2010 Product Line Catalog

Stand Alone Access Control

IEI Now Part of **Linear** Building On Innovation.

Linear Building On Innovation.

STAND ALONE ACCESS CONTROL

With a broad selection of Access Control Devices and accessories, we have a solution for your specific environment. Our electronic keypads are being used today at thousands of companies throughout the world for stand alone operations.

Regardless of the application or your requirements, we have the style and functionality to meet most needs, either indoor, outdoor, extreme weather environments, illuminated, vandal resistant, Wiegand output, or many other performance considerations.

We make product selection easy, whether you are choosing for functionality or style, or both. We provide the added benefit of simple and consistent programming across all our products. You decide the keypad that is best for your requirements.

The quality of the products, combined with our advanced engineering and design capabilities, results in our stand alone access control devices being second to none.
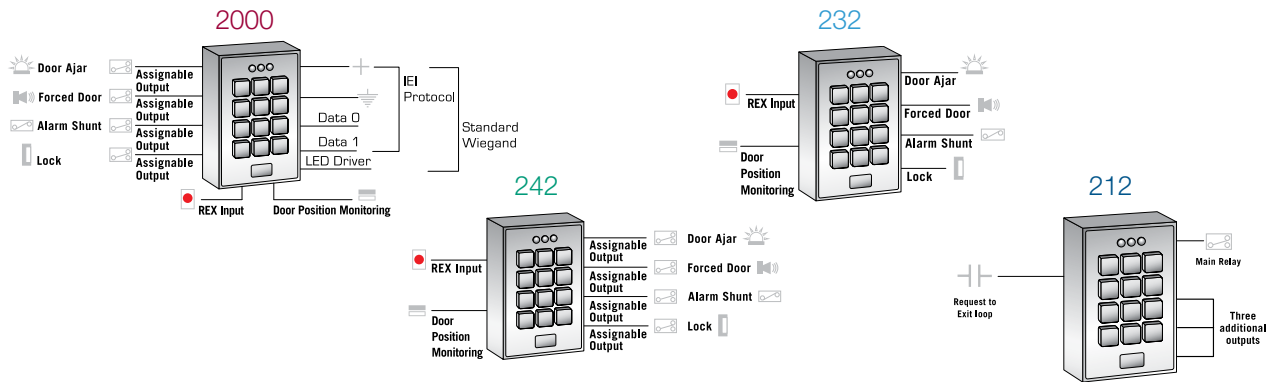
Door•Gard™

Quick selection guide

To begin the process of selecting the appropriate product for your application, we have organized this section to walk you through the selection process. The following charts outline the performance and functionality available with different keypad styles. This section also contains detailed product views with specific information and images for each style of keypad and reader. This section ends with functionality group descriptions and available accessories.

Select your style according to your needs

Performance

Style	INDOOR	OUTDOOR	LIGHT/MEDIUM DUTY	HARSH CONDITIONS HEAVY DUTY	BACKLIT KEYS	BRAILLE KEYS	ALPHA-NUMERIC KEYS	MAGNETIC CARD READER	PROXIMITY CARD READER	MULLION	SURFACE MOUNT	FLUSH MOUNT	UL LISTED
e	●	●	●		●							●	●
eM	●	●		●		●	●					●	●
R	●	●		●				●			●		●
SE	●	●		●			●				●		●
i	●		●									●	
W	●	●	●									●	●
iLM	●	●	●							●	●		●
iLW	●	●	●		●							●	●
233	●	●						●		●			●
FX	●			●								●	●
prox.pad	●	●	●		●				●			●	●

Choose the functionality

2000

- Door Ajar
- Forced Door
- Alarm Shunt
- Lock
- Assignable Output
- Assignable Output
- Assignable Output
- Assignable Output
- REX Input
- Door Position Monitoring
- IEI Protocol
- Data 0
- Data 1
- LED Driver
- Standard Wiegand

232

- REX Input
- Door Ajar
- Forced Door
- Alarm Shunt
- Lock
- Door Position Monitoring

242

- REX Input
- Door Position Monitoring
- Assignable Output
- Assignable Output
- Assignable Output
- Assignable Output
- Door Ajar
- Forced Door
- Alarm Shunt
- Lock

212

- Main Relay
- Request to Exit loop
- Three additional outputs

Options

Functionality	MAIN RELAY	INDEPENDENT OUTPUTS	CONFIGURABLE OUTPUTS	DOOR POSITION INPUT	REQUEST TO EXIT INPUT	DOOR AJAR OUTPUTS	FORCED DOOR OUTPUTS	ALARM SHUNT	WIEGAND OUTPUTS	SECURED SERIES OUTPUTS
2000	●	●	●	●	●	●	●	●	●	●
212	●	●			●					
232	●			●	●	●	●	●		
242	●	●	●	●	●	●	●	●		

Combine functionality with style

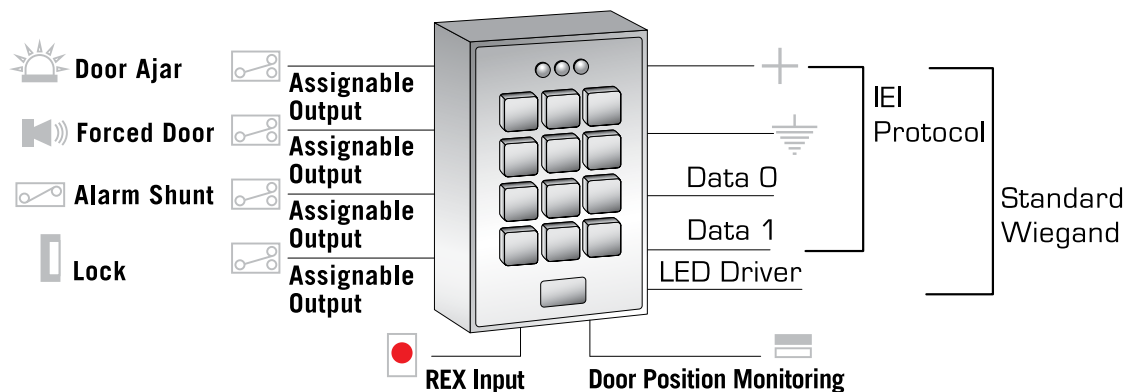| Style \ Functionality	2000	212	232	242
e	2000e			
eM	2000eM			
R		212R	232R	
SE		212SE	232SE	
i		212i	232i	
W		212w	232w	
iLM		212iLM	232iLM	
iLW		212iLW		242iLW
233			233	
FX			232FX	
prox.pad			prox.pad	

2000 Series

The 2000 Series is our newest offering that combines all of our functionality groups into one powerful platform. The 2000 Series access control keypads manage up to 500 users and provide complete access control functionality including monitoring door position; controlling locking hardware; triggering a propped or forced door alert or alarm shunt output. The 2000 Series outputs can be expanded using the expansion relay module [Model 2000-8EX] that provides 8 additional Form C outputs for a system total of 10 Form C outputs. Some applications for the 2000 Series keypads include; operating as keypad front ends for access system, controlling many other electronic devices such as handicapped doors, gate controls, alarm systems, ATM vestibules, and other types of machinery requiring momentary or latched outputs. You can select between two modes of functionality with the 2000 Series keypads. They can operate as keypad front ends to IEI access systems and most Wiegand access system controllers, or as stand alone access control devices.

FEATURES

- 500 users
- Uniform IEI programming & wiring
- Door position input
- Request to Exit input
- 2 Form C SPDT relay outputs – default for access control function
- Expansion relay module (2000-8EX) – 8 additional outputs for elevator and other applications
- Sounder for key press and alert conditions
- All outputs can be programmed independently if required
- Option for secure installation with control electronics in protected area
- Widest array of user type options including single use and two man rule
- 10-30 VDC and 12-24 VAC operation
- Over-voltage protection for reliable operation
- Programmable Wiegand formats
- Works as a reader for all IEI and Wiegand access systems
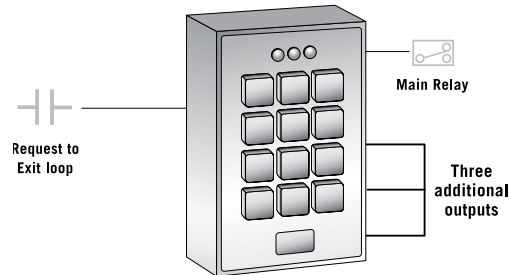
STYLES: e, eM

212 Series

The 212 Series keypads are designed for basic access or code control for up to four individual devices (model dependent), and one input from a request to exit loop. These keypads are the perfect choice for controlling electric locks or magnetic locks, security systems, elevator control, gate controls or other types of equipment requiring on/off or momentary control inputs.

FEATURES

- 120 Users
- Input Trigger for Request to Exit or other open circuit contact
- Up to 4 independent relay outputs
- Each output is assignable by code
- Keypad programmable

STYLES: R, SE, i, W, iLM, iLW

Request to Exit loop
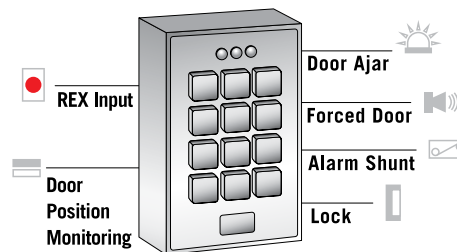
Main Relay

Three additional outputs

232 Series

The 232 keypads are designed to meet most residential, commercial, and industrial single door access control requirements. Each 232 keypad provides two inputs and four outputs, factory set access control. Utilizing the door position input will trigger features such as: Auto relock, Door forced and Door ajar.

FEATURES

- 120 Users
- Request to Exit input loop
- Door position monitor input loop
- Relay Outputs: Lock Release, Door Forced, Door Propped, Alarm Shunt
- Keypad programmable

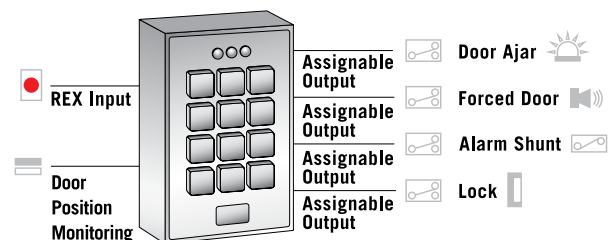STYLES: R, SE, W, i, iLM, 233, FX, prox.pad

REX Input

Door Position Monitoring

Door Ajar

Forced Door

Alarm Shunt

Lock

242 Series

The 242 Series combines the ease of the 232 Series with the flexibility of the 212 Series. It's four pre-programmed access control outputs can be reconfigured to operate in any combination by a valid PIN entry. This functionality allows the keypad to monitor the door position like the 232 Series and trigger the Door Forced output, while operating multiple separate outputs after valid PIN entry.

FEATURES

- Four Independently configurable relay outputs
- All relay outputs assignable by code
- Request to Exit input Loop
- Door position monitor input loop
- 120 Users
- Relay outputs programmable for latched or timed operation
- Door position monitor input loop
- Access control functionality: Door forced, Door ajar, Alarm shunt

STYLES: iLW

REX Input

Door Position Monitoring

Assignable Output

Assignable Output

Assignable Output

Assignable Output

Door Ajar

Forced Door

Alarm Shunt

Lock

e Style - Flush Mount Backlit

The e style keypad uses hardened backlit keys to ensure long-term durability and high-quality performance. e style keypads are designed for both indoor and outdoor flush mount applications. The electronics for each e keypad are conformal coated in the manufacturing process in order to provide this level of application flexibility.

FEATURES

- Single-gang flush mount design
- Backlit hardened keys
- Polycarbonate trim
- Key press feedback via sounder and yellow LED
- Built-in assignable sounder
- Bi-color Red/Green LED indicates relay status
- Indoor/outdoor use
- Keypad Programmable
- Five year warranty
- Functionality mode: 2000 Series

SPECIFICATIONS

- Operating Voltage: 10-30 VDC; 12-24 VAC auto-adjusting
- Dimensions: 4.50" x 2.75" x 0.60"
- Temperature tolerance: -20F to 130F

2000e

i Style - Flush Mount Indoor

Affordable single door access control keypad designed to meet the indoor flush mount needs of lighter volume access control environments. There are three LED's to indicate operation status and provide the user with visual PIN entry confirmation. The i style keypad mounts to most standard single-gang electrical back boxes.

FEATURES

- Single-gang design
- 212i - 1 SPDT 2 amp relay and three 50mA negative voltage outputs
- With 212 mode; Optional 293 relay board converts 3 voltage outputs to SPDT relays
- 232i - 1 SPDT 2 amp relay and three 1 amp SPDT relays
- Door Position Monitoring – 232 mode only
- Door ajar, Forced door, Alarm shunt outputs – 232 mode only
- Indoor use only
- Functionality mode: 212, 232

SPECIFICATIONS

- Operating voltage: 12-24 VAC/VDC - auto adjusting
- Dimensions: 2.75" x 4.50" x 1.13"
- Dimensions including the 293 relay module: 2.75" x 4.5" x 1.68"
- Current draw: 94 mA maximum (add 30 mA for each relay)
- Temperature tolerance: -20F to 130F

212i / 232i

eM Style - Flush Mount Durable Metal

The eM style keypad uses metal Braille alpha-numeric keys to ensure long-term durability and high-quality performance. eM style keypads are designed for both indoor and outdoor flush mount applications. The electronics for each eM keypad are conformal coated in the manufacturing process in order to provide this level of application flexibility.

FEATURES

- Single-gang flush mount design
- Metal Braille alpha-numeric keys
- Brushed metal trim
- Conformal coating
- Key press feedback via sounder and yellow LED
- Built-in assignable sounder
- Bi-color Red/Green LED indicates relay status
- Indoor/outdoor use
- Keypad programmable
- Five year warranty
- Functionality mode: 2000 Series

SPECIFICATIONS

- Operating Voltage: 10-30 VDC; 12-24 VAC auto-adjusting
- Dimensions: 4.50" x 2.75" x 0.60"
- Temperature tolerance: -20F to 130F

2000eM

w Style - Flush Mount Weather Resistant

The w style single door access control keypad is designed to meet the indoor/outdoor flush mount needs of lighter volume access control environments. The w style features a sealed membrane keypad that allows the keys to be cleaned and resist moisture. There are three LED's to indicate operation status and provide the user with visual PIN entry confirmation. The w style keypad mounts to most standard single-gang electrical back boxes.

FEATURES

- Single-gang design
- 212w - 1 SPDT 2 amp relay and three 50mA negative voltage outputs
- With 212 mode; Optional 293 relay board converts 3 voltage outputs to SPDT relays
- 232w - 1 SPDT 2 amp relay and three 1 amp SPDT relays
- Door Position Monitoring – 232 mode only
- Door ajar, Forced door, Alarm shunt outputs – 232 mode only
- Indoor/outdoor use
- Functionality mode: 212, 232

SPECIFICATIONS

- Dimensions: 2.75" x 4.50" x 1.13"
- Dimensions including the 293 relay module: 2.75" x 4.5" x 1.675"
- Operating voltage: 12-24 VAC/DC - auto adjusting
- Current draw: 94 mA maximum (add 30 mA for each additional relay)
- Temperature tolerance: -20F to 130F

212w / 232w

iLW Style - Architectural Weather Resistant Backlit

The iLW keypad has a chrome plated metal trim with hardened backlit keys. There are LED's shown through the face plate to indicate operation status and provide the user confirmation of PIN number entry. Designed for indoor or outdoor use, the iLW keypad mounts to any standard single-gang electrical back box and provides superior durability.

FEATURES

- Single-gang flush mount design
- Hardened backlit keys
- Heavy chrome plated trim ring
- Key press feedback via sounder and yellow LED
- Built-in assignable sounder
- Bi-color Red/Green LED indicates relay status
- Indoor/outdoor use
- Keypad Programmable
- Functionality mode: 212, 242

SPECIFICATIONS

- Operating Voltage: 10-30 VDC; 12-24 VAC auto-adjusting
- Dimensions: 3.47" x 5.14" x 0.71"
- Temperature tolerance: -20F to 130F

212iLW / 242iLW / SSW-iLW

FX Style - Harsh Environmental

Combining elegant looks and the durability of a solid-state keypad in a weather proof design, the FX style keypad can be utilized for most any application. Designed for outstanding performance in high traffic and harsh environments, the solid-state touch sensitive keypad will continue to operate in the worst of conditions. The electronics have been conformal coated in the manufacturing process accompanied with the keypad design, provide an unsurpassed level of application flexibility. There are two LED's to indicate operation status and provide the user with visual PIN entry confirmation.

FEATURES

- Heavy chrome plated trim ring
- Flush mount
- Fits single-gang electrical box
- Touch sensitive solid-state flat keys
- Bi-color LED to indicate operation
- Indoor/outdoor
- Internal sounder
- Functionality mode: 232

SPECIFICATIONS

- Dimensions: 3.44" x 5.16" x 0.71"
- Operating voltage: 12-24 VDC
- Temperature tolerance: -20F to 130F

232FX / SSW-FX

iLM Style - Mullion Mount Backlit

Elegantly designed backlit keypad suitable for indoor and outdoor installations. The iLM keypad mounts directly to mullion door frames or most flat surfaces with no backbox required. The convenience of the built-in doorbell feature with the iLM's sleek design make it an easy choice for entrance installations. Each of the iLM keypads have their electronics conformal coated during the manufacturing process to provide increased application flexibility.

FEATURES

- Surface mount - fits on door mullion
- 1 - 2 amp SPDT relay (212 model)
- 3 - 1 amp SPDT relays in controller (232 model)
- Door Position Monitoring (232 model)
- Door ajar, Forced door, Alarm shunt outputs (232 model)
- Backlit hardened keys
- Sounder
- Available in Aluminum-AL or Bronze-BZ
- Door bell relay
- Indoor/outdoor use
- Functionality mode: 212, 232

SPECIFICATIONS

- Operating Voltage: 12/24 volts AC/DC - Auto-adjusting
- Dimensions: 1.71" x 6.48" x 1.13"
- Temperature tolerance: -20F to 130F

212iLM / 232iLM / SSW-iLM

R Style - Ruggedized

The ruggedized r style keypad features a cast aluminum housing and all metal faceplate that has been treated with polyurethane to increase its protection from corrosion. The ruggedized uses an all metal Braille, alpha-numeric keys. There is also an internal sounder that is used to indicate key press feedback. The Ruggedized's housing can be mounted to a variety of surfaces. Suggested mounting includes; gate goosenecks, post, concrete walls, etc. Additional tamper resistance is provided with the onboard tamper loop that can be used to indicate the removal of the faceplate.

FEATURES

- Indoor/outdoor weather resistant, self contained metal housing
- Surface mount vandal resistant design
- One piece housing suitable for wall, post, or gooseneck mounting
- Durable metal Braille alpha-numeric keys
- 212 mode - 4 on board programmable timed relays
- 232 mode - 1 SPDT 2 amp relay and 3 - 1 amp SPDT access relays
- Door Position Monitoring – 232 mode
- Door ajar, Forced door, Alarm shunt outputs – 232 mode
- Functionality mode: 212, 232

SPECIFICATIONS

- Current draw: 108 mA maximum (add 30 mA for each additional relay)
- Operating voltage: 12-24 VAC/DC - auto adjusting
- Dimensions: 3.75" x 5.25 x 2.50"
- Temperature tolerance: -20F to 130F

212R / 232R

SE Style - Sealed Environmental

The sealed environment se style keypad features a brushed metal housing that has been treated to resist corrosion and an all metal Braille, alpha-numeric keypad. There is an internal sounder that is used to indicate key press feedback, and a bi-color LED to indicate operation. The housing has been designed to mount directly on a standard single-gang electrical box, or to most flat surfaces.

FEATURES

• Indoor/outdoor self contained brushed metal housing
• Surface mount vandal resistant design
• One piece housing suitable for wall, post, or gooseneck mounting
• Durable metal Braille alpha-numeric keys
• 212 mode - 4 on board programmable timed relays
• 232 mode - 1 SPDT 2 amp relay and 3 - 1 amp SPDT access relays
• Door Position Monitoring – 232 mode
• Door ajar, Forced door, Alarm shunt outputs – 232 mode
• Tamper loop functionality mode: 212, 232

SPECIFICATIONS

• Current draw: 108 mA maximum
  (add 30 mA for each additional relay)
• Operation voltage: 12-24 VAC/VDC - auto adjusting
• Dimensions: 3.00" x 4.50" x 1.55"
• Temperature tolerance: -20F to 130F

212SE / 232SE

Magnetic Card Reader

The Model 233 magnetic card reader reads ANSI Track II encoded magnetic cards. This type of encoding can be found on most credit cards, bank ATM cards, state ID's, drivers license and access control system cards. A built in test feature will allow testing of a card to confirm its system compatibility prior to attempting to program the card(s). The sleek narrow design allows the card reader to be mounted to a mullion door frame or any flat surface. The need for a back box is not required, increasing the application flexibility. A unique feature of the 233 is the ability to set the system into an ATM mode that allows access to cards that have track II information, without having to program the cards into the system. The magnetic card readers brushed metal finish and elegant design, make it a perfect choice for commercial or residential installations.

FEATURES

• Surface mount - fits on door mullion
• Two-piece unit, includes remote controller w/programming keypad
• 1 – 5 amp SPDT relay in controller
• 3 - 1 amp SPDT relays in controller
• Door Position Monitoring
• Door ajar, Forced door, Alarm shunt outputs
• Bi-color LED to indicate operation
• Indoor/outdoor capability with up 120 users
• Functionality mode – 233

SPECIFICATIONS

• Operating Voltage: 12/24 volts AC/DC – Jumper selectable
• Current draw: 70 mA maximum (add 15 mA for each addition output)
• Dimensions: 1.75" x 4.50" x 1.155"
• Temperature tolerance: -20F to 130F

233

STAND ALONE ACCESS CONTROL

prox.pad - Integrated Proximity & Controller

IEI's prox.pad is a stand alone proximity reader and keypad that can be directly mounted to a single-gang electrical box or to most flat surfaces. The prox.pad provides standard access control functionality with the use of its two relays and two inputs for request to exit and door position. By utilizing the proximity reader and keypad together, a higher level of security is achieved by requiring both to grant access. The prox.pad can be used for stand alone access control, or used as a reader for IEI access systems or most Wiegand systems. The proximity reader is capable of being mounted up to a maximum of 10 feet away from the prox.pad.

FEATURES

- Integrated door control, proximity reader and keypad
- 2000 users
- 2000 event audit trail
- Bi-color LED to indicate operation
- HID 26 – 37 bit format card compatibility
- Fits over a single-gang electrical box
- Corporate 1000 compatible
- Glass-mount option included
- Secured Series & Wiegand compatible
- UL 294 Listed

SPECIFICATIONS

- Dimensions: 2.75" x 5.25" x 1.38"
- Operating voltage: 12 VDC only
- Temperature tolerance: -20F to 130F
- Main relay: Form C 4 amp SPDT
- Auxiliary Relay: Form C 1 amp SPDT

Remotely Mounted prox.pad proximity reader

Accessories

2000-8EX

The 2000-8EX Output Expansion Module is for use with 2000 Series keypads and provides eight 1 amps Form C relay outputs. It wires to the keypad with 6-wire connection and is powered from the keypad. The module mounts to a double-gang electrical plate and can be installed up to 100' from the keypad.

293

The 293 Relay Module provides three 1 amp Form C relays and the REX input via screw terminals for the 212i & 212w keypads. These keypads come from the factory with a harness that supplies a 50 mA source, but if relay outputs are required, the 293 is the perfect choice.

284

The 284 Leaded Accessory Relay is a 5 amp Form C relay with wire leads pre-attached. The relay operates on 12 VDC and provides an easy way to increase the current handling capability of a lower current output.

PowerKey AC 110 & 220

The UL Listed PowerKey AC Machinery Access Control System is designed to limit the access to powered devices to authorized users only. Power is supplied to the controlled device after a valid code has been entered. After the device has been switched off, PowerKey AC will sense the load reduction and begin a time out before restricting access. Once this time has expired, a valid code must be entered in order to supply power to the device again. PowerKey AC also monitors the circuit for an overload. If an overload has been detected, PowerKey AC will automatically shut down and the LED's will begin flashing alternately to indicate the condition.

FEATURES

- Lockout unauthorized/untrained users
- 99 Users
- 110 or 220 Volts AC
- UL Listed

SPECIFICATIONS

- Control up to 1 1/2 HP motor (110 Volt Model)
- Control up to 3 HP motor (220 Volt Model)
- Switch 1 – Load Sensed 50 mA and up
- Switch 2 - Load Unsensed
- Ratings: 110 Volt Model – 20 Amps maximum
  220 Volt Model – 17 Amps maximum

PKAC-110 – 110 Volt Model
PKAC-220 – 220 Volt Model