valid credentials are used. Otherwise the buzzer and alarm will continue to sound for the programmed alarm time.

Programming Step	Keystroke Combination
1. Enter Program Mode	* (Master Code) #
2. Disable DPS Detection OR	6 3 # (factory default)
2. Enable DPS Detection OR	64#
2. Disable DBM Detection OR	6 5 # (factory default)
2. Enable DBM Detection	66#
3. Set Alarm Time	5 (0-180) # (factory default is 60 seconds)
4. Exit Program Mode	*

Wiegand Reader Mode

The device can work as a Standard Wiegand Reader connected to a third-party controller (**78** #).

Connection Diagram



Notes:

When set to Wiegand Reader Mode, most settings in Controller Mode are inactive, and the Yellow and Orange wires are redefined as below:

- Yellow Wire: Green LED light control
- Orange Wire: Buzzer control

If you need to connect the Yellow / Orange wires:

When the input voltage for LED is low, the LED will turn green. When the input voltage for the Buzzer is low, it will sound.





Use the QR code below for additional support, or visit

InoxSmart.com





Downloading and Setting Up the INOX Smart App



From the Apple or Google Play Store, download the app "INOX Smart."



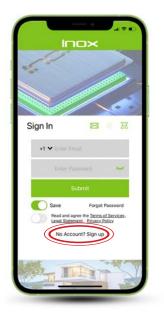




Downloading and Setting Up the INOX Smart App



Open the App on your Smart device.



At the first screen, tap "No Account? Sign up."





Downloading and Setting Up the INOX Smart App

< Inox	
Арр	
Last Name	
User	
Email	
User@appuser.com	
Password	
•••••	here
Confirm Password	
•••••	**
Read and agree the <u>Terr</u> Legal Statement. Privat	y Policy
Send Code)
Next Time	



Fill in Name, Email, and Password fields, and accept the Terms of Service, Legal Statement and Privacy Policy by activating the toggle.

Selecting the green "Send Code" button will send a Registration Verification code to your email address. Locate the email that contains your registration verification code.



Downloading and Setting Up the INOX Smart App



Set Up a Property ? Tips Whether to bind face recognition Cancel U U U U U U U U U U U U U U U U U U U
Whether to bind face recognition
Whether to bind face recognition
Cancel
Crente

Enter this code on the next screen and slide the green button to the right to verify.

If enabled, your Smart device may ask if you want to use Face ID or Touch ID as credentials to verify App access.



Adding a Property to the App

Adding a Property to the App





Use the QR code below for additional support, or visit

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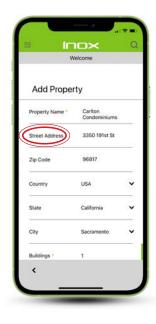
These instructions cover the procedures for creating a new property in the INOX Smart App. For instructions on how to join an existing property, see the FAQs at InoxSmart.com.

To add a new property, tap the "+" icon in the lower right corner of the Property screen.

Adding a Property to the App







To create a new property, select the Create button at the bottom of the Set Up a Property screen. Fill in the property information, including address and number of buildings. To edit the number of buildings, slide the Buildings option to the left.



Adding a Property to the App



The INOX Smart App requires a photo for each property. Tap on Edit Photo to access the photo screen.





Tap the Camera icon to access your camera or photo gallery.

You may also choose a stock photo provided by the App.

Tap Confirm.



Adding a Door to the App



Use the QR code below for additional support, or visit

InoxSmart.com





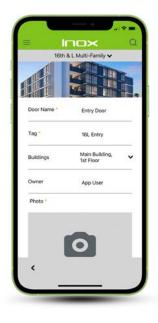


Doors are added to specific properties. Tap on the property to select.

Adding a Door to the App







To add a door, tap the "+" icon in the lower right corner of the Doors screen.

Fill in identifying information about the door. The INOX Smart App requires a photo for each door. Tap on the Edit Photo box to access the photo screen.

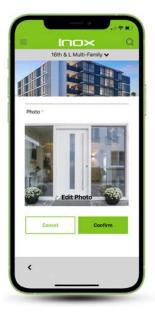


Adding a Door to the App





5



Tap the Camera icon to access your camera or photo gallery. You may also choose a stock photo provided by the App.

Tap Confirm.

The photo will be added to the door information.

Tap Confirm to add the door.





Use the QR code below for additional support, or visit

InoxSmart.com



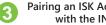


Pairing an ISK Access Control Keypad with the INOX Smart App



From the Lock Screen, tap the Devices button in the bottom right corner of the screen.







To add a device, tap the "+" icon in the bottom right corner of the screen.

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		H.
1. Ent	ry Door	>
	m List evices to Door	>
(

Choose "Auto Detect" to search for available locking devices.









The screen will automatically populate with all available access control and locking devices that are within Bluetooth range of the smartphone or gateway.

If no devices are available, this screen will remain blank.

Tap the device that you would like to pair with the App. A green check mark will appear next to your selection.

Tap Confirm.





	h & L. Multi-Far	
Add Devi	се	
Con	ngratulatio	ons!
Device	e Added Succe	ssfuilly
	Continue	
Lock Activated	By package or	App User
Door Owner	paid gran	App User

When the device is paired with the App, the Congratulations screen will be shown.

Tap Continue.



On the Add Device screen, rename the device by tapping on the name.

Edit any other relevant information, including Auto Lock, Privacy Mode, or Passage Mode settings.

Scroll to the bottom of the screen and tap Confirm.





Pairing an ISK Access Control Keypad with the INOX Smart App





The Access Control unit will appear in the list of devices that are paired with the App for this door.

To control the lock, return to the lock screen. Tap and hold on the central lock icon for 2 to 3 seconds.





Use the QR code below for additional support, or visit

InoxSmart.com





Pairing an ISK Access Control Keypad with a Wi-Fi / POE Gateway



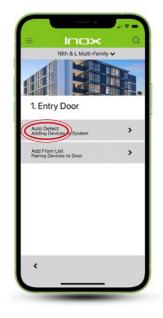
From the Lock Screen, tap the Settings icon in the bottom right corner of the screen.







To add a gateway, tap the "+" icon in the bottom right corner of the screen.



Choose "Auto Detect" to search for available devices.









The screen will automatically populate with all available devices that are within Bluetooth range.

If no devices are available, this screen will remain blank.

Tap the gateway that you would like to pair with the access control device. A green check mark will appear next to your selection.

Tap Confirm.





Pairing an ISK Access Control Keypad with a Wi-Fi / POE Gateway





Connecting by Wi-Fi: Select a 2.4Ghz network. Enter the network password and tap Confirm.

No password is required for a hardwired POE gateway.

Note: the gateways are not compatible with 5Ghz networks.

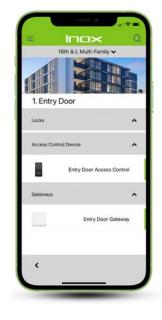
If the password field is left blank when connecting to an iOS device, an additional screen is shown as a reminder that connecting by Wi-Fi requires a password.

Tap Cancel to go back and enter a Wi-Fi password, or Confirm if connecting to a POE gateway.









Enter a name for the gateway in the Device Name field. If there is a firmware update available, the Device Update field will show "Available." Tap the word "Available" to update the firmware.

Tap Confirm to complete the pairing process.

The gateway will appear in the list of devices that are paired with the App for this door.



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