

This is Cansec's 25th anniversary. Many of their employees have been there for the entire ride. Something more interesting is that some of their products have been in the field working for the full 25 years! That says something for the quality of their products.

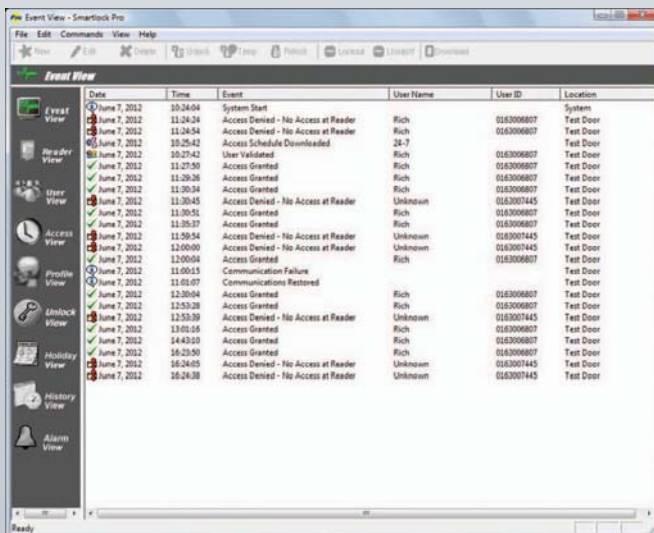
To celebrate this 25 year milestone, Cansec is extending their warranty on their Cansec manufactured products from 1 year to 5 years. That's a lot of warranty. All CanProx readers also have a lifetime warranty.

To help promote their products, Cansec has developed an evaluation kit for their Smartlock® system. What a great idea. The kit consists of a Smartlock® controller, a CanProx reader with card and key tag, a USB communications line driver and the Smartlock® software. The really cool thing is that if you become a dealer, all this is free!

I am going to go over each of the products included in the evaluation kit and show you how they work. At the end I will cover their wireless modems that have a range of up to 6 miles. Wow! First I will start with the software.

The Software

The Smartlock® Pro software in a nice software package. It installs easily and is also easy to setup. After installation, the first screen you see is the event view, (see photo 1). This screen shows access granted or denied as well as communications failures and system updates. It is a live display of everything that is happening to the system.



1. The event view shows all activity as it happens on the system.

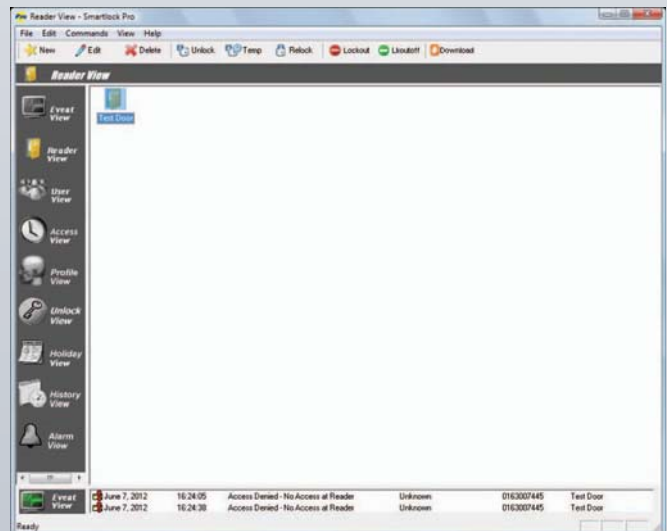


by
Richard Dickey

The reader view will display all the doors in your system, (see photo 2). In this system there is only a test door. By clicking on the test door, another window pops up that will show you the status of the door, (see photo 3). This will also allow you to perform an unlock, relock, momentary, lockout and lockout off.

The user view will show all the users in the system, (see photo 4). By clicking on a user, you can see their user ID, the credential expiration date as well as a lot of other stuff, (see photo 5). You can even set the card for a set number of uses before it expires.

The access view allows you to have several different access schedules that can be assigned, (see photo



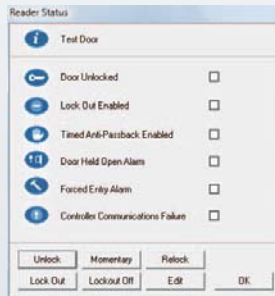
2. The reader view lists all the doors connected to the system.

YEARS

with Cansec

3. From here you can remotely control the door.

6). I set one up for 24-7 access and named it that. Any type of schedule can be set up by clicking an untitled icon and setting a schedule, (see photo 7).

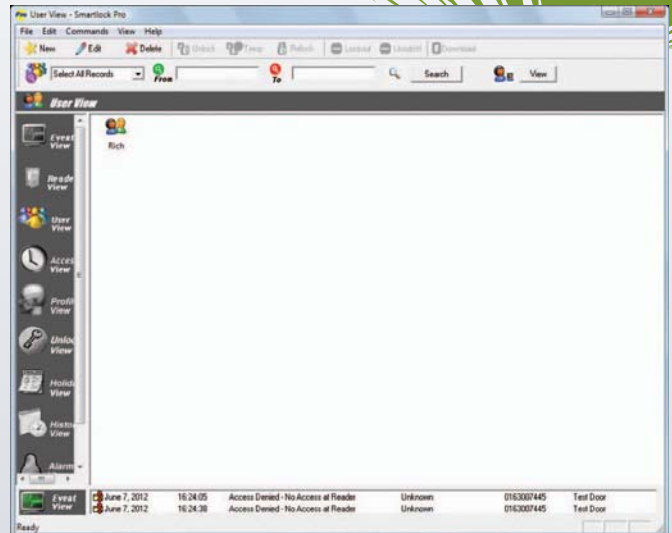


The profile view allows you to assign a door a schedule, (see photo 8). It is just a matter of matching a specific door with the schedule you want, (see photo 9).

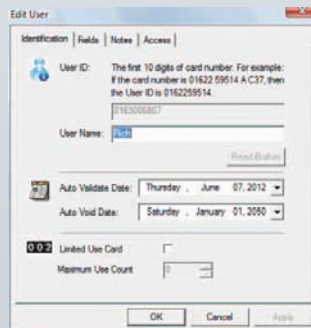
The only setup required at the beginning is to open the configuration window and specify the communications port used by the computer to talk with the communications module, (see photo 10). This can be either a line driver for a wired system or a wireless modem. I did all this by myself without any help from technical support. If you read the directions, you can do it too.

Smartlock®™ Pro Features

- FREE Smartlock® Pro Software
- Support standard 26-bit and Cansec 37-bit Wiegand format
- Unlimited amount of facility codes
- 30 Door / 60 Reader Capacity
- 4,800 User Capacity
- Real-Time Communications
- “Unlock Privilege” assignment
- Automatic Door Unlock Schedules
- Programmable Access Schedules, Access Profiles and Holidays



4. The user view displays all users in the system.



5. Click on a user and their information is displayed.

- Automatic Cardholder Activation and Deactivation
- Card Deactivation based on Programmable Usage Count
- Form “C” Lock relay, door operator relay and force entry/door held open relay
- Support egress button input and exit reader.
- Door Alarms via simple Email
- “First Man In” used in conjunction with unlock schedule
- Timed Anti-Passback

Communications Line Driver

The CLAUSB communications line driver is powered and connected to the computer via a USB

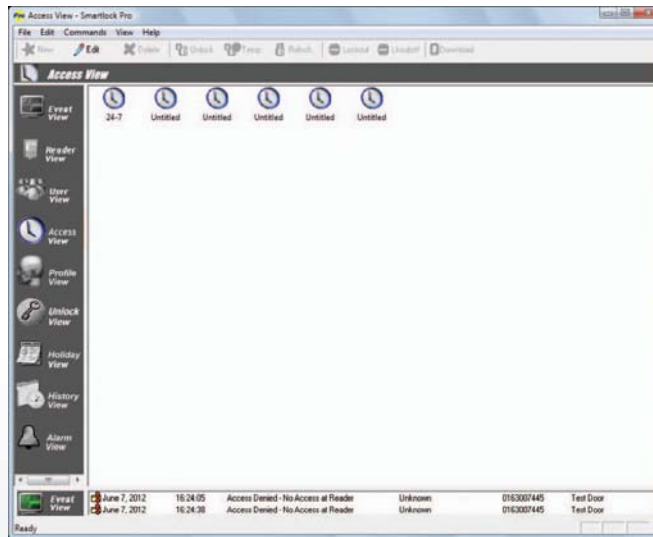
connection, (see photo 11). This device is very simple to install and worked first time right out of the box. It will work with RS-232, RS-422 and RS-485 communications protocols. Both a 6-pin terminal block and a DB9 male connector are available for optimal flexibility for serial connection.

The job of the line driver is to take information from the computer and transmit it over copper wire to a door controller. The line driver does this for up to 2000 feet using a RS-485 protocol. 2000 feet is a long way over 22 gauge copper wire. This is a nice setup.

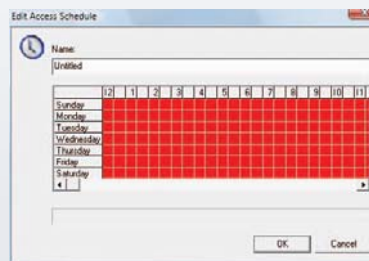
Features and Benefits

- Metal case
- DIN-rail mountable
- External DIP switch to select different modes without the need to open chassis
- Both terminal block & DB9 connector
- Adds one RS-232, or RS-422, or RS-485 serial port by connecting to a PC by connecting to its USB port
- Speed up to 38.4 kbps
- Powered by USB port. No external power supply required
- Includes: USB cable & Driver

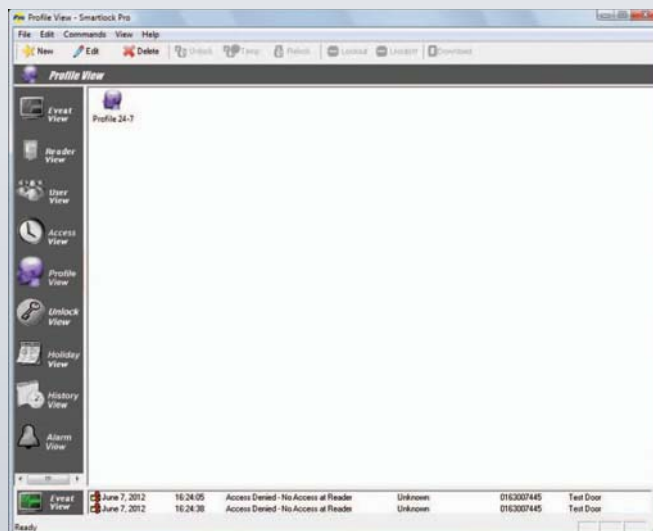
9. Here the test door was assigned a 24-7 schedule.



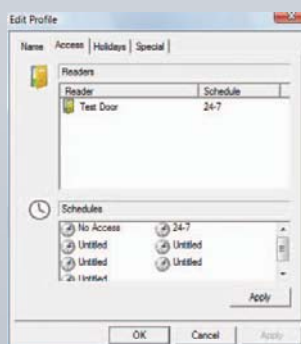
6. The access view is where you will set schedules.



7. They can be set in 30 minute segments for each day of the week.



8. The profile view is where doors and access times are mated.



10. Assigning a communications port is the only thing you have to do to make the software work.

- Supports Smartlock[®], Hurricane and Maestro Controllers

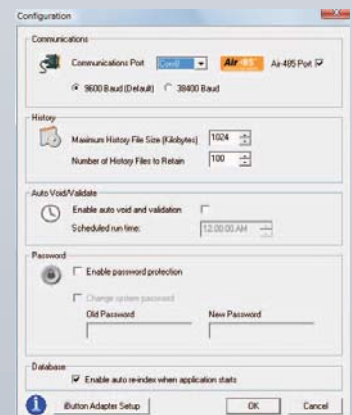
Controller Board

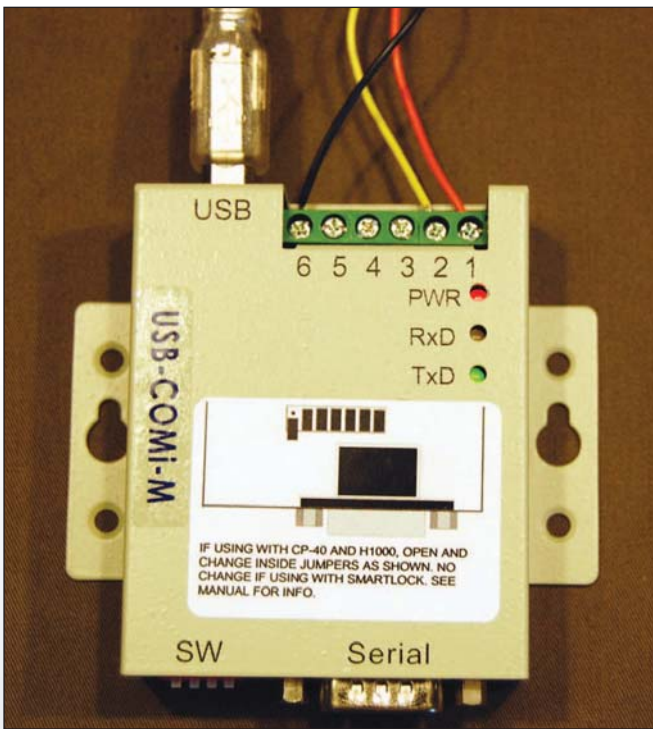
The Pro controller board is 3.5" x 2.75" and is designed to be mounted in some type of box, (see photo 12). It will fit into a 4x4 electrical box with no problem. However it should be mounted in a conventional electronics box.

The controller needs 12 VDC to operate, (see photo 13). This can be provided by a plug in wall transformer or a typical battery backup system.

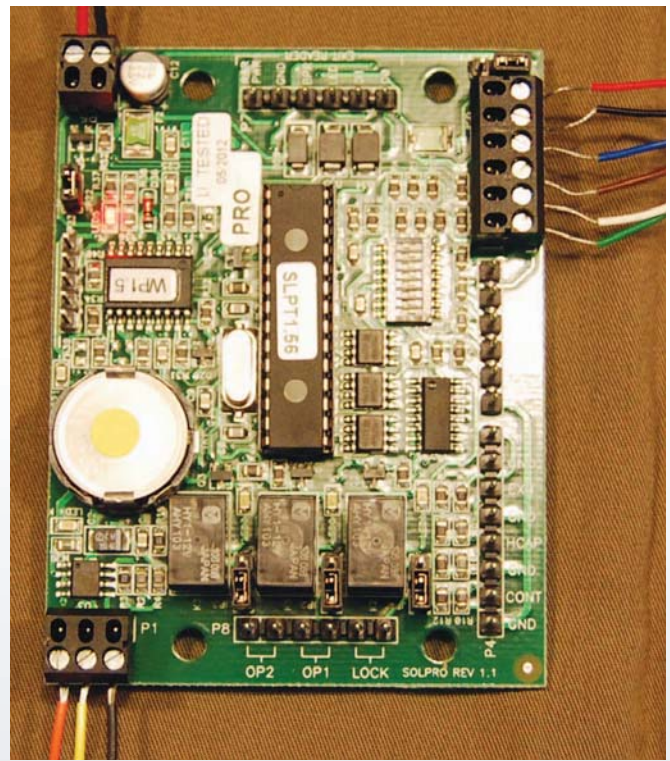
The communications connection is a two wire connection with a shield ground, (see photo 14). These are the wires that come from the communications line driver mentioned earlier.

Any Wiegand reader can be connected to the controller board, (see photo 15). This gives the ability to use card readers, prox readers, biometric readers as well as others. There are also connections for an exit reader, iButton reader, exit button, door contact, door operator as well as three relay contacts on the board. There is even a jumper for 5 or 12 VDC outputs to your readers. This board packs a punch anyway you look at it.

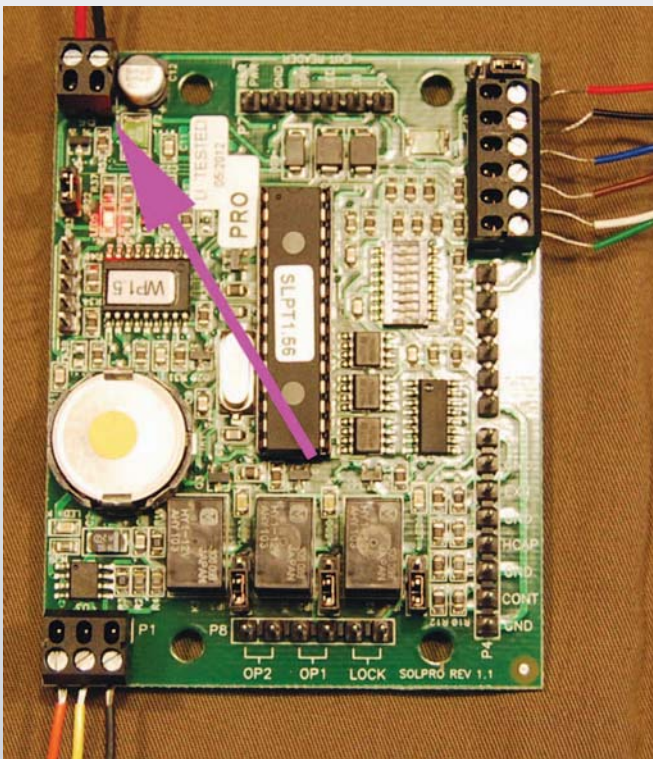




11. This is the CLAUSB communications line driver.



12. Here is the controller board.



13. Controller board power connection.

The Card Reader

The CanProx One reader is multitasking, (see photo 16). Not only will it read 26 bit and 37 bit Wiegand prox cards, it can also be wall mounted in a single gang electrical box or mullion mounted. As I said, multitasking.

CanProx One assures compatibility with electronic access control and time & attendance systems by using an industry standard Wiegand interface. CanProx

One also provides an impressive 5" read range with a standard card and is compatible with Cansec, AWID and HID proximity cards.

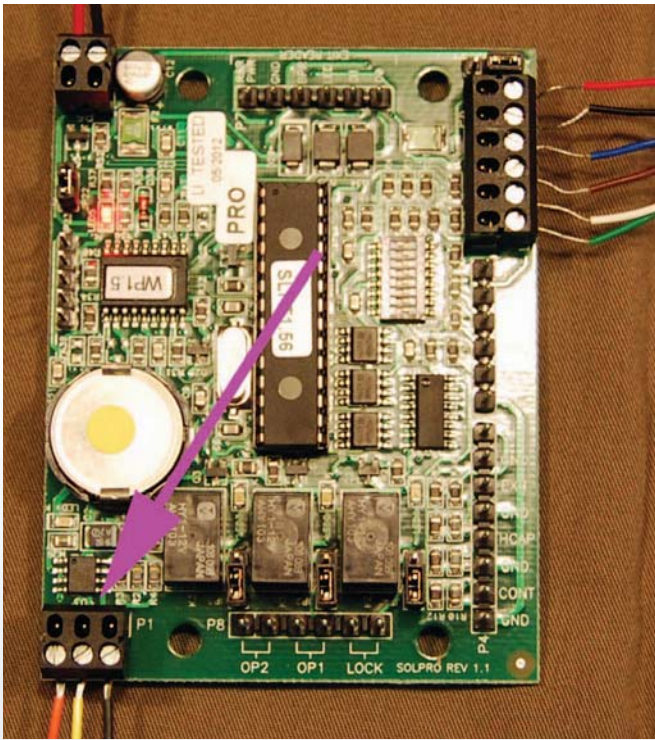
Features and Benefits

- Up to 5" Read Range
- Mullion or Wall Mount
- Comes with Wall Adapter Plate
- Sleek and Attractive Design
- LED and Beeper
- Wiegand Output
- Supports AWID and HID 125-kHz proximity cards and tags
- Indoor / Outdoor
- Lifetime Warranty

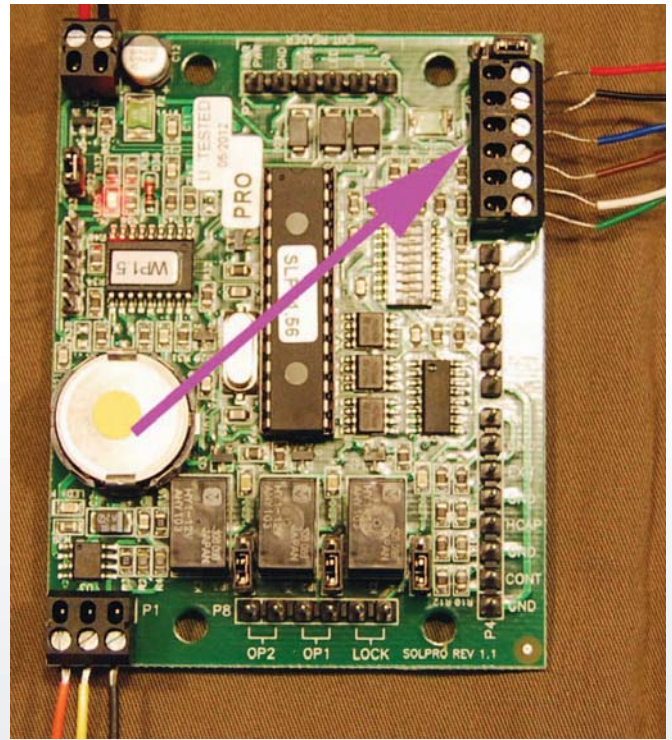
AIR-485®

Air-485®™ is a high performance 900MHz frequency-hopping spread spectrum (FHSS) long-range wireless modem, (see photo 17). It provides a reliable wireless data link to RS-485 serial devices and offers a simple yet cost-effective alternative to running costly RS-485 data cables. This is especially true in commercial environments that make wire connections challenging or impractical.

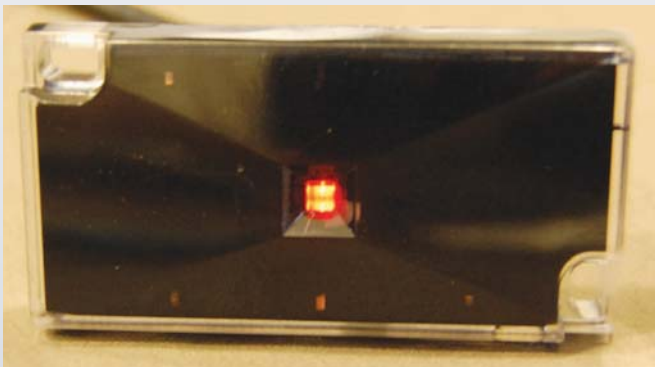
Air-485®™ modems support both USB and 2-wire RS-485 connections. When connected to the PC using USB, the device is powered from the USB when using the two lower power settings, (see photo 18). For the



14. RS-485 communication connection.



15. Any Wiegand reader can be connected here.



16. CanProx One reader without its cover.

two higher power settings, an external power supply is needed. When connected to an RS-485 data cable, an external power supply must be used. Air-485®™ automatically detects the type of connection and configures itself automatically. Support for both types of connections provides greater flexibility in accommodating even the most complex configuration.

The upper LED on the left indicates a connection with the other wireless modem. The two lower LED's indicate transmit and receive when data is flowing.

Four output power levels (10, 250, 500 and 1000 milliwatts) can be easily set in the field using two DIP switches. The RF power level should be set higher as needed for longer range. Note that setting the RF power to a high level when doing testing at very short range (under 2 m/6 feet) can overload the receiver and cause erratic operation.

One of the biggest challenges in setting up a wireless system is determining the optimum placement



17. Here is the Air-485® wireless modem with a range of up to 6 miles.



18. One end has the USB connection and indicator lights.

of the RF modems. This has to be done to obtain the right balance of range and signal strength. The Air-485[®]™ RF modem contains three LEDs which provide a simple visual indication of signal strength, (see photo 19). No meters or other equipment are required for the installation. Because the Air-485[®]™ modems are totally separate from the wired or wireless LAN, there is no need to configure complex network parameters or involve any IT departments.


Features and Benefits

- Works with any 2-wire RS-485 product
- Indoor/Urban: 900MHz: 400 m (1300 ft.) / 2.4GHz: 100m (335 ft)
- Line-of-sight: 900MHz: 10 km (6.2 miles) / 2.4GHz:1.6km (1 mile)
- 900 MHz / 2.4GHz Frequency Hopping Spread Spectrum (FHSS)
- Supports baud rate of 4800 kbps, 9600 kbps, 19200 kbps and 38400 kbps. Configurable via DIP switches
- 128-bit AES encryption
- Ideal for installations where wired connections are cost prohibitive



19. The other end has a signal strength meter and RS-485 connection.

- Supports USB and RS-485 connection with auto detect
- Supports point-to-point and point-to-multipoint network topologies, as well as multiple networks per site
- Built in signal strength indicator LEDs simplify device placement

The beauty of this system is that it can be used with other manufacturers' locks and readers. You are not limited to products from Cansec. Just remember that even when using the wireless modems, there is still that little bit of wire between the modem and controller as well as the wire between the controller and the lock. With that said, this is a great system that has extreme flexibility in the field. 

*For more information on these products or other products from Cansec, contact them at Cansec Systems Ltd, 3105 Unity Drive, Unit 9, Mississauga, Ontario Canada, L5L 4L2
Tel: (905) 820-2404 Fax: (905) 820-0301, www.cansec.com*