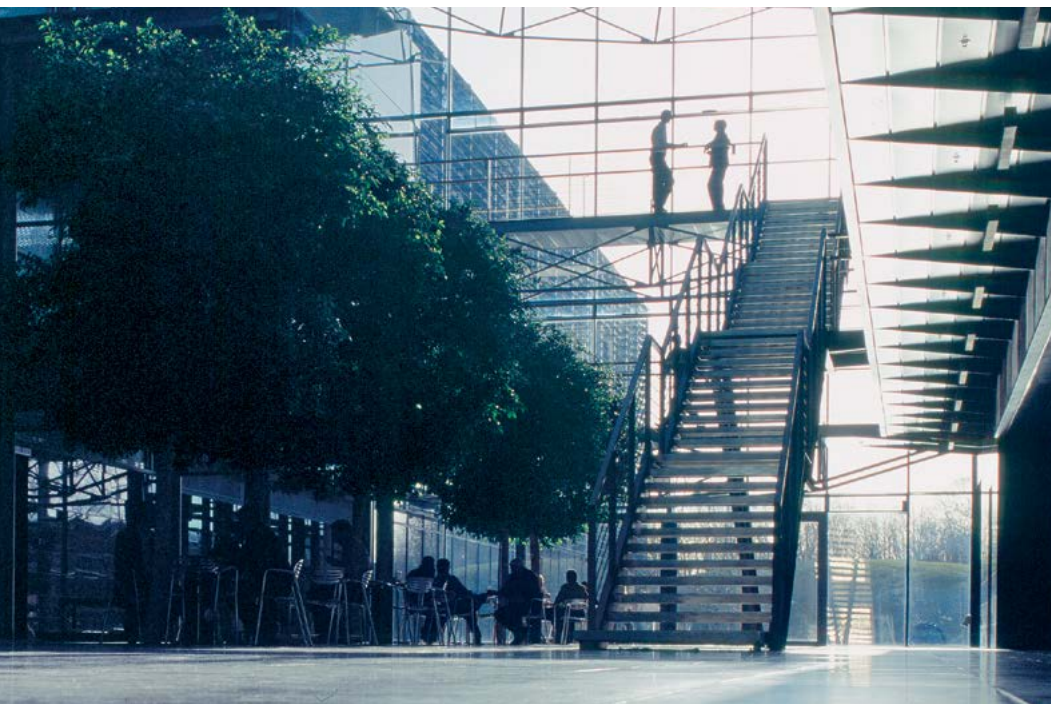# VANDERBILT

Entro
Open the door to comprehensive security

Entro: A security system you can count on

Entro is a very scalable, flexible, and user-friendly access control system that can monitor and control access to facilities with anywhere from one to 512 doors and as many as 40,000 cardholders. System configuration is easy and an extensive range of reader and card options is available, including Cotag hands-free technology.

Access rights can be easily customized and managed by categories. The system provides a complete range of reports and can handle a large number of external controls, including elevator control, alarm outputs, machine control and fire alarm inputs. The user-friendly software includes a visual template design tool for designing and printing photo ID cards. Integration with video surveillance and intrusion detection systems is also possible, and there is an open TCP/IP interface to communicate with other systems, such as accounting and time and attendance.

Access control that's as easy as 1-2-3!

Easy to install, administer and use

Entro is a cost-efficient and reliable access control system. Once it is up and running, the system administrator only has to add and delete cards/tags as employees come and go. The system runs on its own without the need for a server or PC, which makes it very low-maintenance and therefore perfect for organizations that don't have dedicated security personnel on site.

Entro is well suited both for small and medium-sized businesses in sectors such as retail, manufacturing and services, as well as for larger, multi-site companies. It is also a popular choice in office buildings, schools, hospitals and residential complexes. Since the system was launched in 1997, approximately 10,000 systems have been installed, monitoring more than 100,000 doors around the world.

Smooth integration with other systems

Entro interfaces towards almost any intrusion detection system via the use of hard-wired inputs and outputs. When the two systems are connected, Entro manages the arming and disarming of the intrusion detection system and stores comprehensive feedback about these activities in its event log.

Entro provides a unique and very smart video recording capability when used in combination with Vanderbilt Vectis digital video recorders. Up to 16 Vectis DVRs and 128 cameras can be connected to Entro without the need for an additional PC or a server. In applications that include Vectis iX DVRs, Entro software fully integrates the DVRs into the access control system, which makes event triggered recording very easy.

Live and pre-recorded viewing via the auto-installed player (as part of the Entro installation process) – means Vectis RAS no longer needs to be installed for Entro - Vectis integration.

Other notable features

Entro supports Windows Terminal Server (TS) 2003/2008/2012, which enables multi-site card management from a central location. This arrangement is ideal for distributed organizations such as retail chains.

The integrated room reservation function in Entro works via the Internet and/or one or more InfoPoint terminals. The doors to the bookable facilities or rooms are kept locked and will only unlock when a cardholder with a valid booking presents his or her card.

Highlights

- Cost-efficient and reliable system
- Wide range of compatible readers
- Photo ID card design and printing
- Anti-passback and roll call
- Extensive range of external controls
- Intrusion detection system management
- Integration with Vectis DVRs
- Easy to integrate with third-party systems

Video recordings are accessible directly from the Entro software

Video surveillance camera from Vanderbilt

■ **One site or many?**
Entro includes easy-to-use, Windows-based software. Simplicity and clear operation principles virtually eliminate the chance of mistakes, thereby improving security. If an organisation only has one site, it may choose to simply install the Entro software on a standard PC. To allow for distributed administration, organisations with multiple sites will likely prefer to install the software on Windows Server 2003/2008/2012.

The PC can be connected to the Entro system via direct cable, LAN, the Internet or a modem, which means that Entro can fit any infrastructure and even be managed remotely from any location.

The PC connection is required only for adding, modifying or deactivating cards and producing reports. In all other respects Entro is a fully autonomous system with all the data needed for operation stored in the segment controllers.

Entro supports various operating authorisations – for example, reception personnel may be authorised only to handle card activation while administrators are authorised to implement basic modifications of the system.

■ **Broad range of security features**
Entro can provide anti-passback functionality, which prevents the same card from being used to gain access twice. Anti-passback also enables roll call, which ensures the accuracy of counts of how many, and which, cardholders are in which rooms at a particular point in time – information that can be crucial in an emergency.

The interlocking functionality in Entro enables you to set up an interlocking zone which will ensure that when one door in the zone is unlocked or open, the other door(s) in that zone remain locked and closed. This functionality is particularly useful in cashier rooms, for example, where all doors to the area should remain locked when the safe is open.

Entro is invaluable in an emergency such as a fire alarm. The system administrator can specify in advance which doors to unlock when the emergency exit input is activated, rather than simply unlocking all doors and risking the theft of unprotected assets.

■ **Alarms and video surveillance**
Alarm bypass and alarm control functions are particular advantages of Entro. It's easy to define alarm zones using the Entro software. At each reader or door assigned to an alarm zone, the intrusion detection system can be armed or disarmed via the use of dual-purpose readers for both access control and intrusion detection. Entro's Alarm Status Feedback (ASF) function can indicate the status (armed/disarmed) of the zone at any reader in the zone (via the red reader LED) and adjust the security levels accordingly.

In applications that include Vectis DVRs, the Entro software fully integrates the DVRs into the access control system, which makes event-triggered recording very easy.Up to 16 Vectis DVRs and 128 cameras can be connected to Entro without the need for an additional PC or a server.

Entro also includes an open TCP/IP interface to communicate with other systems, such as accounting and time and attendance.

Entro starter kit

InfoPoint 812

■ **Segment controller**
The segment controller is the heart of the Entro system. It processes all the information in the system and stores the complete database. As a result, the system is robust, easy to maintain and able to operate without a connected PC or server, even when Vectis DVRs are connected to the Entro system. The integrated Web server and flash memory port provide the basis for additional online functions, such as facility reservation, which can be customised for specific customer requirements. The integrated dual port switch makes network installation a simple matter.

Entro segment controller units can communicate using a wide variety of methods, such as standard RS-485, TCP/IP networks, modems or WLAN. These communication channels can also be combined as required. Regardless of the physical network used, 128-bit encryption is always applied.

■ **Door controllers**
The DC22 door controller is used to connect all elements of a door. It supports all standard modes from the basic one entry reader to two readers (one entry and one exit) for an anti-passback system. In addition to Vanderbilt readers, it is also possible to connect most third-party readers that support Wiegand and Clock&Data standards. To meet specific card and reader

requirements, the most common Wiegand formats are supported.

The DC22 door controller also supports alarm status feedback in conjunction with alarm systems. It also has two outputs for electric locks (day/night lock) as well as two relays for implementing alarm controls.

Both door controllers have an integrated status display, which facilitates simple installation and service.

■ **InfoPoint reservation terminal**
Entro includes a reservation function that works via the Internet and/or via one or more InfoPoint reservation terminals. An InfoPoint terminal can be mounted at the entrance to a facility or room so that users can view and edit their reservations directly in the terminal. InfoPoint has an integrated function to transfer information to and from the segment controller (which acts as a Web server).

■ **Readers, cards and tags**
The full range of Entro readers, cards and tags are available for use. By using a combination of magnetic stripe and proximity card readers (with or without keypads), it is possible to create a "tailor-made" Entro system to suit the specific security needs of any organisation.

■ **External controls**
Entro can handle a large number of external controls via its IOR6 input/output controllers. Typical examples are elevator control, alarm outputs, machine control and fire alarm inputs.
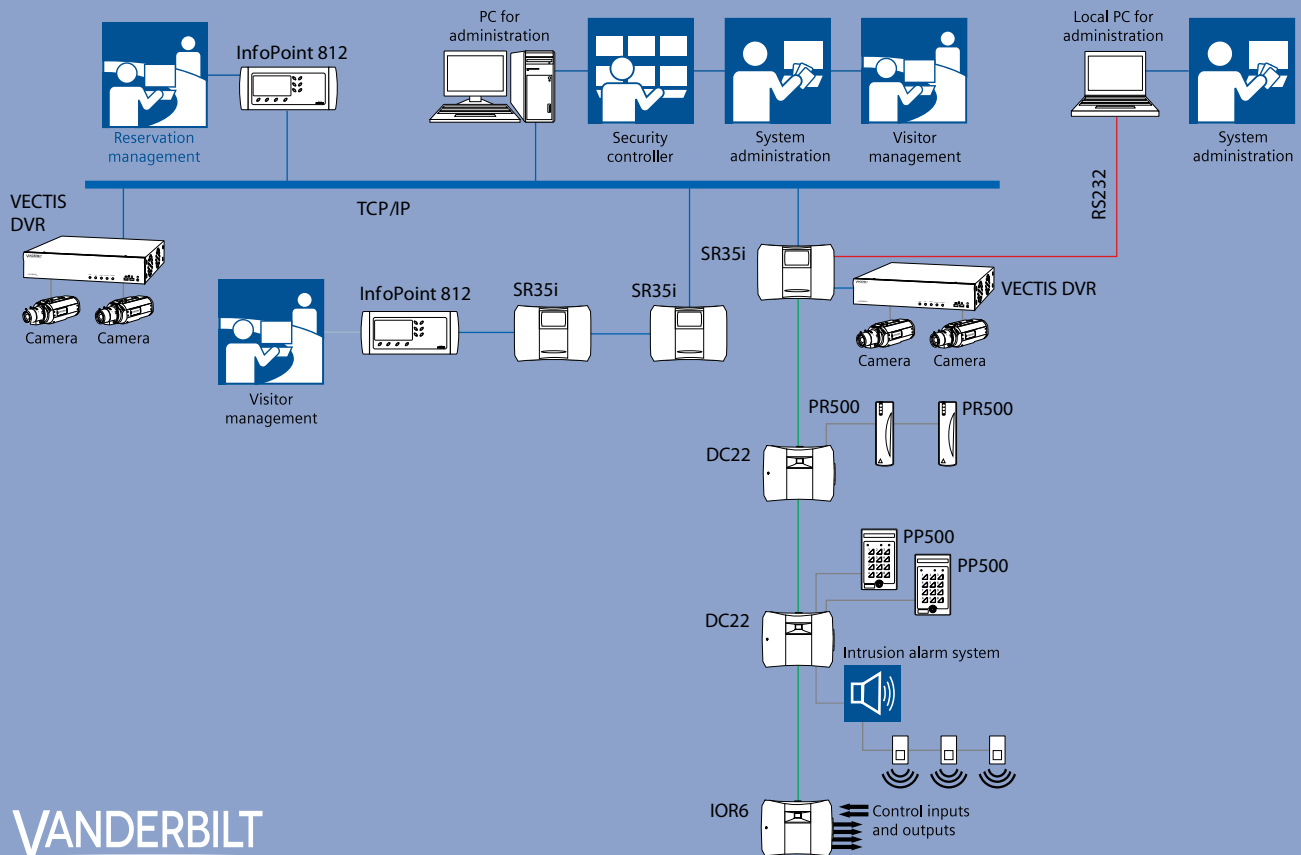
■ **Vectis DVRs**
Each segment controller in a Entro system can be connected to Vectis digital video recorders. In total, up to 16 DVRs and 128 cameras can be integrated into a Entro system. Depending upon the type of DVR chosen, the configuration of the recording rules can be set using the Entro software. Direct links to video recordings are stored in the Entro event memory and can be recalled and played at the touch of a button.

■ **BAPSI technology**
It is easy to integrate Entro with a number of third-party systems – such as those for accounting or for tracking time and attendance – via BAPSI open interface technology.

PC for administration
InfoPoint 812
Reservation management
Security controller
System administration
Visitor management
Local PC for administration
System administration
VECTIS DVR
TCP/IP
RS232
Camera Camera
SR35i
VECTIS DVR
InfoPoint 812 SR35i SR35i
Camera Camera
Visitor management
PR500 PR500
DC22
PP500
PP500
DC22
Intrusion alarm system
IOR6
Control inputs and outputs

VANDERBILT

Entro's flexibility, scalability and user-friendliness have made it the obvious choice for companies in a wide range of business sectors, including industrial manufacturing, services, healthcare and retail, as well as public agencies and residential complexes.

■ **Retailers**
Entro provides the ideal solution for both small and large retailers. It is easy to install and use and ensures that only authorized personnel have access to stock and cashier rooms. It is easy to connect video surveillance equipment and intrusion detection systems to create an integrated security system.

■ **Manufacturing, distribution and other commercial facilities**
Whether large or small, most manufacturers and distributors must manage access to warehouses, halls, garages and other kinds of facilities. They also need fast and easy access to accurate information about the location of employees in high-risk or critical plant areas in order to respond appropriately in emergencies.

Entro provides a variety of features that improve security in an industrial environment, including the anti passback function, time and attendance monitoring (via BAPSI) and hands-free and/or long-range reading technology.

■ **Office buildings**
More and more, the modern office environment is characterised by shared facilities, mobile work spaces and temporary employees. If security is not to be achieved at the expense of unacceptable limitations on people's freedom of movement, a flexible and user-friendly access control system is a must. Entro enables you to classify people at a location as employees, customers, service providers, temporary employees, and so on, and assign them different access privileges and/or time restrictions. The system can be combined with one of Vanderbilt door-entry phone systems for additional convenience and security.

■ **Residential complexes**
Entro is ideally suited to increasing the level of security, service and comfort of residential complexes, without the risk of lost keys and the hassle of managing checkout and usage lists. It can secure all outer doors and garage entrances, provide access to service providers and manage residents' facility reservations.

■ **Sports and leisure facilities**
Entro offers affordable systems for smaller sports and leisure facilities, such as tennis courts and tanning salons, which often have limited personnel.
Entro's reservation function in combination with the open interface makes it possible to book these facilities via the Internet. Entro ensures a better overview of the use of facilities and at the same time reduces the risk of misuse.

Technical data

Entro	
Door capacity	512
Card capacity	40,000
Access groups	480
Time schedules	240
Zones	240 global zones, including: alarm control with ASF, anti-passback, roll-call, entrance limitation, interlock
Elevator control	Yes, up to 192 floors
Built-in reservation function	Yes, up to 64 reservation objects
Machine control	Yes, in conjunction with reservation
Door configuration	Entry and exit readers
Day&Night lock control	Yes, with DC22 door controller
Communication interfaces	RS232, RS485, TCP/IP for LAN/WAN
Reader interfaces	BC-Link, Clock&Data, Wiegand 26-bit 8-bit burst or Wiegand 32-bit 8-bit burst, 26 bit HID H10301, Europlex 36 bit format, HID H10302, HID H10304
Optional interfaces	Open TCP/IP interface to other third-party systems through BAPSI
Software	Client-based software supplied on CD-ROM that can support up to 10,000 systems/sites
Operating systems	Windows 10, Windows 8.1, Windows 8, Windows 7 and Windows Vista
Standard languages	Czech, Danish, Dutch, English, Finnish, French, German, Italian, Norwegian, Polish, Portuguese, Spanish and Swedish.
Multiple-user database	Up to 16 clients
Administrator rights	Configurable in 5 different levels
Backup/restoration of system data	Manual and automatic through mirrored database
Import/export of cardholder data	Yes
Event log	Yes, with real-time update
Event buffer	10,000 in offline mode
Export of events	Yes
DVR integration	Vanderbilt Vectis AX, CX and MX, Vectis HX - one Vectis DVR per segment controller - maximum of 16 DVRs and 128 cameras
Further information	www.vanderbiltindustries.com

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