



# Access Control Product Catalogue



**BEWATOR**

A Siemens Business

# INTRODUCTION & PROFILE

## Introduction

Welcome to the 2006 edition of Bewator's Access Control Product Catalogue. We hope you find all the necessary information required to buy and install a wide variety of innovative access control solutions.

This guide should act as a useful tool for sourcing any of your access control requirements and prove an effective point of reference. If however, you need any further assistance please contact us by phone or visit our website.

## Profile

Bewator is a leading international security group that develops and markets products and systems within the area of Access security. Bewator has some 350 employees with headquarters in Solna, Sweden and offices in Sweden, Norway, Denmark, Finland, Germany, UK and Belgium.

In 2002, Bewator celebrated its 25th year of security technology innovation. Whether you specify, integrate or install security systems, you need solutions that are flexible enough to meet your requirements of today, whilst allowing for systems to be expanded or upgraded at a later date.

Bewator Access Control products are designed with your requirements in mind and will help you get the best from your Security System.

With innovative solutions, high quality products, and a strong commitment to customer service, Bewator is the partner of choice of Security professionals around the world.

Development and manufacturing expertise in the Access Control area puts Bewator Group at the cutting edge of modern security practice, by combining diverse technologies and systems to provide fully integrated security solutions.

With Bewator solutions you can relax, safe in the knowledge that nearly 30 year pedigree of quality and excellence will provide you with practical, cost effective security solutions wherever you are in the world.

In 2005, Bewator became the global centre of excellence for products and solutions in access security, for Siemens Building technologies Group. Siemens is one of the world's largest electrical engineering and electronics companies with integrated fire and security operations world-wide.

## CONTACT INFORMATION

### Customer services

For general product information, orders and delivery status, please contact us at:

Phone: +46 8 629 03 00

Fax: +46 8 627 00 96

Email: [order@bewator.se](mailto:order@bewator.se)

[www.bewator.com](http://www.bewator.com)

### Technical support

For technical questions, please contact us at:

Phone: +46 8 627 03 00

Email: [support@bewator.se](mailto:support@bewator.se)



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# WHY BEWATOR ACCESS CONTROL?

## Why choose Bewator Access Control?

- Quality, innovative products and systems
- Patented Cotag® Hands-Free technology
- Simple to install products
- Established for over 25 years serving markets worldwide
- Excellent service and support capabilities
- Comprehensive training facilities
- Strong partnerships with Distributors and System Integrators
- Products and systems installed in major businesses and organisations around the world
- Comprehensive range of Access Control products and systems
- Forward thinking product development strategies
- Systems & solutions for any type of organisation and application

## Global Presence

Bewator is represented in over 45 other countries around the world by local reseller networks.





# TECHNICAL SERVICES

Bewator aims to be a product supplier with a difference. Standing out from its competitors, the company has an After Sales Services Division offering expert post-sales technical support and troubleshooting to assist Installers and Dealers during installation and configuration of all Bewator branded products.

If your engineers need that bit of extra technical information then help is at hand. Call our technical support teams on +46 8 629 03 00.

## Technical Support

Telephone support is a **FREE** service – please be aware that demand can be variable and we do have busy periods. On such occasions, leave your return contact details so that we can call you back as soon as we are able. We can also offer expert database analysis, this may involve a small cost.

## Technical Training

Full technical training courses are available for all of the current Bewator Access Control products and systems. Course length and structure varies, enabling you to pick individual day modules from our standard material. Call us on +46 8 629 03 00 for details and prices.



# Bewator Entro 5

Imagine the unimaginable

Conceive a multi-scale IP access control system capable of handling anything from 1 to 40,000 cardholders.

Think future-proofed components, mirrored databases and Ethernet connection in an IP environment.

Envisage a multi-functional, multi-site system that has all the features you expect, plus many you didn't.

Imagine this same highly technical system being consummately easy to install and just as easy for users.

Now you understand Entro.



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*The award winning Bewator Entro system is suitable for commercial and industrial premises, institutions such as hospitals, or indeed any establishment requiring an effective Access Security Solution. Simplicity is one of Entro's most important qualities.*

- PC Based modular access control system
- Can cater for up to 512 doors and 40,000 cardholders
- Simple system configuration
- Improved operating flexibility
- Extensive range of Reading Solutions and card options
- Integral Reservation Function
- Open TCP/IP interface to other systems through BAPSI

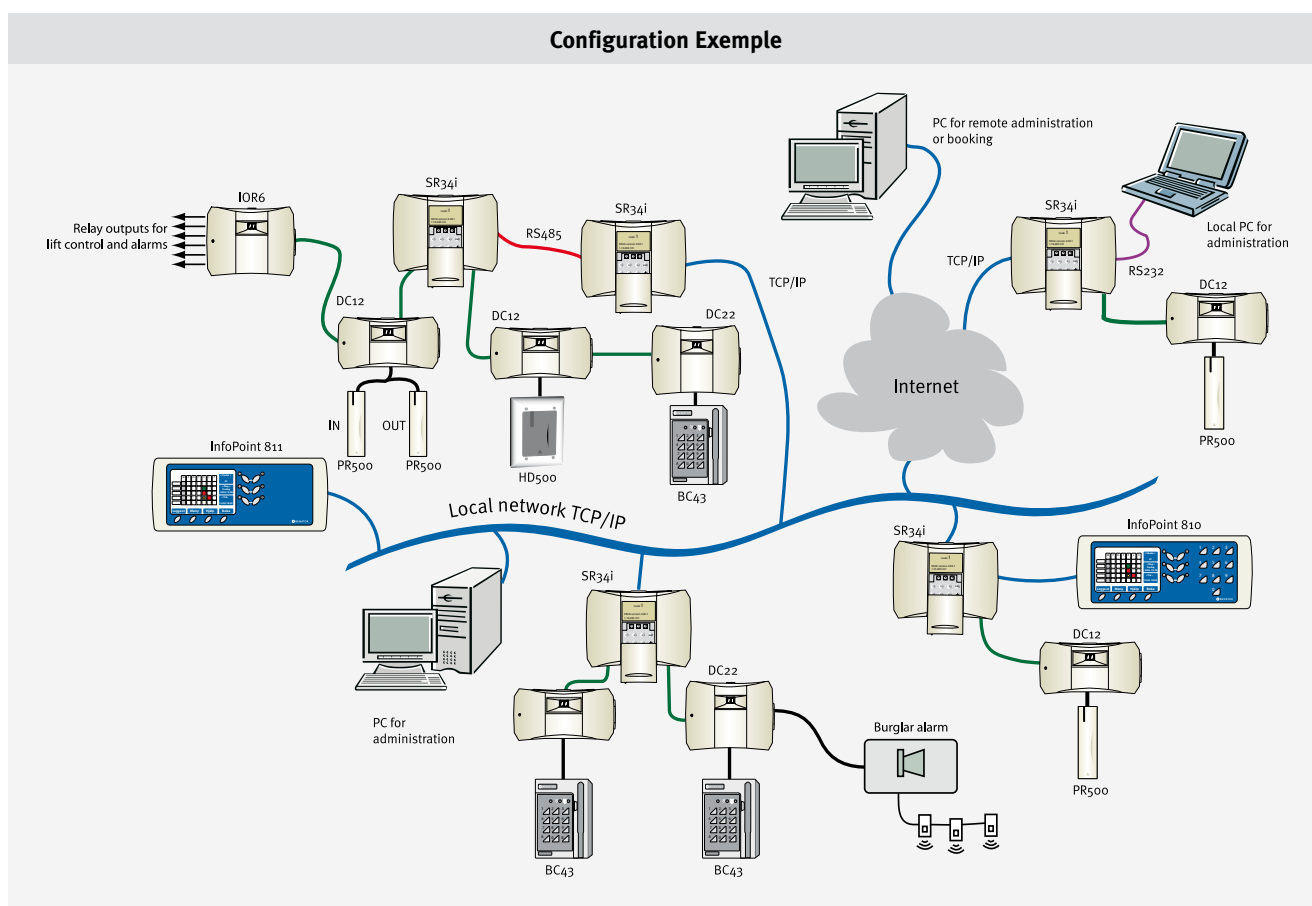
# System Introduction

## Entro Version 5

### *The user-friendly, networkable access control system*

An access control system is a sophisticated yet convenient way to protect premises or buildings by restricting access to non-authorised persons without the need for a key. The Bewator Entro system is suitable for commercial and industrial premises, institutions such as hospitals, or indeed any establishment requiring an effective access security solution. With the ability to cater for up to 512 doors and 40,000 cardholders, it is surprisingly one of the easiest systems to install and use.

Simplicity of use is one of Entro's most important qualities. Supporting a full range of card reading options, including Bewator's unique long range 'Hands-Free', proximity and magnetic stripe allows for free movement of authorised personnel into controlled areas whilst maintaining overall site security. All versions of Entro are backward compatible, leaving room for future systems expansion or upgrades.





# Bewator Entro Software

## Bewator Entro Software v.5

Can communicate via directly connected (COM), – or on local and global network (LAN/WAN) via TCP/IP, – or via modem based systems. Includes sophisticated event control- and search functions with graphical icons for door monitoring in addition to common tasks like card administration. Also includes alarm bypass control with alarm status feedback (ASF), anti-passback, roll call, interlock function, lift control and many other useful features.

An integrated web-based reservation function is also included in the software. It is ideal for reservation of and accessing conference rooms, sport facilities or clubs etc. Reservation can be done via the Internet or with use of the InfoPoint reservation terminal. The software also includes an open TCP/IP interface (BAPSI) to 3:rd party applications.



Product	Article Number
Bewator Entro Software v.5	31-815
Entro 5 S/W Incl IF1	31-821
Entro 5 Additional SW License	31-803

Technical data	
<b>PC System Requirements:</b>	Pentium 266MHz. 64 Mb RAM. At least 20 MB free space on disc. CD-ROM drive. VGA colour monitor. Local Area Network connection (Ethernet 10/100Mbit). Serial port for SR34i/modems. Parallell printerport. Windows 98/2000/XP.
<b>Requirements for modem:</b>	9600 baud on DTE. Autoanswer disabled. Ignore DTR. Local echo disabled.
<b>Recommendation for modem:</b>	Watchdog should be included. Will reset the modem if e.g. communication stops.
<b>Basic Network Requirements:</b>	Twisted-pair Ethernet 10/100 MBit. Static or dynamic (DHCP) IP-address for SR34i. Permanent/active Internet connection of SR34i (when Internet is used).

## TG-EM USB/TG-Cotag USB

### Enrolment reader Kit for EM or Cotag cards/tags.

This readerkit consists a PR500EM/PR500Cotag proximity reader, Desk stand and USB-RIF/2.

See the PR500EM and PR500Cotag under “Proximity Readers” for more technical information about the reader.

Product	Article Number
TG-EM USB	33-112
TG-Cotag USB	33-113



# Segment Controller

This is the vital part of the Bewator Entro access control system, which holds the processor and where the complete database including cardholder names is stored. This means that the PC does not have to be connected when the system has been installed, which makes the system less vulnerable and simplifies service and expansion of the system.

## SR34i

The SR34i is the controller used in Entro version 5. The SR34i Segment Controllers come in four different sizes, (4, 8, 16 or 32 doors) making it simple to optimise the system. Regardless of the size, up to 16 Segment Controllers can exist in the system.



Product	Article Number
SR34i/4	31-504
SR34i/8	31-508
SR34i/16	31-516
SR34i/32	31-532

Technical data	
<b>Interfaces:</b>	Built-in 2-port switches with two RJ45 10/100 Mbit connections for Ethernet. RS232 to PC, printer or modem. Max. 25 metres RS485 global – to other SR34i controllers. RS485 local – to door controllers. Expansion slot for memory card CF8 (compact flash).
<b>Housing:</b>	Plastic housing for wall mounting.
<b>Colour:</b>	White
<b>Environment:</b>	Indoor use only
<b>Temperature:</b>	0 to +50 °C
<b>Voltage:</b>	8 to 40 V DC, 8 to 30 V AC
<b>Current:</b>	100 mA
<b>Dimensions:</b>	248 (W) x 182 (H) x 66 (D) mm
<b>Door capacity:</b>	4 to 32

# Door Controllers & Compact Readers

The door centrals DC22 & DC 12 is used together with the SR34i to offer the best possible functionality in Entro version 5. Both DC22 and DC12 are designed with the installation process in mind, keeping it simple and easy to maintain. Each door central comes with a display to indicate the system status.

## DC22

Controls one door. Connects on the local RS485 bus to SR34i and fits together with any card reader like magnetic stripe, proximity, hands-free, keypads or 3:rd party readers. The DC22 also has features like relay outputs for Alarm control with ASF (Alarm Status Feedback) and can control an extra motorlock e.g. Day&Night function. Built in display for status and error information.

**Article Number:** 31-611

Technical data	
<b>Interfaces:</b>	RS485 connection to SR34i segment controller. Connection of readers via BC-link, Clock&Data or Wiegand.
<b>Housing:</b>	Wallmounted composite housing.
<b>Colour:</b>	White
<b>Environment:</b>	Indoor use only
<b>Temperature:</b>	-35 to +50 °C
<b>Voltage:</b>	8 to 40 V DC, 8 to 30 V AC
<b>Current:</b>	60 mA
<b>Dimensions:</b>	248 (W) x 182 (H) x 55 (D) mm
<b>Inputs:</b>	Exit button request with delay. Door contact for indicating closed/ open door. Lock status sensor for indicating locked/unlocked door. Alarm bypass activating from a button or a timer. Alarm Status Feedback (ASF). Indication of alarmstatus (red LED).
<b>Outputs:</b>	Voltage free change over contact (lock relay), max 2A, 30V. Voltage free closing contact (motorlock relay), max 2A, 30V. Voltage free change over contact (alarm bypass relay), max 2A, 30V. Voltage free closing contact (door held warning relay), max 2A, 30V. Voltage free closing contact (pre-warning relay), max 2A, 30V. Voltage free closing contact (alert relay), max 2A, 30V.



## DC12

Controls one door. Connects on the local RS485 bus to SR34i and fits together with any card reader like magnetic stripe, proximity, hands-free or keypads. It has a built in display for status and error information.

**Article Number:** 31-610

Technical data	
<b>Interfaces:</b>	RS48-5 connection to SR34i and segment controller. Connection of readers via BC-link, Clock&Data or Wiegand.
<b>Housing:</b>	Wallmounted composite housing.
<b>Colour:</b>	White
<b>Environment:</b>	Indoor use only.
<b>Temperature:</b>	-35 to +50 °C
<b>Voltage:</b>	8 to 40 V DC, 8 to 30 V AC
<b>Current:</b>	60 mA
<b>Dimensions:</b>	250 (W) x 182 (H) x 54 (D) mm
<b>Inputs:</b>	Exit button request with delay. Doorcontact for indicating closed/ open door. Tamper switch for internal control.
<b>Outputs:</b>	Voltage free relay contact, max 2A, 30V.



# Door Controllers & Compact Readers

## DCo1

### Door central

Unit for one door (without reader). Used for general control like timing functions or door monitoring.

**Article Number:** 31-603



#### Technical Data

<b>Interfaces:</b>	RS485 connection to SR34i segment controller.
<b>Housing:</b>	White plastic box.
<b>Colour:</b>	Light Grey
<b>Environment:</b>	Indoor use only.
<b>Temperature:</b>	-35 to 50 °C.
<b>Voltage:</b>	8 to 40 V DC or 8 to 30V AC
<b>Current:</b>	100 mA.
<b>Dimensions:</b>	120 (W) x 80 (H) x 40 (D) mm.
<b>Inputs:</b>	Exit button request with delay. Doorcontact for indicating closed/open door. Tamper switch for internal control.
<b>Outputs:</b>	Voltage free relay contact, max 2A, 30V.
<b>Opening time:</b>	1-99 secs programmable.

## DT05 Entro reader

A compact reader unit for Entro, which controls one door. It includes a drop box where communication and power are connected. All other cables are installed in the reader. DT05 is designed for both out- and indoor use and is available with Magnetic stripe, EM or Cotag technology.

Product	Article Number
DT05 magstripe	31-110
DT05 EM	31-113
DT05 Cotag	31-112



#### Technical data

<b>Interfaces:</b>	Connection to SR34i (via dropbox).
<b>Housing:</b>	Cast metal with stainless steel keys and security lock.
<b>Colour:</b>	Grey
<b>Environment:</b>	Indoor or outdoor use (IP54 design).
<b>Temperature:</b>	-35 to +50 °C
<b>Voltage:</b>	8 to 40 V DC. 8 to 30 V AC
<b>Current:</b>	100 mA
<b>Dimensions:</b>	110 (W) x 160 (H) x 47 (D) mm
<b>Inputs:</b>	Exit button request with delay. Door contact for indicating closed/open door. Tamper switch for internal control.
<b>Outputs:</b>	Voltage free change over contact (lockrelay), max 2 A, 30 V.

# IO Controllers

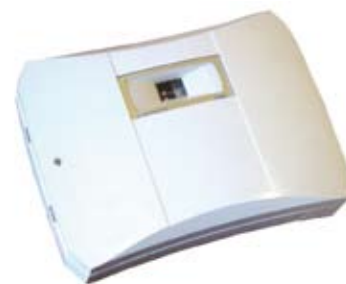
## IOR6

IOR6 is a general relay central for Entro. With 4 inputs and 6 outputs it is intended for use in lift control applications – or machine control/door control in reservation applications – or just as pure timer functions.

A maximum number of 32 units of IOR6 can be used for lift control – otherwise only restricted by addressing technique in Entro (maximum 512).

**Article Number:** 31-606

Technical data	
<b>Interfaces:</b>	RS485 connection to SR34i segment controller.
<b>Housing:</b>	Wallmounted housing with security lock.
<b>Colour:</b>	Light Grey
<b>Environment:</b>	Indoor use only.
<b>Temperature:</b>	-35 to +50 °C
<b>Voltage:</b>	8 to 40 V DC, 8 to 30 V AC
<b>Current:</b>	50 mA in standby, 200 mA with all relays activated.
<b>Dimensions:</b>	140 (W) x 200 (H) x 60 (D) mm
<b>Inputs:</b>	Four remote control inputs. Tamper switch for internal alarm.
<b>Outputs:</b>	Two voltage free change over relay contacts. max 0.9A. 60V (2 A. 30V). Four voltage free closing relay contacts. max 0.9A. 60V (2 A. 30V). Six extra outputs which works in parallel with above.





# Proximity Readers

There is a wide range of readers for the Entro system, which gives you the opportunity to choose the reader best suited for your needs. Proximity readers for instance, can read cards from 5 to 30 cm. The “close” proximity reader is the most common choice, with benefits such as simplicity, lower risk of manual interference and less wear-and-tear on the cards when compared to magnetic stripe cards readers.

Hands-free readers, when used in conjunction with Bewator’s Cotag active technology can read cards from a distance of up to 1 metre. The reader can also be installed inside a wall or behind a glass partition, making it highly resistant to vandalism or interference.

## PR500 – Mullion Proximity Reader

Compact, proximity reader for Bewator Entro or Bewator Entro Lite. It holds a read range of up to 30 cm with an active card and 10cm with an inactive card. Available with EM or Cotag reading technology.

Product	Article Number
PR500 Cotag	21-426
PR500EM	21-416

Technical data	
Housing:	ABS Base, Clip on ABS Front Cover.
Colour:	White
Environment:	Indoor or outdoor use.
Temperature:	-30 to +50 °C
Voltage:	10,6 to 32 V DC
Current:	100 mA
Dimensions:	40 (W) x 140 (H) x 18,5 (D) mm
Reading distance:	Up to 30 cm with active card. Up to 10 cm with passive card.



## HD500 – Heavy Duty Proximity Reader

Compact, proximity reader for Bewator Entro or Bewator Entro Lite. Designed for both modern office environments and vulnerable locations requiring increased protection. It has a vandal proof design, impact and fire resistant and with up to 30 cm read range. Available with EM or Cotag reading technology.

Product	Article Number
HD500 Cotag	21-418
HD500EM	21-419

Technical data	
Housing:	Polycarbonate case, fully encapsulated electronics, Stainless Steel outer frame.
Colour:	Black/Stainless Steel
Environment:	Indoor or outdoor use.
IP Rating:	65
Temperature:	-30 to +50 °C
Voltage:	10,6 to 32 V DC
Current:	100 mA
Dimensions:	100 (W) x 128 (H) x 18 (D) mm
Reading distance:	Up to 30 cm with active card. Up to 10 cm with passive card.



# Proximity Readers

## SP500 – Switch Plate Proximity Reader

Compact, proximity reader for Bewator Entro or Bewator Entro Lite. Mounted into most single gang back-boxes. Read range of up to 30 cm, and is available with EM or Cotag reading technology.

Product	Article Number
SP500 Cotag	21-424
SP500EM	21-422

Technical data	
Housing:	ABS Base with housing fully encapsulated electronics, Clip on ABS Front Cover.
Colour:	White
Environment:	Indoor or outdoor use.
Temperature:	-30 to +50 °C
Voltage:	10,6 to 32 V DC
Current:	100 mA
Dimensions:	86 (W) x 86 (H) x 14 (D) mm
Reading distance:	Up to 30 cm with active card. Up to 10 cm with passive card.



## PM500 – Panel Mount Proximity Reader

Compact, proximity reader for Bewator Entro or Bewator Entro Lite. High Performance Panel Mount Proximity Reader complete with onboard library of popular data interfaces for easy integration. Designed to fit most remote call point enclosures. Supplied complete with a custom machined perspex front panel for increased aesthetic appeal. It is suitable for both internal and external installations. Available with EM or Cotag reading technology.

Product	Article Number
PM500 Cotag	21-425
PM500EM	21-423

Technical data	
Housing:	High impact polycarbonate outer casing, fully potted electronics.
Colour:	Black
Environment:	Indoor or outdoor use.
Temperature:	-30 to +50 °C
Voltage:	10,6 to 32 V DC
Current:	100 mA
Dimensions:	68 (W) x 73 (H) x 13,5 (D) mm
Reading distance:	Up to 20 cm with active card. Up to 5 cm with passive card.



# Proximity Readers

## BC43 – Prox & PIN Reader

Proximity Reader with built-in keypad for Bewator Entro or Bewator Entro Lite. Built-in keypad offers the possibility of combined access control with both a card and a PIN for higher security. The metal casing used in Bewator's robust designs protects the reader against tampering and makes it extremely vandal-resistant.

Product	Article Number
BC43 Cotag	21-544
BC43 EM	21-545

Technical data	
<b>Housing:</b>	Zinc casting lacquered metallic paint finish with stainless steel keys and security lock.
<b>Colour:</b>	Grey
<b>Environment:</b>	Indoor or outdoor use.
<b>IP Rating:</b>	54
<b>Temperature:</b>	-35 to +50 °C
<b>Voltage:</b>	12 to 24 V DC. Powered from controller unit.
<b>Current:</b>	50 mA
<b>Dimensions:</b>	110 (W) x 160 (H) x 47 (D) mm
<b>Inputs:</b>	Tamper switch internal/external (normally closed).



# Proximity Readers – Codoor



*PD30EM Prox Codoor*



*PD40EM Prox Codoor*

## PD30EM and PD40EM – Prox Codoor

Prox Codoor is a system Prox reader for Bewator Entro with an integrated electro-mechanical lock. It is an "all-in-one-reader" and is an efficient way to protect any indoor security needs. Since the reader is mounted straight on to a standard Euro lock case, you do not have to make any unnecessary cuts in the door, besides for the cables for power and communication.

- PD30EM is suitable for lock cases with a distance of in between 105 mm and 116 mm between the centre of the door handle and the centre of the lock cylinder.
- PD40EM is suitable for lock cases with a distance of 72 mm between the centre of the door handle and the centre of the lock cylinder.

Product	Article number
PD30EM	31-116
PD40EM	31-140

Technical data	
Interfaces:	Bewator Entro systembus RS485.
Colour:	Stainless steel
Environment:	Indoors
Temperature:	0 to +50 °C
Voltage:	8 to 40 V DC, 8 – 30 V AC
Current:	100 mA
Dimensions:	PD30EM: 64 (W) x 250 (H) x 64 (D) mm. PD40EM: 70 (W) x 250 (H) x 60 (D) mm.
Supplied with:	Dropbox and 5 metre cable.

# Hands-free Readers

## HF500 – Hands-Free Reader

Hands-Free Reader for Bewator Entro or Bewator Entro Lite. Indoor use, reads through concrete, wood, glass etc but not metal.

**Article Number:** 21-400

Technical Data	
<b>Housing:</b>	White UV-resistant ABS-plastic.
<b>Environment:</b>	Indoor use only .
<b>Temperature:</b>	0 to 50 °C.
<b>Voltage:</b>	10 to 35 V DC
<b>Current:</b>	400 mA
<b>Dimensions:</b>	220 (W) x 265 (H) x 29.3 (D) mm
<b>Reading distance:</b>	Appr. 1m with IB928 (active card). Appr. 15 cm with IB938 (passive card).



## BC5511 – Split Mounted Hands-Free Reader

Hands-free reader for Bewator Entro or Bewator Entro Lite. Consists of readerinterface BC5311 (indoor) and reader head HF100 (outdoor). Reads through concrete, wood, glass etc but not metal.

**Article Number:** 21-401

Technical Data	
<b>Housing:</b>	White UV-resistant ABS-plastic.
<b>Environment:</b>	Indoor for BC5311, dry environment. Outdoor for HF100.
<b>Temperature:</b>	-40 to +70 °C. (HF100). 0° to +50°C (BC5311).
<b>Voltage:</b>	10 to 35 V DC
<b>Current:</b>	400 mA (max)
<b>Dimensions:</b>	BC5311: 110 (W) x 195 (H) x 40 (D) mm HF100: 220 (W) x 265 (H) x 30 (D) mm
<b>Reading distance:</b>	Appr. 1 m with IB928 (active card). Appr. 30 cm with IB968 (passive card).





# Hands-Free Loop Technology Readers

## BC5270 – Loop Reader

Integrated Loop Reader offering both Loop Coupler and Reader electronics inside one convenient enclosure. Up to 4 metre reading zone with Active Technology Tags. Uses simple wire loop antenna. Compatible with all Cotag Technology Active and Passive cards & tags.

Reads through all non-metallic materials. Easy to install complete Loop Reader. Flexible, easy configuration, compatible with most OEM access control systems. Compact size, drives a loop antenna directly. Tunes transmit loop, matches loop impedance to line. Transmit range adjustment.

**Article Number:** 52-504

Technical Data	
Colour:	Light Grey
IP Rating:	54
Temperature:	0 to 50 °C
Voltage:	12 V DC (+25% -10%) – Linear design only.
Current:	350
Dimensions:	110 (W) x 195 (H) x 70 (D) mm
Weight:	0,5 kg
Reading distance:	4m reading zone with active technology tags.



## BC5516 – Split Mounted Loop Reader

Loop Reader Pack consisting of a 270 Loop Coupler and a 5311 Reader Interface.

The 270 Loop Coupler allows simple wire loop antennas to be used for applications such as access loops around doors and roadway loops for vehicle (AVI) systems. Use in conjunction with Bewator Granta systems & Reader Interfaces.

Transmit range adjustment. Easy monitoring of TX & RX status via onboard LEDs.

The 5311 Reader interface allows Cotag Technology Reading Heads to integrate into non Cotag systems, typically Access Control and other similar applications. Popular data interfaces ensure easy integration with most host systems.

**Article Number:** 21-403

Technical Data	
Housing:	Grey UV-resistant ABS-plastic.
Temperature:	-40 to +70 °C (BC270). 0° to +50° C (BC5311).
Voltage:	10 to 35 V DC.
Current:	400 mA (max).
Dimensions:	BC270: 160 (W) x 80 (H) x 56 (D) mm. BC5311: 110 (W) x 195 (H) x 40 (D) mm.



# Magnetic Stripe Readers & Keypads

Bewator offers the broadest range of card readers, keypads, and cards on the market with the ability to satisfy most needs and environments. They are robust, durable and are suitable for all environments, either through flush or single-surface mounting.

## BC18 – Magstripe Reader

Magstripe Card-only reader for use with Bewator Entro or Bewator Entro Lite.

**Article Number:** 21-147

### Technical Data

Connect to multibox – if both indoor and outdoor readers are to be used.

**Interfaces:** Connects to Entro door controller (Clock/data) or to Bewacard BC640.

**Housing:** Cast metal with integrated 3 metre cable.

**Environment:** Indoor or outdoor use (with heating unit VS18). In very exposed locations, use SH1 protective cover.

**Temperature:** -10 to +55 °C. (-20 heating unit VS18 installed).

**Voltage:** 5 V DC

**Current:** 40 mA.

**Dimensions:** 29 (W) x 124 (H) x 28 (D) mm



## BC43 – Magstripe reader with keypad

BC43 is a Card+PIN reader for Bewator Entro or Bewator Entro Lite. Two units can be installed for indoor/outdoor use. The Keypad is equipped with background illumination and for flush mounting use the BB4 flush mounting unit.

**Article Number:** 21-543

### Technical data

**Housing:** Zinc casting lacquered metallic paint finish with stainless steel keys and security lock.

**Environment:** Indoor or outdoor use.

**IP Rating:** 54

**Temperature:** -35 to +50 °C

**Voltage:** 12 to 24 V DC. Powered from controller unit.

**Current:** 50 mA

**Dimensions:** 110 (W) x 160 (H) x 47 (D) mm

**Inputs:** Tamper switch internal/external (normally closed).



## M43 Keypad

The M43 for Entro is used in mainly two situations:

- If you only require the group code level in the system.
- Where you want to add a PIN code function to an existing Hands-Free reader like HF500.

**Article Number:** 31-115

### Technical data

**Housing:** Cast metal with stainless steel keys and security lock.

**Environment:** Indoor or outdoor use (IP54 design). In very exposed locations, use SH2 or SH1 rain cover.

**Temperature:** -35 to +50 °C

**Voltage:** 12 to 24 V DC, Powered from controller.

**Current:** 50 mA

**Dimensions:** 80 (W) x 140 (H) x 40 (D) mm

**Inputs:** Tamper switch for internal alarm.



*For flush mounting – use BB3 flush mounting unit. See page 64*

# Smartcard Readers

## SC500 – Smart Card Reader

Smart Card Reader. The SC500 is a smart card reader with small dimensions. The reader has a tight plastic enclosure, which makes the installation and location simple in various environments. The SC500 reads data from Mifare® cards, and can be used with either a Granta or an Entro system. The default configuration reads the chip serial number from Mifare® cards and provides a Wiegand output.

**Article Number:** 50-249

### Technical Data

The carrier frequency is 13.56 Mhz.

**Interfaces:** Wiegand, Clock&Data.

**Housing:** Plastic

**Colour:** White

**Environment:** Indoor or outdoor use.

**IP Rating:** 67

**Temperature:** -40 to +55 °C

**Voltage:** +10 to +30 VDC

**Current:** 130 (max) mA

**Dimensions:** 44 (W) x 110 (H) x 24 (D) mm

**Reading distance:** 70 mm, supports Mifare® standard transponders and multi-application transponders.

**Connection:** Supplied with a prepared fixed 3 m cable mounting.

**Indicators:** Tri-colour LED



## SC500P – Smart Card and PIN Reader

Smart Card Reader with PINpad. The SC500P is a smart card reader with small dimensions. It has an integrated keypad for entering a PIN-code. The reader has a tight plastic enclosure, which makes the installation and location simple in various environments. The SC500P reads data from Mifare® cards, and can be used with either a Granta or an Entro system. The default configuration reads the chip serial number from Mifare® cards and provides a clock & data output.

**Article Number:** 50-250

### Technical Data

The carrier frequency is 13.56 Mhz.

**Interfaces:** Wiegand, Clock&Data.

**Housing:** Plastic

**Colour:** White

**Environment:** Indoor or outdoor use.

**IP Rating:** 67

**Temperature:** -40 to +55 °C.

**Voltage:** +10 to +30 VDC

**Current:** 200 (max) mA

**Dimensions:** 44 (W) x 110 (H) x 24 (D) mm.

**Reading distance:** 70 mm, supports Mifare® standard transponders and multi-application transponders.

**Connection:** Supplied with a prepared fixed 3 m cable mounting.

**Indicators:** Tri-colour LED.



# Reservation Terminal

One of the reasons for Entro being so popular is because the system is so versatile and includes functions such as reservation of and access to specified areas. The InfoPoint is an ideal product to make it easy for users to do reservations in a Bewator Entro reservation system. It can work in parallel with standard web browser functionality. You can mount the InfoPoint nearby the object, which can allow for the users to view and edit their reservations. The card identity of the User is sent to the Entro system and a valid card enables log in to the systems and presents information on the screen.

## InfoPoint

InfoPoint is used as a reservation terminal for Bewator Entro and has an integrated function to send and receive information from/to the SR34i Segment Controller (acting as a web server). The InfoPoint uses TCP/IP and works similar to a web browser in a PC. Supplied with a wall mount kit and a power supply cable (with free end and a RJ45 type of connector). The terminal includes a colour screen and keys for navigating as well as a numeric keypad, which is mainly for use of the “free time” reservation function. InfoPoint also has a proximity reader to identify the person who wants to use the unit. This model either has a reader for Cotag or EM reading technology. There is two models IP810 with the numeric keypad and IP811 without the numeric keypad.



Product	Article Number	Description
IP810 Cotag	31-811	With numeric keypad
IP810 EM	31-810	With numeric keypad
IP811 Cotag	31-818	
IP811 EM	31-817	
BB7	31-809	Flush mounting unit for InfoPoint reservation terminal.

Technical data	
Interfaces:	Standard TCP/IP LAN connection, 10BaseT connector. Type RJ45.
Housing:	Robust housing in aluminium and composite and a strong polycarbonate film is covering the TFT-screen. Use the BB7 flush mounting unit when flush mounting the InfoPoint.
Environment:	Indoor use only
Temperature:	5 to 40 °C
Voltage:	12 to 35 V AC/DC
Current:	350 mA
Dimensions:	350 (W) x 154 (H) x 52 (D) mm
Screen:	Colour TFT screen with the resolution 400 x 240 and 256 colours.

## CF8

### Memory card for SR34i

Memory card for the Web based Reservation feature in Entro. An accessory to be mounted in Segment Controllers. Shipped configured for reservation functions in Bewator Entro 5.0 or higher.

**Article Number:** 31-760



# Cards, Keyring tags & Accessories

## Cards & Tags – Cotag

IB-928	50-527	Active Clamshell encoded card.
IB-911	50-528	Active encoded keyring tag.
IB-970	15-118	Active encoded vehicle tag (attaches to underside of vehicle).
IB-968	15-119	Passive encoded clamshell card.
IB-961	15-120	Passive encoded keyring tag.
IB-958M	50-529	Passive encoded ISO laminated card with magstripe, suitable for Photo ID.
IB-928	51-702-06	Active encoded coloured clamshell card, available in Blue, Clear, Purple, Red or Green.

## Cards & Tags – EM

Product	Article Number	Description
IB41	15-401	Passive proximity card for EM4102. Completed with Bewator print and magnetic stripe for use also in conventional readers.
IB42	15-402	Passive proximity card for EM4102. Completed with magnetic stripe for use also in conventional readers.
IB44	15-411	Key tag with EM technology. Used for cardreaders with EM4102 reading technology.
IB45	15-414	Adhesive key tag with EM technology. For use on existing mag.stripe cards. Used for cardreaders with EM4102 reading technology.

## Cards – Magstripe

Product	Article Number	Description
IB1-100	15-101	Cards (100 package). Bewator magnetic cards.

## Cards – Mifare

Product	Article Number	Description
SC558	53-100	Contactless Mifare Smart Card.

For a full description of Bewator's Cards & Tags and Read Ranges please see page 51.

## Accessories

Product	Article Number	Description
SH-1	22-412	Cardreader cover
BB4	22-418	Flush mount Kit swipe for BC610, BC615, BC43, DT05
BB4	22-420	Flush mounting Kit prox for BC610, BC615, BC43, DT05
SH-4	22-513	Rain-cover for cardreaders
Modem	55-123	Modem-du-hst-en dial-up modem PC end (Entro)
Modem	55-124	Modem-du-rem-en dial-up modem, remote (Entro)
USB-RIF/2	33-111	USB-RIF (USB interface)
IF1	31-701	Junction box and cable for easy connection of PC (or printer) to SR34i
B125	55-112	12V 6 Amp hour sealed lead acid battery for BA212
BA212	55-114	Battery backed power supply (battery not included)

For the full range of accessories please see page 63.



# Bewator Entro Lite



Imagine a cost effective access control system for small businesses that only have a few doors to control but still require a high level of security.

Envisage a system that can be customized for any needs that your business may have, and easily be expanded as your business grows.

Bewator Entro Lite can easily be upgraded to Bewator Entro – one of the best selling access control systems on the market. Of course the same hardware is upgradeable to Bewator Entro.

Now you understand Bewator Entro Lite!



**BEWATOR**

A Siemens Business

## BEWATOR ENTRO LITE



*The access system Bewator Entro Lite is a cost efficient solution for those who only have a few doors to control but who still want to feel safe with a high level of security.*

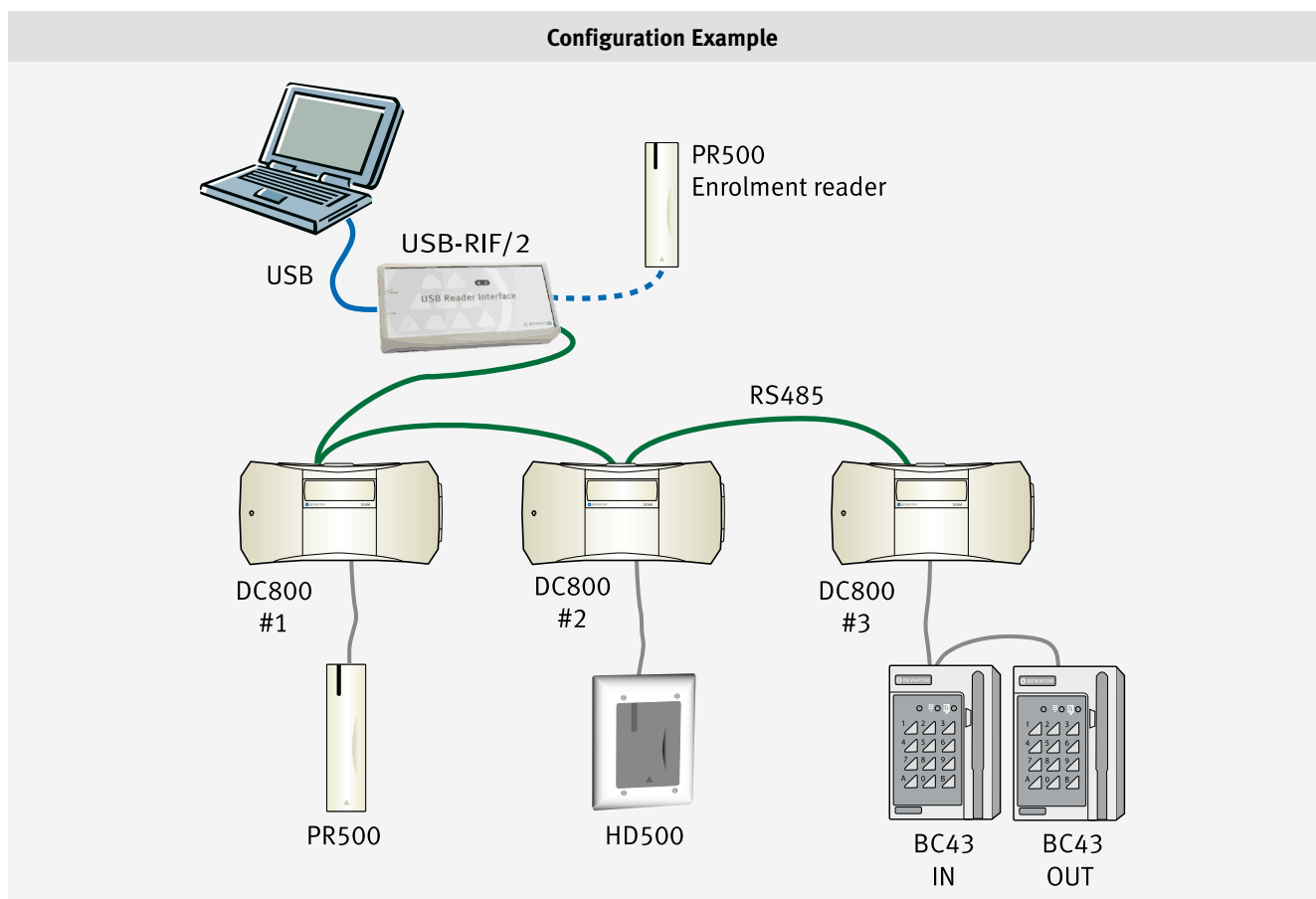
*Entro Lite can be installed with one door to start with and can then be expanded with more doors when needed. The possibility of adding more doors as you go along makes the system flexible and cost efficient. At the same time Entro Lite has many important features and is as user-friendly and functional as the larger access control system Bewator Entro, even with just one door installed.*

# System Introduction

## Entro Lite

Entro Lite is an access control system that has been developed with focus on the end user. Programming and administration can be done simple via a keypad in standalone mode or via the Window based Entro Lite software. Adding new cards, setting access levels or blocking lost cards is quickly and easily achieved.

Entro Lite suits apartment buildings where there is a need to get away from the problems of lost keys and pin-codes circulating as well as giving the tenants easy and secure access to the building. With Entro Lite it is easy to give time-limited access to temporary staff or to make any other adjustments.



# Door controller

## DC800

### Door controller for one door

Programmable via integrated keypad or from a PC with the Entro Lite SW, but it can also work as a door controller in a larger Entro system.

Includes functions like calendar clock, event buffering, door monitoring, anti-pass-back, bank lobby function.

Very easy to upgrade to a multi-door solution by using the Entro Lite software together with the USB-RIF/2 interface converter.

The DC800 is also a good alternative when a split mounted code lock is required because it includes a calendar clock (no timers needed). Just install a M43 keypad outside and/or inside the door.

Two readers or keypads can be connected if they have the BCLINK interface. The extra relay can be used for Warning function, Alert (incl tamper), Alarm bypass or Duress (when Card+PIN). Interfaces: Connects to reader via BCLINK, Clock&Data or Wiegand (26bit, 32bit, 8bit burst). RS485 for system communication



**Article Number:** 31-620

Technical Data	
<b>Housing:</b>	Wallmounted housing with lock.
<b>Colour:</b>	White
<b>Environment:</b>	Indoor
<b>Temperature:</b>	-35 to +50 °C. 0 to 90% relative humidity.
<b>Voltage:</b>	10 to 40 V DC, 8–28 VAC.
<b>Current:</b>	200 mA (24V DC). Reader exclusive.
<b>Dimensions:</b>	250 (W) x 128 (H) x 54 (D) mm.
<b>Door Capacity:</b>	1
<b>Code capacity:</b>	10
<b>Card capacity:</b>	1000
<b>Time Schedules:</b>	10 (using up to eight time zones).
<b>Time Zones:</b>	80
<b>Event log:</b>	1000
<b>Inputs:</b>	Door contact for indicating closed/open door. Exit button request with delay.
<b>Outputs:</b>	Voltage-free change over contact (lock relay), max. 2A, 30 VDC. Voltage-free change over contact (extra relay) max. 2A, 30 VDC.

# Entro Lite

## Entro Lite SW

### PC Software + USB-RIF/2 converter

Software for control of up to eight DC800 door controllers.

Nine languages included as standard.

Includes also an interface unit USB-RIF/2 for converting the RS485 communication bus to USB (in PC). See the product USB-RIF/2 for more information about the converter.

The software is of the type “one-window” with both events and programming menus displayed at the same time. It includes visual symbols of doors for quick check of door status.

The USB-RIF/2 allows for enrolment functions at PC – just connect a proximity reader (like PR500) to the unit. (See the products TG Prox Cotag or TG Prox EM).

**Article Number:** 31-622

Technical Data	
	The DC800 controller are connected via a RS485 bus. When PC is online all information is sent/received from the controllers. The database can also be downloaded to each DC800 on demand.
<b>Door Capacity:</b>	8
<b>Code capacity:</b>	8
<b>Card capacity:</b>	1000
<b>Time Schedules:</b>	10 + one 24 hours a day.
<b>Time Zones:</b>	2 time interval per day + one interval (in each time schedule) for half days.
<b>Security Levels:</b>	Unlocked, Group code, Card only, Card+PIN, Door locked plus Toggle.
<b>PC System Requirements:</b>	USB port for connection of the access control system. CD drive. Printer port (parallel). Windows XP or Windows 2000.
<b>Opening time:</b>	1–99 seconds.
<b>Door held warning time:</b>	1–99 seconds.



## TG Prox EM/ TG Prox Cotag

### Enrolment reader Kit for EM/Cotag cards and tags

This readerkit consists of a PR500EM/PR500 proximity reader and a Desk stand. Connects to the USB-RIF/2.

See page 14 for more technical information about the PR500EM.

Product	Article Number
TG Prox EM	33-108
TG Prox Cotag	33-109





# Entro Lite – Readers

There is a wide range of readers for the Entro system, which gives you the opportunity to choose the best reader for your needs. Proximity readers for instance, can read cards from 5 to 30 cm. The “close” proximity reader is the most common choice, with benefits such as simplicity, lower risk of unwanted reads.

Hands-free readers, when used in conjunction with Bewator’s Cotag active technology can read cards from a distance of up to 1 metre. The reader can also be installed inside a wall or behind a glass partition, making it highly resistant to vandalism or interference.

## PR500 – Mullion Proximity Reader

Compact, proximity reader for Bewator Entro or Bewator Entro Lite. It holds a read range of up to 30cm with an active card and 10cm with an inactive card. Available with EM or Cotag reading technology.

Product	Article Number
PR500 Cotag	21-426
PR500EM	21-416

Technical data	
Housing:	ABS Base, Clip on ABS Front Cover.
Colour:	White
Environment:	Indoor or outdoor use.
Temperature:	-30 to +50 °C
Voltage:	10,6 to 32 V DC
Current:	100 mA
Dimensions:	40 (W) x 140 (H) x 18,5 (D) mm
Reading distance:	Up to 30 cm with active card. Up to 10 cm with passive card.



## HD500 – Heavy Duty Proximity Reader

Compact, proximity reader for Bewator Entro or Bewator Entro Lite. Designed for both modern office environments and vulnerable locations requiring increased protection. It has a vandal proof design, impact and fire resistant and with up to 30 cm read range. Available with EM or Cotag reading technology.

Product	Article Number
HD500 Cotag	21-418
HD500EM	21-419

Technical data	
Housing:	Polycarbonate case, fully encapsulated electronics, Stainless Steel outer frame.
Colour:	Black/Stainless Steel
Environment:	Indoor or outdoor use.
IP Rating:	65
Temperature:	-30 to +50 °C
Voltage:	10,6 to 32 V DC
Current:	100 mA
Dimensions:	100 (W) x 128 (H) x 18 (D) mm
Reading distance:	Up to 30 cm with active card. Up to 10 cm with passive card.



# Proximity Readers

## SP500 – Switch Plate Proximity Reader

Compact, proximity reader for Bewator Entro or Bewator Entro Lite. Mounted into most single gang back-boxes. Read range of up to 30 cm, and is available with EM or Cotag reading technology.

Product	Article Number
SP500 Cotag	21-424
SP500EM	21-422

Technical data	
<b>Housing:</b>	ABS Base with housing fully encapsulated electronics, Clip on ABS Front Cover.
<b>Colour:</b>	White
<b>Environment:</b>	Indoor or outdoor use.
<b>Temperature:</b>	-30 to +50 °C
<b>Voltage:</b>	10,6 to 32 V DC
<b>Current:</b>	100 mA
<b>Dimensions:</b>	86 (W) x 86 (H) x 14 (D) mm
<b>Reading distance:</b>	Up to 30 cm with active card. Up to 10 cm with passive card.



## PM500 – Panel Mount Proximity Reader

Compact, proximity reader for Bewator Entro or Bewator Entro Lite. High Performance Panel Mount Proximity Reader complete with onboard library of popular data interfaces for easy integration. Designed to fit most remote call point enclosures. Supplied complete with a custom machined perspex front panel for increased aesthetic appeal. It is suitable for both internal and external installations. Available with EM or Cotag reading technology.

Product	Article Number
PM500 Cotag	21-425
PM500EM	21-423

Technical data	
<b>Housing:</b>	High impact polycarbonate outer casing, fully potted electronics.
<b>Colour:</b>	Black
<b>Environment:</b>	Indoor or outdoor use.
<b>Temperature:</b>	-30 to +50 °C
<b>Voltage:</b>	10,6 to 32 V DC
<b>Current:</b>	100 mA
<b>Dimensions:</b>	68 (W) x 73 (H) x 13,5 (D) mm
<b>Reading distance:</b>	Up to 20 cm with active card. Up to 5 cm with passive card.



# Proximity Readers

## BC43 – Prox & PIN Reader

Proximity Reader with built-in keypad for Bewator Entro or Bewator Entro Lite. Built-in keypad offers the possibility of combined access control with both a card and a PIN for higher security. The metal casing used in Bewator's robust designs protects the reader against tampering and makes it extremely vandal-resistant.

Product	Article Number
BC43 Cotag	21-544
BC43 EM	21-545

Technical data	
Housing:	Zinc casting lacquered metallic paint finish with stainless steel keys and security lock.
Colour:	Grey
Environment:	Indoor or outdoor use.
IP Rating:	54
Temperature:	-35 to +50 °C
Voltage:	12 to 24 V DC. Powered from controller unit.
Current:	50 mA
Dimensions:	110 (W) x 160 (H) x 47 (D) mm
Inputs:	Tamper switch internal/external (normally closed).



# Hands-free Readers

## HF500 – Hands-Free Reader

Hands-Free Reader for Bewator Entro or Bewator Entro Lite. Indoor use, reads through concrete, wood, glass etc but not metal.

**Article Number:** 21-400

Technical Data	
<b>Housing:</b>	White UV-resistant ABS-plastic.
<b>Environment:</b>	Indoor use only.
<b>Temperature:</b>	0 to 50 °C.
<b>Voltage:</b>	10 to 35 V DC
<b>Current:</b>	400 mA.
<b>Dimensions:</b>	220 (W) x 265 (H) x 29.3 (D) mm
<b>Reading distance:</b>	Appr. 1m with IB928 (active card). Appr. 15 cm with IB938 (passive card).



## BC5511 – Split Mounted Hands-Free Reader

Hands-free reader for Bewator Entro or Bewator Entro Lite. Consists of reader interface BC5311 (indoor) and reader head HF100 (outdoor). Reads through concrete, wood, glass etc but not metal.

**Article Number:** 21-401

Technical Data	
<b>Housing:</b>	White UV-resistant ABS-plastic.
<b>Environment:</b>	Indoor for BC5311, dry environment. Outdoor for HF100.
<b>Temperature:</b>	-40 to +70 °C. (HF100). 0° to +50°C (BC5311).
<b>Voltage:</b>	10 to 35 V DC
<b>Current:</b>	400 mA (max)
<b>Dimensions:</b>	BC5311: 110 (W) x 195 (H) x 40 (D) mm. HF100: 220 (W) x 265 (H) x 30 (D) mm.
<b>Reading distance:</b>	Appr. 1 m with IB928 (active card). Appr. 30 cm with IB968 (passive card).



# Hands-Free Loop Technology Readers

## BC5270 – Loop Reader

Integrated Loop Reader offering both Loop Coupler and Reader electronics inside one convenient enclosure. Up to 4 metre reading zone with Active Technology Tags. Uses simple wire loop antenna. Compatible with all Cotag Technology Active and Passive cards & tags.

Reads through all non-metallic materials. Easy to install complete Loop Reader. Flexible, easy configuration, compatible with most OEM access control systems. Compact size, drives a loop antenna directly. Tunes transmit loop, matches loop impedance to line. Transmit range adjustment.

**Article Number:** 52-504

Technical Data	
Colour:	Light Grey
IP Rating:	54
Temperature:	0 to 50 °C
Voltage:	12 V DC (+25% -10%) – Linear design only.
Current:	350
Dimensions:	110 (W) x 195 (H) x 70 (D) mm
Weight:	0,5 kg
Reading distance:	4m reading zone with active technology tags.



## BC5516 – Split Mounted Loop Reader

Loop Reader Pack consisting of a 270 Loop Coupler and a 5311 Reader Interface.

The 270 Loop Coupler allows simple wire loop antennas to be used for applications such as access loops around doors and roadway loops for vehicle (AVI) systems. Use in conjunction with Bewator Granta systems & Reader Interfaces.

Transmit range adjustment. Easy monitoring of TX & RX status via onboard LEDs.

The 5311 Reader interface allows Cotag Technology Reading Heads to integrate into non Cotag systems, typically Access Control and other similar applications. Popular data interfaces ensure easy integration with most host systems.

**Article Number:** 21-403

Technical Data	
Housing:	Grey UV-resistant ABS-plastic.
Temperature:	-40 to +70 °C (BC270). 0° to +50° C (BC5311).
Voltage:	10 to 35 V DC.
Current:	400 mA (max)
Dimensions:	BC270: 160 (W) x 80 (H) x 56 (D) mm. BC5311: 110 (W) x 195 (H) x 40 (D) mm.



# Magnetic Stripe Readers & Keypads

Bewator offers the broadest range of card readers, keypads, and cards on the market with the ability to satisfy most needs and environments. They are robust and resistant and are suitable for all environments, either through flush or single-surface mounting.

## BC18 – Magstripe Reader

Magstripe Card-only reader for use with Bewator Entro or Bewator Entro Lite.

**Article Number:** 21-147

### Technical Data

Connect to multibox – if both indoor and outdoor readers are to be used.

**Interfaces:** Connects to Entro door controller (Clock/data) or to Bewacard BC640.

**Housing:** Cast metal with integrated 3 metre cable.

**Environment:** Indoor or outdoor use (with heating unit VS18). In very exposed locations, use SH1 protective cover.

**Temperature:** -10 to +55 °C. (-20 heating unit VS18 installed).

**Voltage:** 5 V DC

**Current:** 40 mA.

**Dimensions:** 29 (W) x 124 (H) x 28 (D) mm



## BC43 – Magstripe reader with keypad

BC43 is a Card+PIN reader for Bewator Entro or Bewator Entro Lite. Two units can be installed for indoor/outdoor use. The Keypad is equipped with background illumination and for flush mounting use the BB4 flush mounting unit.

**Article Number:** 21-543

### Technical data

**Housing:** Zinc casting lacquered metallic paint finish with stainless steel keys and security lock.

**Environment:** Indoor or outdoor use.

**IP Rating:** 54

**Temperature:** -35 to +50 °C

**Voltage:** 12 to 24 V DC. Powered from controller unit.

**Current:** 50 mA

**Dimensions:** 110 (W) x 160 (H) x 47 (D) mm

**Inputs:** Tamper switch internal/external (normally closed).



# Smartcard Readers

## SC500 – Smart Card Reader

Smart Card Reader. The SC500 is a smart card reader with small dimensions. The reader has a tight plastic enclosure, which makes the installation and location simple in various environments. The SC500 reads data from Mifare® cards, and can be used with either a Granta or an Entro system. The default configuration reads the chip serial number from Mifare® cards and provides a Wiegand output.

**Article Number:** 50-249

### Technical Data

The carrier frequency is 13.56 Mhz.

**Interfaces:** Wiegand, Clock&Data.

**Housing:** Plastic

**Colour:** White

**Environment:** Indoor or outdoor use.

**IP Rating:** 67

**Temperature:** -40 to +55 °C

**Voltage:** +10 to +30 VDC

**Current:** 130 (max) mA

**Dimensions:** 44 (W) x 110 (H) x 24 (D) mm

**Reading distance:** 70 mm, supports Mifare® standard transponders and multi-application transponders.

**Connection:** Supplied with a prepared fixed 3 m cable mounting.

**Indicators:** Tri-colour LED.



## SC500P – Smart Card and PIN Reader

Smart Card Reader with PINpad. The SC500P is a smart card reader with small dimensions. It has an integrated keypad for entering a PIN-code. The reader has a tight plastic enclosure, which makes the installation and location simple in various environments. The SC500P reads data from Mifare® cards, and can be used with either a Granta or an Entro system. The default configuration reads the chip serial number from Mifare® cards and provides a clock & data output.

**Article Number:** 50-250

### Technical Data

The carrier frequency is 13.56 Mhz.

**Interfaces:** Wiegand, Clock&Data

**Housing:** Plastic

**Colour:** White

**Environment:** Indoor or outdoor use.

**IP Rating:** 67

**Temperature:** -40 to +55 °C.

**Voltage:** +10 to +30 VDC.

**Current:** 200 (max) mA.

**Dimensions:** 44 (W) x 110 (H) x 24 (D) mm

**Reading distance:** 70 mm, supports Mifare® standard transponders and multi-application transponders.

**Connection:** Supplied with a prepared fixed 3 m cable mounting.

**Indicators:** Tri-colour LED.





# Cards, Keyring tags & Accessories

## Cards & Tags – Cotag

IB-928	50-527	Active Clamshell encoded card.
IB-911	50-528	Active encoded keyring tag.
IB-970	15-118	Active encoded vehicle tag (attaches to underside of vehicle).
IB-968	15-119	Passive encoded clamshell card.
IB-961	15-120	Passive encoded keyring tag.
IB-958M	50-529	Passive encoded ISO laminated card with magstripe, suitable for Photo ID.
IB-928	51-702-06	Active encoded coloured clamshell card, available in Blue, Clear, Purple, Red or Green.

## Cards & Tags – EM

Product	Article Number	Description
IB41	15-401	Passive proximity card for EM4102. Completed with Bewator print and magnetic stripe for use also in conventional readers.
IB42	15-402	Passive proximity card for EM4102. Completed with magnetic stripe for use also in conventional readers.
IB44	15-411	Key tag with EM technology. Used for cardreaders with EM4102 reading technology.
IB45	15-414	Adhesive key tag with EM technology. For use on existing mag.stripe cards. Used for cardreaders with EM4102 reading technology.

## Cards – Magstripe

Product	Article Number	Description
IB1-100	15-101	Cards (100 package). Bewator magnetic cards.

## Cards – Mifare

Product	Article Number	Description
SC558	53-100	Contactless Mifare Smart Card.

For the full range of cards and tags please see page 51.

## Accessories

Product	Article Number	Description
CR1	21-024	Reader Interface for BC-615 Compact Cardreader when being networked with Bewator Entro (One per Reader)
BB4	22-418	Flush mount Kit swipe for BC610, BC615, BC43, DT05
BB6	22-419	Flush mounting kit for the PR500 Reader models
BB4	22-513	Flush mount kit for BC615, BC43, DT05
SH4	22-513	Rain-cover for cardreaders
SH1	55-114	Rain-cover for cardreaders

For the full range of accessories please see page 63.

## COMPACT CARDREADERS



*Bewator Access Control Systems provide a secure method of protecting doors, whilst causing as little restriction as possible on freedom of movement. As part of this 'free-flowing' security, Bewator has produced a range of Compact Cardreaders. These are available in two different technologies, Magnetic Stripe or Proximity. Bewator's Compact Cardreaders are easy to install and provide a high level of security whilst maximizing freedom of movement within a business environment.*

- Effective security whilst allowing freedom of movement
- Choose from Magnetic Stripe or Proximity technology
- Combined PIN number and card provides greater security and user flexibility
- Tough high quality robust construction

# Compact Cardreaders

**Product:****BC615****General Description:**

Compact, magnetic card reader for one door. Programmable from the keypad. Can also be used in Bewator Entro. Built-in time clock for easy change of security levels. Access registration and printing. Indoor or outdoor use. Keypad background illumination. Blocked after three wrong codes. For flush mounting – use BB4 flush mounting unit.

**BC615Prox**

Compact proximity reader for one door. Programmable from the keypad. Can also be used in Bewator Entro. Built-in time clock for easy change of security levels. Access registration and printing. Keypad background illumination. Blocked after three wrong codes. Indoor or outdoor use. For flush mounting – use BB4Prox flush mounting unit.

**BC615EM**

Compact proximity reader for one door. Uses the EM4102 reading technology. Programmable from the keypad. Can also be used in Bewator Entro. Built-in time clock for easy change of security levels. Access registration and printing. Blocked after three wrong codes. Indoor or outdoor use. Keypad background illumination. For flush mounting – use BB4Prox flush mounting unit.

**Article Number:**

21-615

21-615

21-619

**Technical Data**

<b>Interfaces:</b>	RS-232 (Printer or system).	RS-232 (Printer or system).	RS-232 (Printer or system).
<b>Housing:</b>	Cast metal with stainless steel keys and security lock.	Cast metal with stainless steel keys and security lock.	9600 bps, no parity, 8 bits, 1 startbit, 1 stopbit.
<b>Colour:</b>	Grey	Grey	Grey
<b>Environment:</b>	Indoor or outdoor use (IP54 design). In very exposed locations, use SH4 or SH1 rain cover.	Indoor or outdoor use (IP54 design). In very exposed locations, use SH4 or SH1 rain cover.	Indoor or outdoor use (IP54 design). In very exposed locations, use SH4 or SH1 rain cover.
<b>IP Rating:</b>	54	54	54
<b>Temperature:</b>	-35 to +50 °C. At 90 % relative air humidity.	-30 to +50 at 90 % relative air humidity.	-30 to +50 °C. At 90% relative air humidity.
<b>Voltage:</b>	12 to 24 V AC/DC	12 to 24 V AC/DC	12 to 24 V AC/DC
<b>Current:</b>	70 mA	120 mA	120 mA
<b>Dimensions:</b>	110 (W) x 160 (H) x 47 (D) mm	110 (W) x 160 (H) x 47 (D) mm	110 (W) x 160 (H) x 47 (D) mm
<b>Card capacity:</b>	1000	1000	1000
<b>Time Schedules:</b>	15 (with each up to four timezones).	15 (with each up to four timezones).	15 (with each up to four timezones).
<b>Time Zones:</b>	15	15	15
<b>Reading distance:</b>	N/A	Passive cards: approx. 3 cm.	Passive cards: approx. 3 cm.
<b>Inputs:</b>	Exit button request with delay. Door monitoring. Red LED external control (galvanic insulation), max 12–30 V DC.	Exit button request with delay. Door monitoring. Red LED external control (galvanic insulation), max 12–30 V DC.	Exit button request with delay. Door monitoring. Red LED external control (galvanic insulation), max 12–30 V DC.
<b>Outputs:</b>	Voltage free relay contacts, max 2A, 30 V DC. Open collector for alarm/duress, max 0.5A, 30 V DC. Open collector for door alarm max 0.5A, 30 V DC. Tamper switch internal/external (normally closed), max 1A, 30 V DC.	Voltage free relay contacts, max 2A, 30 V DC. Open collector for alarm/duress, max 0.5A, 30 V DC. Open collector for door alarm max 0.5A, 30 V DC. Tamper switch internal/external (normally closed), max 1A, 30 V DC.	Voltage free relay contacts, max 2A, 30 V DC. Open collector for alarm/duress, max 0.5A, 30 V DC. Open collector for door alarm max 0.5A, 30 V DC. Tamper switch internal/external (normally closed), max 1A, 30 V DC.
<b>Serial Interface:</b>	RS232: 9600 bps, no parity, 8 bits, 1 startbit, 1 stopbit.	RS232: 9600 bps, no parity, 8 bits, 1 startbit, 1 stopbit.	RS232: 9600 bps, no parity, 8 bits, 1 startbit, 1 stopbit.



*Bewator produces the best selling range of Codelocks in the world. Bewator Codelocks are the natural choice when seeking a simple and secure method of locking doors without having to resort to the use of keys. Using a Codelock allows those with authority to enter by use of a four digit code, all others are effectively locked out.*

- Enhanced range
- Improved features
- Simple installation
- Rugged and reliable

# Compact Codelocks

All-in-one for fast installation.

Within the Compact Codelocks all the electronics are the same in each unit, therefore for simple installation you only need the PSU and then connect to a suitable electrical lock.


**Product:**
**K42**
**General Description:**

One lock, two codes. K42 has the highest selling rate of codelocks in the world. A simple and compact codelock with modern design for outdoor montage. With a capacity of two four-digit codes, one can be given to e.g. the mailman or the property caretaker. If the correct code is given the opening relay is activated on the chosen time.

**K44 Duo**

K44 is a programmable codelock for two doors, with two-relay output and the possibility to set a code for each door or both. There is also the option of door control and alarm output. It has a code capacity of 20 four-digit codes & 10 six-digit codes, and if 3 incorrect codes are entered, the unit is blocked.

**K12**

K12 is an alarm by-pass device with integrated codelock & door monitoring functions. Every code can control the opening relay and/or the alarm relay. K12 is aimed for either monostable alarm by-pass – or bistable control of an external intruder alarm system. The choice of method is programmable. The K12 allows for timer- or button controlled alarm activation. The red LED can be lit via external input.

**Article Number:** 11-411

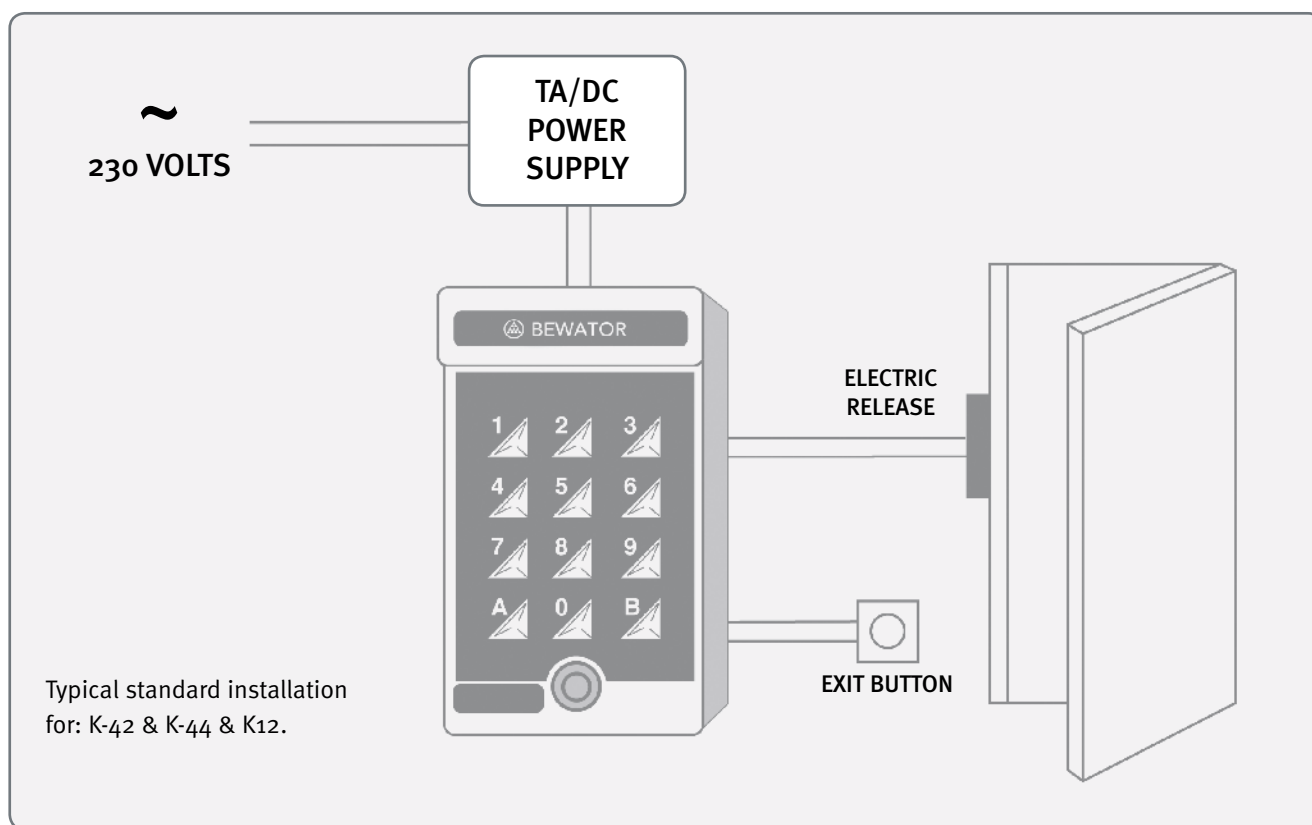
11-412

12-135

**Technical data**

<b>Housing:</b>	Cast metal with Stainless Steel buttons and security lock.	Cast metal with Stainless Steel buttons and security lock.	Cast metal with Stainless Steel buttons and security lock.
<b>Colour:</b>	Grey	Grey	Grey
<b>Environment:</b>	Indoor or outdoor use (IP54 design). In very exposed locations, use SH2 or SH1 rain cover.	Indoor or outdoor use (IP54 design). In very exposed locations, use SH2 or SH1 rain cover.	Indoor or outdoor use (IP54 design). In very exposed locations, use SH2 or SH1 rain cover.
<b>IP Rating:</b>	54	54	54
<b>Temperature:</b>	-35 to +55 °C	-35 to +55 °C	-35 to +55 °C.
<b>Voltage:</b>	12 to 24 V AC/DC	10 to 35 V DC, 8 to 24 V AC	10 to 35 V DC 8-24V AC
<b>Current:</b>	8 mA in standby	75 mA in standby	90 mA (with keypad illumination on). 60 mA without.
<b>Dimensions:</b>	80 (W) x 140 (H) x 40 (D) mm	80 (W) x 140 (H) x 40 (D) mm	80 (W) x 140 (H) x 40 (D) mm
<b>Door capacity:</b>	1	2	1
<b>Code capacity:</b>	Two four-digit codes.	20 four-digit codes & 10 six-digit codes.	20 four-digit codes & 10 six-digit codes.
<b>Inputs:</b>	Two exit button requests with delay. Two separate for codes disable.	Two exit button requests with delay. Two separate for codes disable. Two for doorcontacts. External control of zero opening.	One exit button requests with delay. Two separate for codes disable. One for doorcontacts. External control of alarm activation (bistable alarm). External control of red LED.
<b>Outputs:</b>	Voltage free relay contact, max 1A, 28 V DC.	Two voltage free relay contacts, max 2A, 28 V DC. Open collector for duress/alert. Open collector for door bell. Tamper switch for alarmconnection (normally closed).	One voltage free, switching door relay contact, max 2A, 28 V DC. One voltage free, switching alarm relay, max 2A, 28V DC. Open collector for duress or alert. Tamper switch for alarmconnection (normally closed).
<b>Opening time:</b>	1–30 sec.	01–99 secs programmable from keypad.	1–99 secs programmable from keypad.

# Schematics



# Split Codelocks

If there are several doors to be controlled, or higher security is requested, you can install a split mount codelock control unit together with one or more keypads. Since all doors are controlled from the same place, it is very easy and convenient to change all codes at the same time. Our control unit allows for a multi-door solution. You mount the control unit indoors and then connect up to six keypads outdoors. In this case the electronics is secured and only the keypad is outdoors. The units connect with a four-wire cable.

## Control unit KC5000

The KC5000 is a programmable and split mounted control unit working together with the M65 keypad. It is ready-made for six doors and the right code activates a relay in the keypad. KC5000 is easy to programme via integral keypad and display, and could also be remotely programmed with REMO PC-based software. It should be mounted indoor and has a discrete design to easily blend into any environment. Power supply is included at delivery.



**Article Number:** 11-310

Technical data	
<b>Interfaces:</b>	Connection to keypad M65, where the lock then is connected. RS232 for PC or modem.
<b>Housing:</b>	Plastic housing with security lock.
<b>Colour:</b>	Light Grey
<b>Environment:</b>	Indoor use only.
<b>Temperature:</b>	0 to +50 °C
<b>Voltage:</b>	24 to 24
<b>Current:</b>	250 mA in standby.
<b>Dimensions:</b>	140 (H) x 60 (D) mm
<b>Door capacity:</b>	1–6 keypads M65 are connected with a four-wire.
<b>Code capacity:</b>	99
<b>Time zones:</b>	99
<b>Serial Interface:</b>	RS232: 9600 bps, no parity, 8 bits, 1 startbit, 1 stopbit.
<b>Opening time:</b>	1–999 seconds.

## Keypad M65

Connects with four-wire to a KC5000 or Telecode Controller. One for each door where only code functions are needed. For flush mounting – use BB3 flush mounting unit. The design, a cast metal with stainless steel keys and security lock, allows both in- and outdoor use.

**Article Number:** 41-524

Technical data	
<b>Housing:</b>	Cast metal with stainless steel keys and security lock.
<b>Environment:</b>	Indoor or outdoor use (IP54 design). In very exposed locations, use SH2 or SH1 rain cover.
<b>Temperature:</b>	-35 to +50 °C
<b>Voltage:</b>	12 to 24 V DC, Powered from controller.
<b>Current:</b>	50 mA
<b>Dimensions:</b>	80 (W) x 140 (H) x 40 (D) mm
<b>Inputs:</b>	Tamperswitch for internal alarm.





# Split Codelocks

## Control unit DC800

### Door controller for one door

Programmable via integrated keypad or from a PC with the Entro Lite SW, but it can also work as a door controller in a larger Entro system.

Includes functions like calendar clock, event buffering, door monitoring, anti-passback, bank lobby function.

Very easy to upgrade to a multi-door solution by using the Entro Lite software together with the USB-RIF/2 interface converter.

The DC800 is also a good alternative when a split mounted code lock is required because it includes a calendar clock (no timers needed). Just install a M43 keypad outside and/or inside the door.



**Article Number:** 31-620

#### Technical Data

<b>Housing:</b>	Wallmounted housing with lock.
<b>Colour:</b>	White
<b>Environment:</b>	Indoor
<b>Temperature:</b>	-35 to +50 °C. 0 to 90% relative humidity.
<b>Voltage:</b>	10 to 40 V DC , 8–28 VAC.
<b>Current:</b>	200 mA (24V DC). Reader exclusive.
<b>Dimensions:</b>	250 (W) x 128 (H) x 54 (D) mm.
<b>Door Capacity:</b>	1
<b>Code capacity:</b>	10
<b>Card capacity:</b>	1000
<b>Time Schedules:</b>	10 (using up to eight time zones).
<b>Time Zones:</b>	80
<b>Event log:</b>	1000
<b>Inputs:</b>	Door contact for indicating closed/open door. Exit button request with delay.
<b>Outputs:</b>	Voltage-free change over contact (lock relay), max. 2A, 30 VDC. Voltage-free change over contact (extra relay) max. 2A, 30 VDC.

## Keypad M65

Connects with four-wire to a DC800 or Telecode Controller. One for each door where only code functions are needed. For flush mounting – use BB3 flush mounting unit. The design, cast metal with stainless steel keys and security lock, allows both in- and outdoor use.

**Article Number:** 41-524

#### Technical data

<b>Housing:</b>	Cast metal with stainless steel keys and security lock.
<b>Environment:</b>	Indoor or outdoor use (IP54 design). In very exposed locations, use SH2 or SH1 rain cover.
<b>Temperature:</b>	-35 to +50 °C
<b>Voltage:</b>	12 to 24 V DC, Powered from controller.
<b>Current:</b>	50 mA
<b>Dimensions:</b>	80 (W) x 140 (H) x 40 (D) mm
<b>Inputs:</b>	Tamperswitch for internal alarm.



# DEMO CASE

## Entro 5 demo case

The demo case is a black heavy-duty case with aluminium trim. The case features a full three door system and also includes an IOR6, which can be used for demonstrate Lift control or Alarm outputs.

The demo case consist of:

- SR34i/4
- DC22
- 2 x DC12
- IOR6
- BC43EM
- HD500EM
- PR500EM
- Exit button
- Door contact
- Contact for ASF
- 6 x red LED's for Lift control or Warning
- Power supply
- EM cards & tags

Article number	Description	Dimensions (mm)
97-426	Demo case Entro 5	470 (W) x 110 (H) x 410 (D)
97-431	Demo case Entro 5 incl. Entro 5 Software	470 (W) x 110 (H) x 410 (D)



## Entro Lite demo case

The demo case is a black heavy-duty case with aluminium trim. The case features a one door system and can be used (demo) as either a stand alone system where you program the DC800 from the built-in keypad or used together with the Entro Lite SW installed on a PC and connected on the USB port via the USB-RIF/2.

The demo case consist of:

- DC800
- PR500EM
- USB-RIF/2
- Entro Lite SW
- Exit button
- Door contact
- LED for Warning
- Power supply
- EM tags

Article number	Dimensions (mm)
97-433	420 (W) x 130 (H) x 310 (D)



# DEMO CASE

## Codoor Demo Stand

Oak wood stand with CD3500 and a mechanical lock.

Product	Article number
CD4000 DEMO UNIT	88-405
FP4000 DEMO UNIT	88-406
PD40EM DEMO UNIT	88-407



## BM3 & K44Duo Demo Case

Grey heavy duty case with aluminium trim. The case features BM3 and K44 Duo. Integrated power supply.

Product	Article number
Demo case BM3&K44Duo	97-414



## InfoPoint IP-810 Demo Case

Grey heavy duty case with aluminium trim. The case features a complete reservation system with IP810, SR32i+CF8, DC11+HD500, IOR6, 4 LED's for indicating machine control. Integrated power supply.

Product	Article number
Demo case IP810-EM	97-422
Demo case IP810-Cylinda	97-421
Demo case IP810-Cotag	97-423

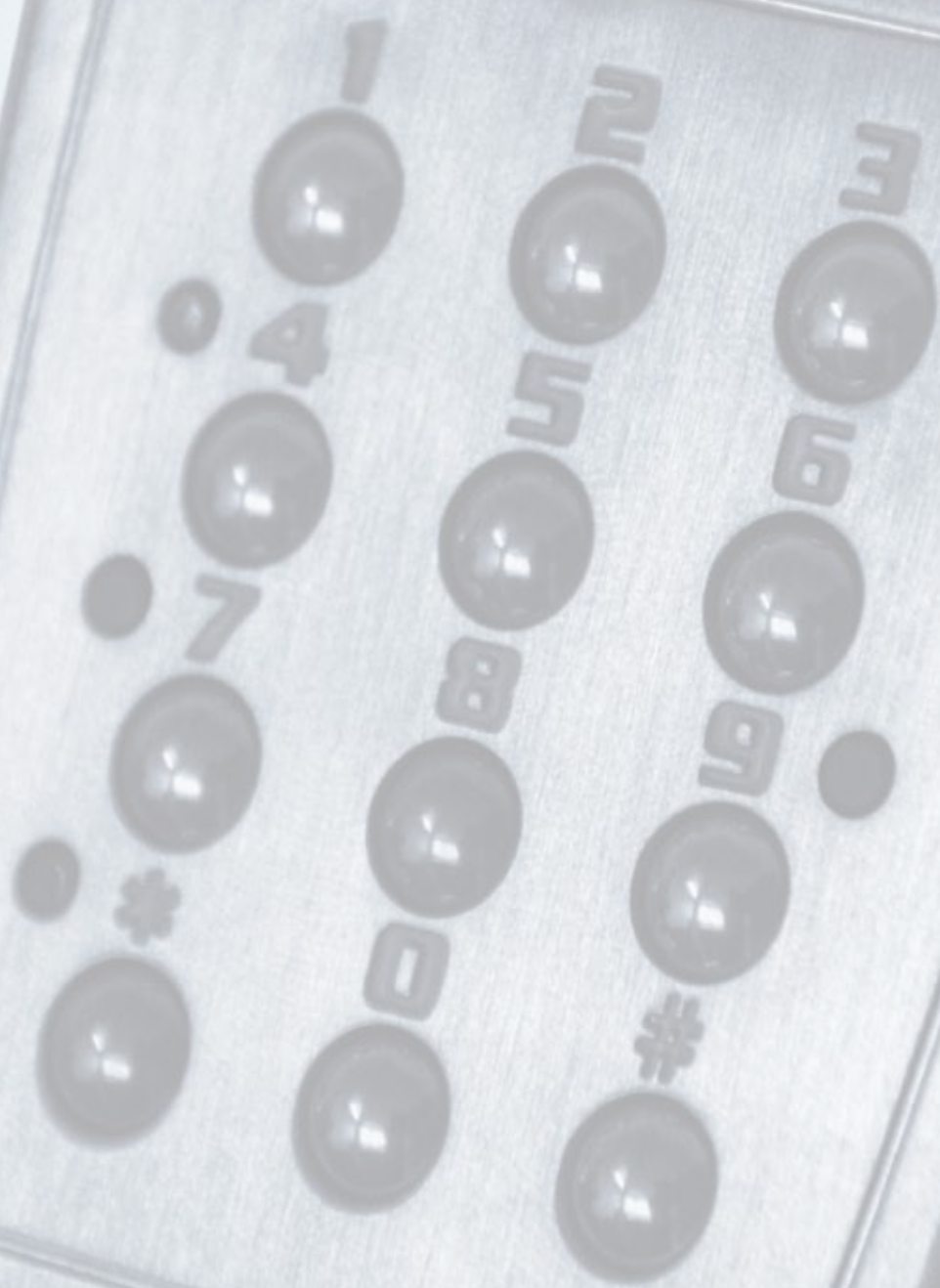


## HF Demo Case

Blue plastic case (Bewator logo), HF500, PR500, SP-Space, PM-space, HD-Space, Cards & Tags wallet and PSU.

Product	Article number
HF-demo-V1	97-417
HF-demo-V3	97-407





BEWATOR





## ***Codoor – the world’s fastest codelock!***

*Codoor CD3500 is a battery-powered codelock you fit directly on the door inside the building. Codoor is very simple to install. Since Codoor has everything built into one unit, you do not need to run any cables or make changes to the door or frame.*

*As your needs change, you can move the Codoor to another door without leaving any installation marks.*

*Codoor is suitable for the majority of doors which require a locking door handle e.g. storerooms, changing rooms, conference rooms and staffrooms – or even the door to your own office.*

# Codoor



CD3500



CD4000

## CD3500/CD4000

A battery-powered codelock you fit directly on the door inside the building. Locks the door from the outside, the correct code allows the door to open once.

The programming of codes is carried out directly on the button panel. Lock can be set manually to “unlock”. Repeated keying of the wrong code blocks the unit from further attempts. The batteries used are standard alkaline or lithium cells. By using lithium cell batteries you’ll have a series of advantages:

- The voltage level is constant during the whole life cycle.
- The battery recovers faster when there is a more frequent use of the CD3500.
- It saves the environment due to longer lifetime hence fewer batteries are needed.
- Storing time can be up to ten years.
- CD3500 is suitable for lock cases with a distance of in between 105 mm and 116 mm between the centre of the door handle and the centre of the lock cylinder.
- CD4000 is suitable for lock cases with a distance of 72 mm between the centre of the door handle and the centre of the lock cylinder.

Product	Article number
CD3500	25-400
CD4000	25-440

Technical Data	
Colour:	Stainless steel
Environment:	Indoors, dry.
Temperature:	0 to +50 °C.
Voltage:	9 V DC Two batteries, 9V type 6LR61 (not included).
Dimensions:	CD3500: 64 (W) x 250 (H) x 64 (D) mm. CD4000: 70 (W) x 250 (H) x 60 (D) mm.
Code capacity:	9
Operational time:	Up to 150 000 openings (lithium batteries), or 50 000 openings(alkaline batteries), or one year, whichever comes first.

# Fingerprint Codoor



FP5000



FP4000

## FP5000/FP4000

Fingerprint Codoor, a complete reader unit suitable for fitting to a single door, incorporates an electronic fingerprint reader locking device and a power unit in the same housing.

Fingerprint Codoor offers the use of up to 32 different fingerprint templates and up to four 4-digit codes. These can be used in parallel with fingerprint reading.

When Fingerprint Codoor is fitted; the outside door handle is disengaged and may be pressed down without opening the door. To open the door a finger has to be placed on the reader (or a code is entered). The handle on the inside of the door is not affected by Fingerprint Codoor, and works normally for people leaving the premises.

- FP5000 is suitable for lock cases with a distance of in between 105 mm and 116 mm between the centre of the door handle and the centre of the lock cylinder.
- FP4000 is suitable for lock cases with a distance of 72 mm between the centre of the door handle and the centre of the lock cylinder.

Product	Article number
FP5000	25-800
FP4000	25-840

### Technical Data

FP5000 and FP4000 uses lithium batteries.

**Housing:** Stainless steel.

**Environment:** Indoors, dry.

**Temperature:** 0 to +50 °C

**Voltage:** 9 V DC. Two batteries, 9V type 6LR61 (Not included).

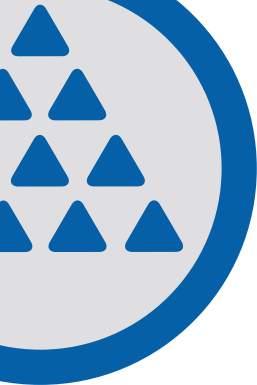
**Dimensions:** FP5000: 64 (W) x 245 (H) x 59 (D) mm.

FP4000: 70 (W) x 255 (H) x 54 (D) mm.

**Sensor type:** Capacitive three-dimensional (requires that the finger is "alive").

**Operational time:** Approx. 16 000 openings (lithium batteries) or one year.





# Prox Codoor

**A cost-effective way of securing a door**



**BEWATOR**

A Siemens Business



*Bewator offers a range of card and tag technologies for use with Bewator access control systems and products. This range includes traditional Magnetic Stripe, Bewator's patented Cotag® Proximity and Hands-Free and Mifare® Smart Cards. Cotag® Active and Passive Technology cards & tags may be easily mixed within the same system allowing customers to allocate the most appropriate tag technology for that cardholder's day to day duties.*

*Active Technology utilises an onboard battery to boost the reading range between the tag & Reader. By using Active Technology cards & tags in conjunction with long range Readers & Loops, true 'Hands-Free' operation is achievable. In addition to user convenience, Hands-Free technology is well suited for facilitating Disability Discrimination Act requirements.*

# Cards & Tags

**Product:****IB911****General Description:**

Active, proximity tag for Cotag. Includes lithium battery. Factory encoded.

**Article Number:**

15-117

**IB970**

Active, encoded vehicle tag featuring Cotag Technology. Used with Loop Technology Reader, attached to the underside of the vehicle.

15-118

**IB928**

Active, encoded clamshell card featuring Cotag Technology. Includes lithium battery. Factory encoded.

15-116

**IB928-Blue**

Active, encoded clamshell card featuring Cotag Technology. Includes lithium battery. Factory encoded.

51-702

**IB928-Clear****Product:****General Description:**

Active, encoded clamshell card featuring Cotag Technology. Includes lithium battery. Factory encoded.

**Article Number:**

51-703

**IB928-Green**

Active, encoded clamshell card featuring Cotag Technology. Includes lithium battery. Factory encoded.

51-704

**IB928-Purple**

Active, encoded clamshell card featuring Cotag Technology. Includes lithium battery. Factory encoded.

51-705

**IB928-Red**

Active, encoded clamshell card featuring Cotag Technology. Includes lithium battery. Factory encoded.

51-706

**IB958M****Product:****General Description:**

Passive encoded ISO laminated card with IS7811/2 Magnetic Stripe. Ideal for Photo ID applications, can be custom printed on both sides. Up to 30cm read range with Hands-Free Readers, 12cm with Proximity Readers

**Article Number:**

50-529

**IB968**

Passive, encoded clamshell card. Up to 30cm read range with Hands-Free Readers, 12cm with Proximity Readers. Without battery.

15-119

**IB961**

Passive, handsfree tag for Cotag. Without battery.

15-120

# Cards & Tags

**Product:****IB41****General Description:**

**EM Laminated Card with print.**  
Passive proximity card for EM4102. Completed with Bewator print and magnetic stripe for use also in conventional readers.  
*Note! Will only work in readers with EM 4102 reading technology.*

**IB42**

**EM Laminated Card without print.**  
Passive proximity card for EM4102. Completed with magnetic stripe for use also in conventional readers.

*Note! Will only work in readers with EM 4102 reading technology.*

**IB44**

**Key tag with EM technology.**  
Used for cardreaders with EM4102 reading technology.

**IB45**

**EM tag adhesive**  
Adhesive key tag with EM technology. For use on existing magnetic stripe cards. Used for cardreaders with EM4102 reading technology.

**Article Number:**

15-401

15-402

15-411

15-414

**Product:****IB1-100****General Description:**

**Cards (100 package).**  
Bewator magnetic card.  
CR80 ISO format (track 2).

**SC558**

**Mifare® Smart Card.**  
Note these cards are unprogrammed.  
The SE500 Smart Card Readers will read the Card Serial Number for access applications.

**Article Number:**

15-101

53-100



BEWATOR



# DOOR ENTRY PHONE SYSTEMS



*It is a natural requirement for most businesses to be able to lock their entrances against external threats, but at the same time, they must have a simple and convenient way of letting in visitors or employees. The simplest and most effective way of solving this problem is to install a modern 'entrance phone system'*

*Bewator's range consists of three different solutions: **Bewatel**, **Telecode** and **Bewacom**. Between them they cover every requirement large or small, residential or commercial.*

*Bewatel is the small system for one to four telephone handsets. Telecode is the unique system which connects to the external telephone network, while Bewacom is designed for larger organisations with their own telephone switchboard.*

## Three different solutions

### Bewatel – the traditional door entry phone

Bewatel is Bewator's entrance phone system for small businesses and domestic premises, and is available for one to four extensions. At each extension a telephone handset is fitted for answering and opening the entrance door.

There are three Bewatel models in the range, some with a built-in codelock, which will allow separate control for staff and residents. Bewatel is designed to withstand the majority of environments both internal and external. Bewatel has a cast metal housing and stainless steel push buttons. Sound quality is excellent and the entrance phone unit is only slightly larger than a conventional codelock panel.

### Bewacom – Uses the PABX system for door opening

Bewacom makes use of a company's internal telecommunications network as it is connected directly to the company's telephone switchboard just like any other extension. Installation is simple and inexpensive, as no major cabling is required. Using their ordinary office telephone, employees can respond to visitors at an entrance, and even open the door without leaving their desk. This allows for calls to be made from anywhere outside to anywhere inside the building; a big advantage, especially if the reception is closed.

A list of extension numbers can be displayed next to the Bewacom, or visitors can be given an extension number to call upon arrival. Bewacom also has a built-in codelock function with time control to allow employees to gain access to the building at specified times while effectively keeping out all unauthorised visitors.

### Telecode TC5000 – Uses the public telephone line

Modern Door Entry systems consist of two parts, and the most expensive of the two you already have. Telecode is a patented, BABT approved door entry telephone system, which can be connected direct to the public telephone network. The Telecode system provides a simple and secure solution for answering and opening remote doors via a conventional telephone handset operating over BT, Mercury or Cable networks.

The system is suitable for both commercial and residential applications, especially multi-tenanted buildings, where the installation wiring of a conventional system would be difficult and expensive. Using the public telephone network not only saves on installation costs but also permits easy expansion of the system and keeps maintenance costs to a minimum. Telecode will work with all approved analogue DTMF "Touch Tone" telephones.



## Door Entry phones

For one call button select model BT41, four call buttons the BT44, or the BTK41 with one call button and a built-in code lock. NOTE: A matching, separate code lock can be supplied for use with model BT44 if required.



<b>Product:</b>	<b>BT41</b>	<b>BT44</b>	<b>BTK41</b>
<b>General Description:</b>	Bewatel doorphone. Traditional doorphone with one key. Connects by wire to handset V801/B801.	Doorphone Traditional doorphone with four keys. Connects by wire to up to four handsets V801/B801.	A traditional door phone with an integrated code lock. It connects by wire to one handset V801/B801, and the key A is used for calling. It comes equipped with CCTV control, tamper switch and duress function.
<b>Article Number:</b>	45-401	45-404	45-441
<b>Technical data</b>			
<b>Interfaces:</b>	5-wire to handset.	5-wire to handset.	5-wire to handset.
<b>Housing:</b>	Cast metal with stainless steel keys and security lock. For flush mounting – use BB5 flush mounting unit.	Cast metal with stainless steel keys and security lock. For flush mounting – use BB5 flush mounting unit.	Cast metal with stainless steel keys and security lock. For flush mounting – use BB5 flush mounting unit.
<b>Environment:</b>	Indoor or outdoor use (IP54 design). In very exposed locations, use SH3 or SH1 rain cover.	Indoor or outdoor use (IP54 design). In very exposed locations, use SH3 or SH1 rain cover.	Indoor or outdoor use (IP54 design). In very exposed locations, use SH3 or SH1 rain cover.
<b>IP Rating:</b>	54	54	54
<b>Temperature:</b>	-35 to +50 °C. At 90% relative air humidity.	-35 to +50 °C. At 90% relative air humidity.	-35 to +50 °C. At 90% relative air humidity.
<b>Voltage:</b>	12 to 24 V AC/DC	12 to 24 V AC/DC	10 to 35 V AC/DC
<b>Current:</b>	40 mA in standby.	40 mA in standby.	40 mA in standby.
<b>Dimensions:</b>	80 (W) x 200 (H) x 40 (D) mm	80 (W) x 200 (H) x 40 (D) mm	80 (W) x 200 (H) x 40 (D) mm
<b>Door Capacity:</b>	N/A	N/A	1
<b>Code capacity:</b>	N/A	N/A	4 fourdigit (Standard Mode factory set). 20 fourdigit + 10 sixdigit in Advanced Mode.
<b>Inputs:</b>	N/A	N/A	Exit button request with delay. Control of separate CCTV system. Two separate for code disable. External control of zero opening.
<b>Outputs:</b>	Voltage free relay contact, max 2 A 28 V DC. Control of separate CCTV system. Tamper switch for alarm (normally closed).	Voltage free relay contact, max 2 A 28 V DC. Control of separate CCTV system. Tamper switch for alarm (normally closed).	Voltage free relay contact, max 2A, 28 V DC. Open collector for duress. Open collector for door bell. Tamper switch for alarmconnection (normalt closed).
<b>Opening time:</b>	1–15 seconds	1–15 seconds	1–99 seconds

# Bewatel

## BTVX

### Exchange unit for connecting up to 4 Bewatel units

Used when up to four Bewatel doorphones are connected to one handset. Only actual door are opened.

Article Number: 45-110



Technical Data	
Interfaces:	5-wire to handset. Connection to four Bewatel doorphones.
Housing:	White plastic housing with security lock.
Environment:	Indoor
Temperature:	-20 to +35 °C
Voltage:	12 to 24 V AC/DC
Current:	20 mA in standby.
Dimensions:	200 (W) x 140 (H) x 60 (D) mm

## Handsets

The handset for connection to Bewatel equipment is white and has a buzzer and egress button included. Three units can be installed in parallell. It comes both as a desktop- and as a wallmounted model.



### V801

Article Number:	45-406
General Description:	<b>Handset for Bewatel</b> White, wallmounted handset for Bewatel. Integrated buzzer and remote opening button. Three sets can be mounted in parallel.



### B801

Article Number:	45-406
General Description:	<b>Handset for Bewatel</b> Desk telephone handset for connection to Bewatel equipment. White tabletop model for Bewatel. Buzzer and egress button are included. Three units can be installed in parallell.

Technical data	
	For connection – see further information supplied with actual Bewatel doorphone.
Interfaces:	5-wire to Bewatel doorphone.
Environment:	Indoor use only.
Dimensions:	80 (W) x 220 (H) x 55 (D) mm

	Junction-box for connections is supplied. See further information supplied with each type of entrance phone.
Interfaces:	5-wire to Bewatel doorphone.
Environment:	Indoor use only.
Dimensions:	80 (W) x 220 (H) x 55 (D) mm

**Product:****BM3****General Description:****Door entry phone for PABX**

Is used as an analogue extension for the internal telephone system (PABX). Built-in code lock with four codes. CCTV control and switch.

**Article Number:**

45-300

**BM31****Door Telephone to PABX (single button)**

Is used as an analogue extension for the internal telephone system (PABX). One button for hotline function. CCTV control and switch.

45-301

Technical Data		
	The telephones must be able to generate a standard tone signal (DTMF).	The telephones sets must be able to generate a standard tone signal (DTMF).
<b>Interfaces:</b>	Two analogue extension cables for PABX.	Two wire for analogue extension in PABX.
<b>Housing:</b>	Cast metal with Stainless Steel buttons and security lock. For flush – use BB5 flush showing unit.	Cast metal with stainless steel keys and security lock. For flush mounting – use BB5 flush mounting unit.
<b>Environment:</b>	Indoor or outdoor use. In very exposed locations, use SH3 or SH1 rain cover.	Indoor or outdoor use. In very exposed locations, use SH3 or SH1 rain cover.
<b>IP Rating:</b>	54	54
<b>Temperature:</b>	-35 to +50 °C. At 90% relative air humidity.	-35 to +50 °C. At 90% relative air humidity.
<b>Voltage:</b>	12 to 24 V AC/DC	12 to 24 V AC/DC
<b>Current:</b>	60 mA in standby.	60 mA in standby.
<b>Dimensions:</b>	80 (W) x 200 (H) x 40 (D) mm.	80 (W) x 200 (H) x 40 (D) mm.
<b>Code capacity:</b>	4	N/A
<b>Inputs:</b>	Exit button request with delay. Two separate for disabling two codes.	Exit request (with delay). External control of calling. External control of ending call.
<b>Outputs:</b>	Voltage free relay contact, max 2 A 28 V DC. Tamper switch for alarm connection (normally closed). Relay for control of CCTV system.	Voltage free relay contact, max 2 A 28 V DC. Tamper switch for alarm connection (normally closed). Relay for control of CCTV system.
<b>Opening time:</b>	01–99 secs programmable from keypad. (can be extended x10).	Fixed 7 seconds.
<b>Calling time:</b>	01–99 seconds (can be extended x10).	Fixed 30 seconds.

# Telecode

## TC300

### Door entry phone, for maximum 300 telephone numbers

Doorphone central for one door and up to 300 telephone numbers. Connects to TP5 or M65 at the door. Easy to programme via integral keypad and display. Could also be remotely programmed with REMO PC-based software. Is also available for maximum 2, 4 or 6 doors, also with the capacity of up to 300 telephone numbers.



Product	Article Number
TC300	41-152
TC300/2	41-257
TC300/4	41-453
TC300/6	41-656

Technical data	
<b>Housing:</b>	Lockable plastic housing for wall mounting.
<b>Colour:</b>	Light Grey
<b>Environment:</b>	Indoor use only.
<b>Temperature:</b>	0 to +50 °C.
<b>Voltage:</b>	24 V AC/DC
<b>Current:</b>	250 mA
<b>Dimensions:</b>	200 (W) x 140 (H) x 60 (D) mm
<b>Code capacity:</b>	99
<b>Time zones:</b>	99
<b>Outputs:</b>	Connects up to 10 separate handsets (V801/TC).
<b>Serial Interface:</b>	RS232: 9600 bps, no parity, 8 bits, 1 startbit, 1 stopbit.
<b>Opening time:</b>	1-999 sec
<b>Approve in:</b>	SE, DK, NO, FI, DE, UK

## TP5

### Telecode Door Entry Phone

Connects with four-wire to Telecode central TC5000 (one for each door where calling is needed).

**Article Number:** 41-520

Technical Data	
Keypad with background illumination	
<b>Housing:</b>	Cast metal with stainless steel keys and security lock. For flush mounting – use BB5 flush mounting unit.
<b>Colour:</b>	Grey
<b>Environment:</b>	Indoor or outdoor use (IP54 design). In very exposed locations, use SH3 or SH1 rain cover.
<b>IP Rating:</b>	54
<b>Temperature:</b>	-35 to +50 °C.
<b>Voltage:</b>	24 V DC
<b>Current:</b>	75 mA.
<b>Dimensions:</b>	80 (W) x 200 (H) x 40 (D) mm
<b>Inputs:</b>	Exit request with delay function.
<b>Outputs:</b>	Voltage free change over relaycontact (lock), max 2 A 30 V DC. Tamper switch for alarm connection (normally closed). Control of external CCTV-system.



# Telecode and Accessories

## M65

### Keypad

Connects with four-wire to Telecode Controller. One for each door where only code functions are needed.

For flush mounting – use BB3 flush mounting unit.

**Article Number:** 41-524

Technical Data	
<b>Interfaces:</b>	Four-wire for connection to TC5000/KC5000 central.
<b>Housing:</b>	Cast metal with stainless steel keys and security lock.
<b>Colour:</b>	Grey
<b>Environment:</b>	Indoor or outdoor use (IP54 design). In very exposed locations, use SH2 or SH1 rain cover.
<b>IP Rating:</b>	54
<b>Temperature:</b>	-35 to +50 °C
<b>Voltage:</b>	24 V DC. Powered from control unit.
<b>Current:</b>	75 mA.
<b>Dimensions:</b>	80 (W) x 140 (H) x 40 (D) mm
<b>Inputs:</b>	Exit button request with delay.
<b>Outputs:</b>	Potentialfree relay, max 2 A 30 V DC. Tamper switch for alarm connection (normally closed).



## Software

Product	Article Number	Description
Remo	41-700	Software for remote control of the code central unit KC5000 or doorphone central Telecode TC5000.

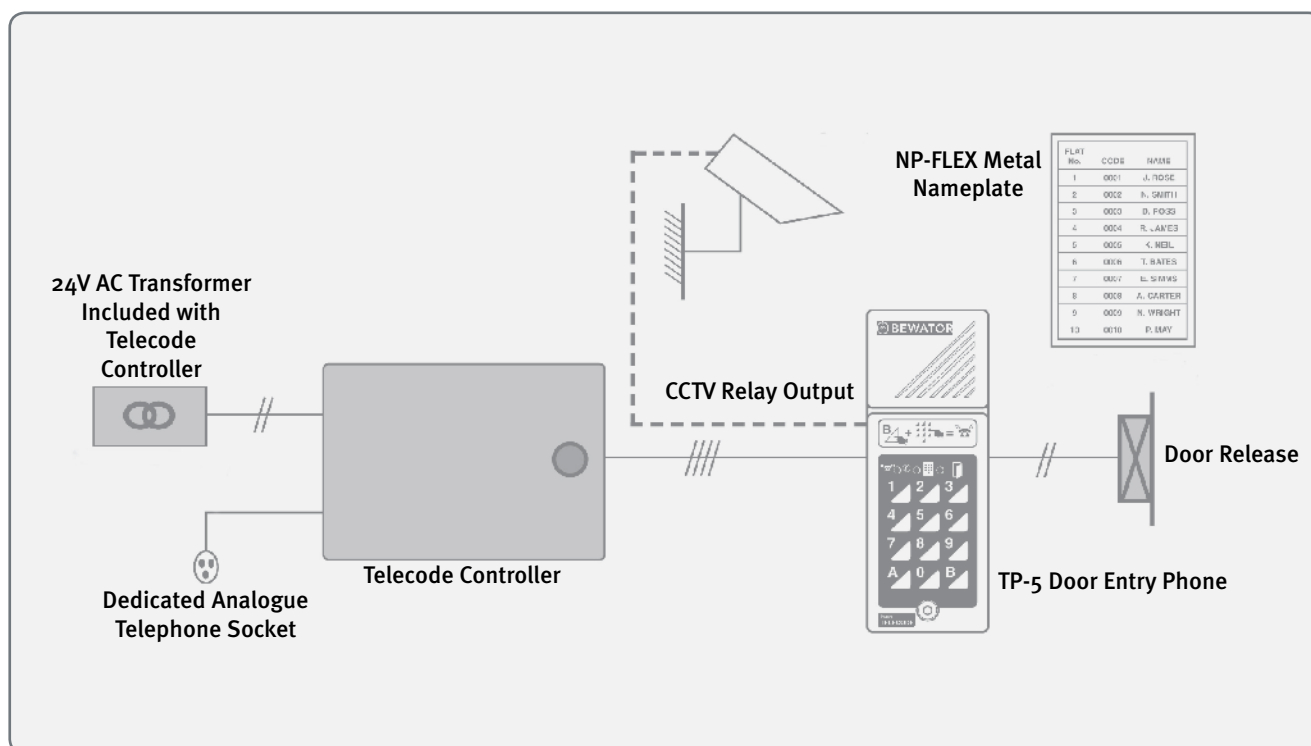
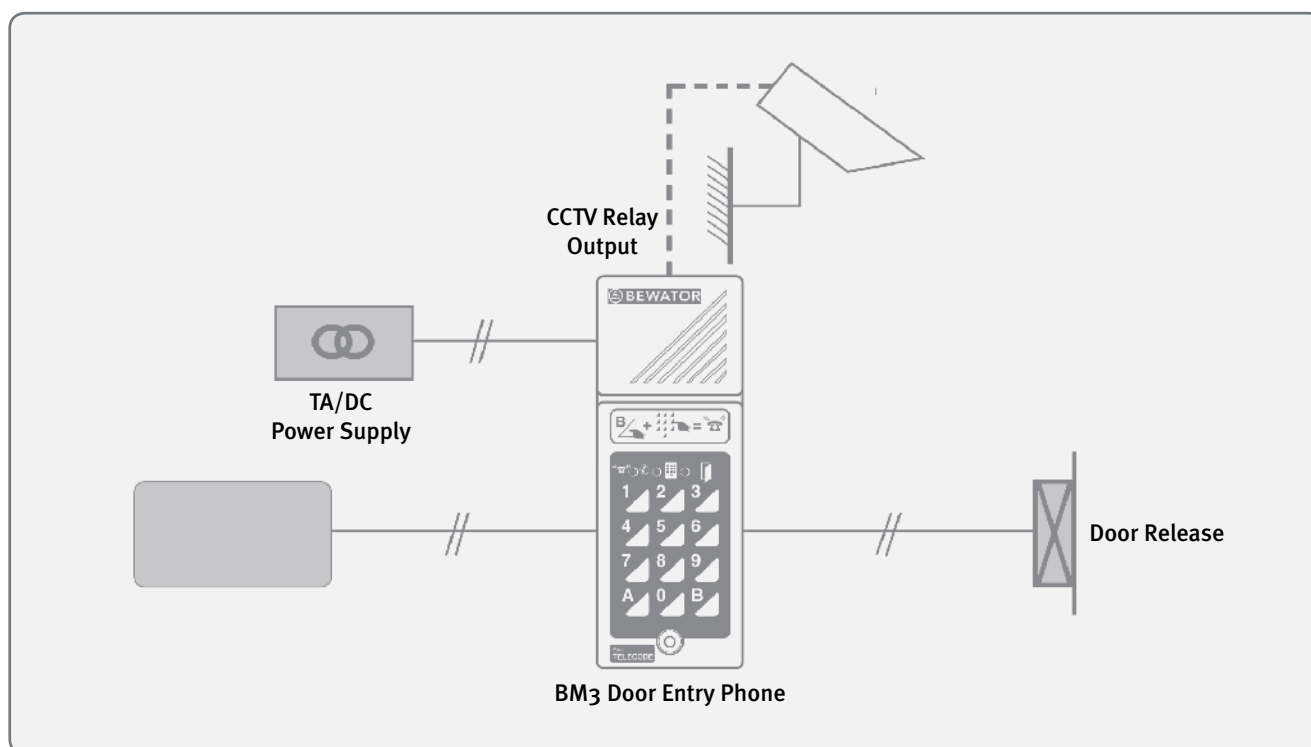
*This Remo software can be downloaded for free from the Bewator.com homepage.*

## Accessories

Product	Article Number	Description
BB5	41-522	Flush mount kit for BT41, BT44, BTK41, BM3/ BM31 or TP5.
BB3	11-608	Flush mount kit for M65.
V801-TC	41-510	Handset for Telecode.
B801	45-406	Handset for Bewatel.
SH-3	22-512	Rain-cover for door entry phones.
SK5	21-410	Security Unit
SH-2	22-511	Rain-cover for keypads.
NTFlex	42-707	Nameplate in rugged metal with unbreakable glass.
NTFlex Gold	42-711	Nameplate in rugged gold-alike metal with unbreakable glass.
Profile 16x13	42-708	Profile for use with nameplate NTFlex.
Sheets	42-710	Extra sheets for NTFlex.

*For the full range of accessories please see page 63.*

# Schematics





*Bewator offer a wide range of accessories, further enhancing the performance and installation of our Access Control products and systems. Our range covers Locking Devices, Power Supplies, Exit Buttons, Break Glasses, Printers and even spare keys. In this section you should be able to find the most suitable accessory for your system, be it new or an upgrade.*

- High quality accessories
- Comprehensive range
- Cost effective solutions
- Ensuring a complete, simple installation



# Accessories

**Product:****BB3****General Description:**

Flush mount kit for flush mounting to give an unobtrusive and aesthetically pleasing installation of the following products: K42, K44Duo, K12, M4, M65 and RB9120.

**Article Number:**

11-608

**BB4**

Flush mount kit for an unobtrusive and aesthetically pleasing installation of the following products: BC610, BC615, BC43, DT05 or RB9160.

22-418

**BB4Prox**

Flush mount kit for an unobtrusive and aesthetically pleasing installation of the following products: BC610Prox, BC615Prox, BC43prox, DT05Prox eller RB9160Prox.

22-420

**BB5**

Flush mounting kit for a flush fitting, allowing aesthetically pleasing and non-obtrusive mounting of the following products: BT41, BT44, BTK41, BM3/ BM31 or TP5.

41-522

**Product:****BB6****General Description:**

Flush mounting kit for the PR500 Reader models (hides the reader), providing a discreet and secure installation.

**Article Number:**

22-419

**SH1**

Rain-cover Universal Protective cover used for cardreaders. Recommended in outdoor installations.

22-412

**SH2**

Rain-cover for keypads Protective cover for Bewator keypads and codelocks. Can be used even for existing installations. There is cuttings for cables.

22-511

**SH3**

Rain-cover for door entry phones Protective cover for Bewator door entry phones. Can be used even for existing installations. There is cuttings for cables.

22-512

**Product:****SH4****General Description:**

Rain-cover for cardreaders Protective cover for Bewator cardreaders. There is cuttings for cables to simplify any completion of existing installations.

**Article Number:**

22-513

**IS391**

Spy proof cover used where higher security are needed. Fits together with keypads M4 and M65 or codelocks K42, K44 and K12 Alarm by-pass device.

11-606

**SK5**

Security Unit Eliminates the possibility of opening the lock by using battery power directly on the outgoing lock cables. Fits all products with a tamper switch. Includes a buzzer with reset button and an alarm output.

21-410

# Accessories

**Product:****LF1****General Description:****Alarm bypass unit**

Can be used together with a separate cardreader for alarm control. LF1 are then triggered by the lock voltage impulse. Monostable or Bistable function.

**Article Number:**

71-501

**E7****Multi Relay**

General relay to be used for special applications. E.g. to achieve a voltage free connection. Includes two separate outputs. Selection of either voltage or potential free output (removable jumpers).

71-111

**CR1****Network interface for BC615 reader**

Mounted at Bewacard 615 when connected to Bewator Entro Converts between RS232 and RS485.

21-024

**BA212****12V DC 4A Power Supply + Battery Backup**

12V d.c. general purpose battery backup PSU (batteries not included) BA212 – 4 amp.

73-432

**Product:****MODEM-DU-HST-EN****General Description:**

Modem for PC connection (host). For use with Entro only.

**Article Number:**

55-123

**MODEM-DU-REM-EN**

Modem for PC connection (host). For use with Entro only.

55-124

**B125**

B125 12V 6 amp hour sealed lead acid battery for BA212.

55-112

**TA12****Transformer**

Power supply with 12 Volt AC.

73-103

**Product:****TA/ST 12****General Description:****Transformer**

Power supply transformer with 12 Volt filtered DC current.

**Article Number:**

73-119

# Accessories

**Product:****USB-RIF/2****General Description:****Interface for Enrolment Reader**

The USB-RIF supports the interfaces Clock & Data and Wiegand 26bit for connecting readers.

It can be used in the Bewator Entro for three purposes:

- Easy programming of cards & tags.
- Login reader for card/tag login to Entro software.
- Fast search of cardholder/person.

Please also see the reader kits TG Prox with PR500 proximity reader and desk stand included. Item nbr 33-108 (EM) or 33-109 (Cotag).

USB-RIF is delivered with 1m USB cable.

**Article Number:**

33-111

**REMO****Software**

Software for remote control of the code central unit KC5000 or doorphone central Telecode TC5000. Serial cable or modem. Different sites. Password protected. The central is the master, i.e. the information is first uploaded to the PC – modified and then downloaded. The PC database can also be completed with supplementary informations like user name etc.

41-700

**Product:****V801-TC****General Description:****Handset for Telecode**

White, wallmounted handset to be connected with four-wire to Telecode door entry system. Used when an ordinary telephone set not are available. Integrated buzzer and remote opening button.

**Article Number:**

41-510

**B801****Handset for Bewatel**

Desk telephone handset for connection to Bewatel equipment. White tabletop model for Bewatel. Buzzer and egress button are included. Three units can be installed in parallel.

45-406

**NTFlex**

Nameplate in rugged metal with unbreakable glass. Intended for use with complete, laserprinted sheets. Diskette with ready-made templates in MS Word for 12, 21 or 30 rows is included.

42-707

**NTFlex Gold**

Nameplate Gold Nameplate in rugged gold-alike metal with unbreakable glass. Intended for use with complete, laserprinted sheets. Diskette with ready-made templates in MS Word for 12, 21 or 30 rows is included.

42-711

**Product:****Profile 16x13****General Description:**

Profile for use with nameplate NTFlex. 16 rows designed for 13 mm text stripes.

**Article Number:**

42-708

**Sheets**

20 pcs extra sheets used in for NTFlex nameplate. Diskette with ready-made templates in MS Word for 12, 20 or 30 rows is included.

42-710



# Take Off to New Security Heights with Bewator

Bewator offers modular solutions to fit the requirements of ports and airports around the world

Bewator has many years of experience solving the particular security requirements of ports and airports. Bewator provides a cost effective means of delivering total security solutions that can be tailored to the client's individual requirements. We provide a flexible frame to increase cargo security and maximize security investments.

With CCTV control & recording equipment responding to alarms triggered by Access, Fire or Intruder control devices, Bewator offer the ultimate tools in alarm response and management, evidence recording and crime prevention. Bewator technology is robust and reliable – a significant factor in all systems.

With us you are safe.



**BEWATOR**

A Siemens Business

# GLOSSARY

**Access** – To enter protected areas or premises

**Access Control** – A method of automatically controlling entry to and/or exit from protected areas or premises

**Access Control Database** – A store on the computer or controllers of all the records required to make the access control system function as required

**Access Control Software** – A group of programs which are run, when required, on a computer (usually a PC) which perform specific tasks associated with setting up and using the access control system.

**Access Control System** – Equipment used to control automatically the passage of people and vehicles into and out of protected areas and premises.

**Access Decision** – The response by a controller to an access request (either access granted or access denied).

**Access Denied** – The access code does not allow a cardholder to gain entry to the protected area or premises.

**Access Granted** – The card number and site code (and PIN if required) allow a cardholder to gain entry to the protected area or premises

**Access Group** – A list of areas to which a cardholder is allowed access. Access may be restricted to certain times by the use of a Time Schedule

**Access Point** – A Reader, usually at a point of entry or exit (door, gate, barrier, turnstile) where access is controlled (and monitored) by an access control system. Points of entry or exit which are used for anti-passback or roll call require two Readers and therefore two access points

**Active Technology** – Where an onboard long-life lithium battery enhances the output signal from a card or tag to the Reader

**Address** – A combination of numbers which uniquely identifies equipment on an access control system

**Alarm** – Warning of a possible breach of security of some kind

**Alarm Actions** – Instructions to be carried out when an alarm occurs

**Alarm Bypass** – Allows integration into a premises intruder protection system allowing arm/disarm control

**Alarm Message** – A message generated by the access control system when an alarm condition occurs. This message is received by the computer and interpreted by the access control software

**Anti-Passback** – The limiting of a card or tag's use in one direction without first having been used in the opposite direction. Requires IN and OUT Readers

**Archive** – A copy of the access control database kept for security against loss of data

**Automatic Vehicle Identification (AVI)** – Method of reading a vehicle tag fastened to the bottom of a vehicle using a loop antenna buried in the roadway. Can also apply to identification of the driver's card using a side loop or Reader

**Backup** – A second copy of a file, made as security against loss of data

**Battery Backup** – An alternative standby energy source that maintains system operation for a period of time in the event of a power failure

**Baud Rate** – The number of bits per second in data transmission

**BC Link** – Bewator propriety Reader interface

**Bewacom** – A Door Entry Phone System that connects directly to a Company's PABX system

**Bewatel** – A hardwired Door Entry Phone System

**Break Glass Unit** – Allows emergency release of electronically locked doors

**Buffer** – A temporary store for data, usually in RAM

**Card** – An encoded card that can be read by a Reader. Also referred to as a token or tag

**Card Number** – One of the numbers programmed into the card. The card number is linked to the cardholder in the cardholder record

**Card Technology** – The physical method by which numbers are stored within cards

**Card Transaction** – The act of reading data from a card and passing it to the access control system

**Cardholder** – A person to whom a card has been issued. (Also known as user)

**Cardholder Record** – One of a number of records in the access control database, each of which links a cardholder's name to the card number and an access group. (Can also contain other data such as PIN and personal details)

**Cardreader** – Equipment that reads data from a card (and PINpad if fitted) and transmits it to a controller. May include indicator lights

**Clamshell** – A card that is manufactured by the welding of two outer protective casings

**Clock & Data** – Industry standard Reader interface

**CodeLock** – Digital compact keypad, allowing entrance via the use of allocated PIN codes

**Command** – An order or instruction that the operator gives to the system, usually at the computer keyboard.

Also an instruction sent by a computer to a controller. The transmission of messages between devices

**Common Code** – A single PIN code that is allocated to all users

**Computer** – The device which runs the access control software and thereby maintains the access control database, sends commands and data, receives and logs system messages, and generates reports

**Configuration** – The relationship of system components to each other

**Controller** – A device which polls Readers, makes access decisions and sends messages to the computer. May also handle other inputs and outputs

**Database** – (See access control database)

**DDA** – Disability Discrimination Act. Government legislation forbidding discrimination of the disabled

**Default** – A standard condition or value determined by the system unless changed by operator intervention

**Device** – Any piece of equipment connected to a system

**Dial-up Telephone Line** – A normal telephone line which is used by a computer to communicate with controllers at remote sites via modems, and vice versa

**Door** – The physical means of controlling access through an access point. Includes barriers, gates, turnstiles

**Door Contact** – Door monitoring switch which changes state when a door is opened or closed

**Door Controller** – A controller which is directly connected to the Segment Controller (see Segment Controller) and the Reader. Also contains connections for the Door Release (see Door Release), Egress Button (see Egress Button) or Break Glass Unit (see Break Glass Unit)

**Door Forced Alarm** – An alarm that is activated when a door is opened without a valid access request or the door exit control being used

**Door Release** – An electro-mechanical device used to lock or unlock a door

**Door Monitoring Switch** – Switch which changes state when a door is opened or closed

**Door Open Alarm** – An alarm that is activated when a door remains open longer than a specified time

**Duress Alarm** – An alarm that is covertly activated by entering a special PIN at an access point, the cardholder being granted access as normal so as not to arouse suspicion

**Egress Button or Switch** – A means of unlocking a controlled door from the secure side without a valid access request. Also referred to as door exit control

**Entro** – PC based Access Control software. Used for programming, editing and reporting of data and events

**Event** – Any system activity which takes place following a specified occurrence

**Fail-Safe** – A door lock that unlocks the door if power fails and requires continuous application of power to stay locked

**Fail-Secure** – A door lock that locks the door if power fails and requires the application of power to unlock the door

**Hands-Free** – Reading technology which enables a cardholder to gain access without having to hold the card in the hand. Typically giving ranges of up to 1 metre with HF500-Entro Readers or up to 2 metres with a Loop aerial

**Hardware System** – A Local Hardware System is one or more controllers connected to one serial port on any computer on the host computer's network. A Remote Site Hardware System is one or more controllers connected to a dial-up modem

**Heavy Duty Reader** – A Proximity Reader manufactured from stainless steel and polycarbonate. Ideal for use in locations vulnerable to physical attack

**Holiday** – The access control software can be configured to provide different time frames on days designated as holidays

**I/O** – Input/output

**IN Reader** – A reader that changes the status of a card in the cardholder record from OUT to IN for the purposes of the anti-passback and roll call functions

**Indicator Light** – A red or green or amber indicator lamp that shows the system's response to an access request

**Input** – An input is a signal which is monitored by a controller. Dedicated inputs are door exit control (egress), door contacts, controller/PSU tamper and PSU monitor

**Interface** – A device or protocol which enables communication between one device and another

**Invalid Card** – A card which is not allowed access

**ISO Laminated Card** – A passive 'credit card' sized card suitable for use with Photo ID applications (see Thermal Dye-Sublimation)

**Jumper** – A small shorting plug on a printed circuit board which can be moved to set an option

**LAN** – Local Area Network. Used in PC networks and can be utilised for Access Control communications (see Network)

**LED (light emitting diode)** – Small indicator light

**Local Hardware System** – See Hardware System

**Loop Antenna** – A piece of wire driven from a controller which is used to interrogate Active cards and tags



**Maglock** – An electro-mechanical device which uses magnets on the door and the frame to lock or unlock a door

**Magnetic Stripe Card** – A card that contains a band of ferrous material that can be magnetically encoded

**Menu** – A displayed list of commands or features available to the operator

**Mifare®** – A registered trade name for Smart Card technology (see Smart Cards)

**Modem** – A device which transmits and receives binary data across a telephone line. Used to communicate with controllers at remote sites

**Monitor** – Either, a part of the access control software which displays transactions. Or, the monitoring of certain parts of the access control system (door, input, etc) to check for certain conditions and generate alarms if necessary

**Mullion Mount Reader** – A Proximity Reader designed to suit door architraves

**Network** – Sometimes called a “local area network” or LAN. Connects computers together so that they can share files, printers and other peripherals. Any computer on the host computer’s network can be connected to a Hardware System

**Off Line** – Communications between the computer and the access control system are halted

**On Line** – Communications between the computer and the access control system are open

**Operator** – Someone who has authority to log in to all or parts of the access control software

**OUT Reader** – A reader that changes the status of a card in the cardholder record from IN to OUT for the purposes of the anti-passback and roll call functions

**Output** – An output is a signal provided by a controller

**PABX** – Private Automatic Branch Exchange. Used by company’s to run their internal telephone systems

**Panel Mount Reader** – A Proximity Reader designed to fit most 3rd party panels, such as Door Entry Phones

**Passive Technology** – A cost effective technology where the user has to actively present a card or tag to a Reader, Read ranges are typically around 10cm with Proximity Readers

**Password** – An alphanumeric code which, if recognised by the access control software, allows access to the access control database and other software functions

**PC** – A computer

**PIN (Personal Identification Number)** – A confidential 4-digit code assigned to a cardholder which is entered at a PINpad

**PINpad** – A keypad at which a cardholder enters his or her PIN

**Port** – A connection that provides a means of communication between devices

**Proximity** – Security industry term to describe Readers which read cards or tags without physical contact, but involving the act of presenting the card or tag to the Reader

**PSTN** – Public Switched Telephone Network. Used for standard telephone lines

**PSU** – Power Supply Unit

**Rain Hood** – A cover that protects Readers or Door Entry Phones from rain in exposed locations

**Reader** – The device that reads data from a card or tag and communicates the information to the controller for validation

**Reading Head** – A proprietary antenna which is used to interrogate cards or tags. Must be used with an interface to connect to the Access Control system

**Reconfigure** – Send the access control database to the controllers

**Record** – A unit of data stored on the computer which specifies the configuration of a particular part of the system, for example, a cardholder, an access point, a time schedule

**Re-index** – Tidy and condense the access database, removing deleted records and updating index files

**Relay** – Device which can switch high voltages and/or currents using a low power logic signal

**Remote Site** – A site which has controllers which are not connected directly to the host computer. The controllers communicate with the host computer at pre-configured times via a modem and a normal dial-up telephone line or via a LAN or WAN

**Report** – Either, a message indicating system abnormality, but which is not an alarm message. Or, a compilation of data from the log file or the access control database which can be displayed on the screen or sent to a printer

**Reset** – The condition of a device in its clear or inactive or normal state. Also, to switch a device to its inactive state.

Also, the clearing of all or part of a system, returning the parameters to their default values

**RFID** – Radio Frequency Identification. The system by which data is transferred from cards and tags to Readers

**Roll Call** – A report which lists cardholders who are currently within a zone. (Also see IN reader, OUT reader and anti-passback)

**RS232** – A standard way of transmitting and receiving data down a cable. Usually used by the computer for distances up to 25 metres

**RS485** – A standard way of transmitting and receiving data down a cable over much greater distances than RS232.

Used by the access control system

**Rx** – Shorthand for anything to do with the receiving side of an RF (radio frequency) system or data communications

**Segment Controller** – A controller that contains data for the Access Control system and validates or not card transactions. There are 5 variants capable of connection to up 2, 4, 8, 16 or 32 Readers

**Shadow Card Pack** – A set of cards used to programme and delete cards into a standalone Magnetic Stripe Card-only Reader

**Smart Card** – A multi-application card often used for Cashless Vending. Access Control Readers can utilise the unique chip serial number found in every card, thus saving the need for a user to hold more than one card

**State/Status** – The current setting or condition of an access control parameter or variable

**Swipe Card** – Card which, to be read, must be passed through, or pushed into, a slot in the Cardreader

**Switch Plate** – A Proximity Reader that is designed to fit most single gang back-boxes

**Tag** – See card

**Tamper** – Unauthorised physical interference with the system, usually by opening enclosures or cutting or short circuiting cables

**Tamper Switch** – A switch that activates an alarm when a tamper condition is detected

**Telecode** – A patented Door Entry Phone System that connects directly the public telephone network (see PSTN), removing the need for hardwiring of handsets

**Thermal Dye-Sublimation** – A process where Photo ID cards are created by a printer heating the dye from a ribbon and then diffusing the colours into the plastic of an ISO Laminated Card (see ISO Laminated Card)

**Time Schedule** – A time slot linked with days of the week and holidays

**Toggle** – When a card or PIN is entered the first time, the door is opened and will remain unlocked until the card or PIN is entered a second time

**Token** – See card

**Transaction** – Any activity occurring in the system

**Transaction Log** – File stored on the computer which contains all the transaction messages received by the computer.

Used as a source of data for reports

**Tx** – Shorthand for anything to do with the transmitting side of an RF (radio frequency) system or data communications

**Uninterruptible Power Supply (UPS)** – A backup system that continues to supply pseudo-mains power for a short time in the event of a mains power failure

**User** – A cardholder. (As distinct from an operator)

**Valid Card** – A card which is allowed access

**Validation Date and Time** – The date and time when a system will validate or invalidate a card

**Visitor Card** – A card assigned for temporary use

**WAN** – Wide Area Network. Used in PC networks and can be utilised for Access Control communications (see Network)

**Zone** – An area within a site or facility, bounded by walls and by access points, used with anti-passback and roll call

# CONDITIONS OF SALE

## 1 General

1.1 The following are the terms and conditions ("Conditions") of the contract ("Contract") under which Bewator AB (the "Company") is to supply the goods and/or services specified in the Company's acknowledgement of order attached to these Conditions or otherwise agreed in writing by the parties (the "Equipment") to the person placing that order (the "Reseller").

1.2 No other terms, conditions or warranties shall apply unless agreed to in writing by the Company. These Conditions shall prevail over any terms and conditions of purchase of the Reseller.

1.3 No variation to these Conditions shall be binding unless agreed in writing by the Company.

1.4 The employees and agents of the Company are not authorised to make representations as to the description, quality or fitness for any particular purpose of any of the Equipment, unless confirmed in writing by the Company. The Reseller acknowledges that it has not relied on, and waives any claim for breach of, any such representations, which have not been so confirmed.

## 2 Sale

2.1 The Company shall sell and the Reseller shall purchase the Equipment subject to these Conditions.

2.2 Orders accepted by the Company may not be cancelled or rescheduled without the Company's consent in writing

## 3 Price and payment

3.1 The price of the Equipment shall be the Company's quoted price or where no price has been quoted, the price listed in the Company's Price list current at the date of acceptance of the Reseller's order.

3.2 Any prices quoted are, unless withdrawn, valid for 30 days only. Quotations by the Company are not offers to sell at the price stated and all orders remain subject to acceptance by the Company.

3.3 Payment of invoices shall unless otherwise agreed in writing be made in full without any deduction or set-off by the due date stated on the invoice.

3.4 Time for payment shall be of the essence. Failure to make due payment in respect of any deliveries or instalments under this or any other contract between the Reseller and the Company shall entitle the Company to delay, suspend or cancel deliveries in whole or in part as its option.

3.5 Any extension of credit allowed to the Reseller may be changed or withdrawn at any time. Any credit accounts are payable 30 days from invoice date.

3.6 If payment is not made in full by the due date stated on the invoice:

3.6.1 The Company will charge interest to the Reseller at the rate of 1.5% per month on the unpaid balance (such interest to accrue on a day to day basis from the due date for payment until receipt by the Company of the full amount whether before or after any judgement) and the Reseller agrees to pay such interest charge; and

3.6.2 the Reseller shall indemnify the Company against all costs and expenses (including any legal costs and expenses on a full indemnity basis) incurred or sustained by the Company in recovering sums due or in exercising its rights pursuant to Clause 6, in each case without prejudice to any other rights or remedies available to the Company.

3.7 Payment shall be due whether or not property in the Equipment has passed by virtue of Clause 6 below and the Company shall (without prejudice to any other right or remedy) accordingly be entitled to sue for the price once the same is due even if property in the Equipment has not passed.

## 4 Licences, taxes and other charges

4.1 The Reseller warrants and represents to the Company that every applicable licence (import or otherwise), foreign exchange control authorisation or any other authority that may be required in connection with the Equipment, have been or will be duly obtained by and at the expense of the Reseller.

4.2 Unless otherwise agreed in writing the prices do not include Value Added Tax ("VAT") or any other tax or levy on the supply or importation of the Equipment.

## 5 Delivery and installation

5.1 Delivery shall be ex-works unless specified otherwise on the order acknowledgement issued by the Company to the Reseller for the Equipment.

5.2 Upon delivery the Reseller shall sign the delivery note of the Company or its carrier to acknowledge receipt of the Equipment.

5.3 Any dates for delivery are approximate only. The Company's liability for any loss, damage, cost or expense caused by any delay or failure in delivery of the Equipment howsoever caused, including without limitation the Company's negligence, shall be limited to the price of that Equipment under the Contract. The Equipment may be delivered by the Company in advance of the quoted delivery date upon giving reasonable notice to the Reseller.

5.4 Where the Equipment is delivered in instalments, each delivery shall be paid for separately and failure by the Company to deliver any one or more of the instalments in accordance with these Conditions shall not entitle the Reseller to treat the Contract for the whole of the Equipment as repudiated.

5.5 If the Reseller fails or refuses to take delivery of the Equipment or fails to give the Company adequate delivery instructions by the time stated for delivery then, without prejudice to any other right or remedy available to the Company, the Company may:

5.5.1 store the Equipment until actual delivery and charge the Reseller the reasonable costs (including insurance) of storage and subsequent re-delivery; or

5.5.2 treat the Contract as repudiated and use the Equipment in fulfilment of other Resellers' orders.

5.6 Where the Equipment is to be collected by the Reseller, the Company may treat the Contract as repudiated and re-sell the Equipment if the Reseller fails to collect the Equipment within 7 days of notification by the Company that it is ready for despatch.

5.7 The Company may charge the Reseller for packaging, insurance, carriage and freight of the Equipment. The Company may pack the Equipment in whatever manner it considers reasonable. The Company shall be under no obligation to conform to any limits for weights or measurements of any consignment of Equipment.

## 6 Title and risk

6.1 Risk of loss or damage to the Equipment shall pass to the Reseller when the Equipment is delivered to the Reseller. If the Equipment is carried at the cost of the Company, the Company will only bear the risk of loss or damage in transit if it receives written notification of such loss or damage within 3 days of delivery, or in the case of non-delivery, within 21 days of the date of despatch.

6.2 Notwithstanding the passing of risk, the Company retains the legal and equitable title in the Equipment, which shall not pass to the Reseller until the Company has received payment of all sums due to the Company from the Reseller under the Contract. This Clause does not apply to the Equipment which has been mixed with or embodied in other products or has been installed in premises of an end-user. Title to software supplied always remains with the Company.

6.3 Until title in the Equipment has passed to the Reseller the Reseller shall hold the Equipment in a fiduciary capacity for the Company and in particular the Reseller shall:

6.3.1 insure the Equipment against loss or damage with an insurance office of good reputation and note the Company's interest on the policy.

6.3.2 store the Equipment safely and securely, and separately or in some other way ensure that it is readily identifiable as the property of the Company;

6.3.3 deliver the Equipment to the Company forthwith on demand.

6.4 For so long as the Reseller continues to trade and is not insolvent or otherwise within the conditions of Clause 11, the Reseller shall have a licence to offer for sale and sell the Equipment in the ordinary course of business as principal for its own account and not as agent for the Company. The Company may terminate this licence at any time by notice in writing to the Reseller. The licence will terminate automatically if the Reseller falls within Clause 11.

6.5 The Company or any of its servants, agents or authorised representatives shall be entitled at any time and without prior notice to enter on any premises where any Equipment is stored, or is believed by the Company to be stored, to retake possession of any Equipment and to sell or otherwise deal with or dispose of it.

6.6 The provisions of this Clause 6 shall survive the termination of the Contract for whatever reason.

## 7 Warranties

7.1 Subject to the conditions set out below the Company warrants that the Equipment will be free from defects in materials and workmanship for the relevant warranty period. Unless stated otherwise the warranty period begins on delivery to the Reseller.

7.2 The warranty period for the Equipment is one year.

7.3 If any of the Equipment does not conform to this warranty, the Company will at its option repair or replace the Equipment.

7.4 The warranty above is conditional upon:

7.4.1 the Reseller giving written notice to the Company of the alleged defect in the Equipment, setting out full particulars of the defect, within 14 days of the date on which the defect becomes apparent to the Reseller;

7.4.2 the Company and the Company's insurers being given a reasonable opportunity to investigate the defects including if requested by the Company an opportunity to inspect the Equipment at the Reseller's premises; and

7.4.3 if so requested by the Company, the Reseller returning the Equipment to the Company carriage paid.



# CONDITIONS OF SALE

**7.5** The Company shall be under no liability under the above warranty:

**7.5.1** in respect of any defect in the Equipment arising from any drawing, design or specification supplied by the Reseller;

**7.5.2** in respect of any defect arising from fair wear and tear, wilful damage, negligence of the Reseller, abnormal working conditions, failure to properly maintain and operate the Equipment in accordance with its specifications, failure to follow the Company's instructions or industry standards and practices, misuse or alteration or repair of the Equipment without the Company's approval or improper storage;

**7.5.3** where the Equipment is transported to the Reseller at the Reseller's risk and the defect occurred during transit;

**7.5.4** in respect of parts, materials or Equipment not manufactured by the Company in which case the Reseller shall only be entitled to the benefit of any warranty or guarantee as it is given by the manufacturer to the Company.

**7.6** The Company is not responsible for programming any replacement cards issued under warranty.

**7.7** The Company shall have no liability under this warranty other than under Clause 7.3. If the Company fails to comply with its obligations under Clause 7.3 its liability for such failure shall be limited to the price of the Equipment.

**7.8** Subject to Clause 8, this express warranty is the Reseller's sole remedy in respect of defects in the Equipment and is in lieu of all warranties, conditions or other terms implied by statute or common law, custom, trade, usage, course of dealing or otherwise, all of which are excluded to the fullest extent permitted by law.

**7.9** Nothing in these Conditions shall affect the statutory rights of a Reseller who is dealing with the Company as a consumer.

## 8 Liability

**8.1** Except in respect of:

**8.1.1** injury to or death of any person caused by the Company's negligence;

**8.1.2** the Company's liability under the Product Liability Act (SFS 1992:18) for any injury to or death of any person or loss of or damage to property intended for private use caused by a defect in the Equipment;

**8.1.3** breach on the part of the such interference the Company will charge for the service at its current rates.

**8.2** The Company shall not be liable for any consequential or indirect loss suffered by the Reseller whether this arises from a breach of duty, in contract or in tort, including negligence, or in any other way including without limitation loss of business, goodwill or profit.

**8.3** In the event that notwithstanding the provision of Clauses 7.8, 7.9, 8.1 and 8.2, the Company is found liable for any loss or damage suffered by the Reseller, that liability should in no event exceed the amount of insurance cover the Company has in respect of the particular liability.

## 9 Intellectual property/software

**9.1** No intellectual property rights in or associated with the Equipment shall pass to the Reseller as a result of the sale of the Equipment to the Reseller.

**9.2** The Company endeavours not to offer for sale Equipment which infringes known and valid patents or other intellectual property rights but shall not be liable in any manner whatsoever to the Reseller for any costs, damages or loss of profits arising from the use or sale of the Equipment which infringes or allegedly infringes any patent, registered design, copyright or other intellectual property rights of any third party.

**9.3** Software embedded in the Equipment and stored in programmable read only memory is supplied by way of irrevocable, non-exclusive licence to the Reseller to use such software only or in respect of the Equipment. The Reseller shall not other than as expressly permitted by these Conditions, copy, reproduce, translate, adapt, decompile, modify, reverse engineer or disassemble any such software. The Reseller acknowledges that the copyright and other intellectual property rights in such software are the property of and shall remain with the Company.

**9.4** Software supplied by the Company which is not embedded in the Equipment is licensed on the basis of a Software Licence Agreement normally provided with each copy of that software or its handbook and the Reseller agrees to use such software strictly in accordance with the terms of its licence.

## 10 Export conditions

**10.1** In these Conditions "Incoterms" means the international rules for the interpretation of trade Conditions of the International Chamber of Commerce as in force at the date when the contract between the Company and the Reseller was made. These Conditions shall prevail over Incoterms in the event of inconsistency between them.

**10.2** Where the Equipment is supplied for export, the provision of this Clause 10 shall apply notwithstanding any other provisions of these Conditions, subject to any special Conditions agreed in writing between the Company and the Reseller.

**10.3** Any bank or other charges on negotiable instruments in respect of export payments shall be paid by the Reseller.

**10.4** Unless otherwise specified on the order acknowledgement issued by the Company to the Reseller for the Equipment, Incoterms ex works shall apply.

**10.5** Where delivery is made fob the Company shall be under no obligation to give notice under Section 9 of the Sale of Goods Act (SFS 1990:931).

**10.6** The Reseller shall be responsible for arranging for testing and inspection of the Equipment at the Company's premises before shipment. The Company shall have no liability for any defect in the Equipment, which is made after shipment or in respect of any damage during transit.

**10.7** Unless otherwise agreed in writing between the Company and the Reseller, payment shall be made by irrevocable letter of credit opened by the Reseller in favour of the Company and confirmed by a bank in Sweden approved by the Company.

## 11 Insolvency of reseller

If the Reseller is unable to pay its debts, ceases to carry on business or becomes bankrupt or insolvent or any steps are taken by any person with a view to its winding up or dissolution or it enters into any composition or arrangement for the benefit of its creditors, or any trustee, liquidator, receiver or similar officer is appointed to it over its assets, the Company shall be entitled to cancel the Contract or suspend any further deliveries under the Contract without any liability to the Company and if the Equipment has been delivered but not paid for the price shall become immediately due and payable notwithstanding any previous agreement or arrangement to the contrary.

## 12 Specifications

**12.1** Specifications, dimensions and other product details as stated by the Company may be altered by the Company at any time without notice.

**12.2** If the Equipment is to be manufactured or any process is to be applied to the Equipment by the Company in accordance with a specification submitted by the Reseller, the Reseller shall indemnify the Company against all loss, damages, costs and expenses awarded, against or incurred by the Company in connection with or paid or agreed to be paid by the Company in settlement of any claim or infringement of any patent, copyright, design, trade mark or other intellectual property right of any other person which results from the Company's use of the Reseller's specification.

## 13 Miscellaneous

**13.1** any controversy or claim of whatever nature arising out of or relating to these conditions or breach thereof shall be governed by the laws of Sweden.

**13.2** All disputes arising in connection with these Conditions or the Contract shall be subject to the non-exclusive jurisdiction of the Swedish Courts.

**13.3** The Company is a member of the group of companies whose holding company is Bewator Group AB and accordingly the Company may perform any of its obligations or exercise any of its rights under these Conditions by itself or through any other member of its group, provided that any act or omission of any such other member shall be deemed to be the act or omission of the Company.

**13.4** The Company shall not be liable in any circumstances for any failure to perform any obligations where such failure is due to industrial dispute, acts or delays of suppliers or sub-contractors or any cause beyond the Company's reasonable control.

**13.5** Any notice required or permitted to be given by either party to the other under these conditions shall be in writing addressed to the other party at the address shown on the acceptance of order or quotation of the Company or such other address as may have been notified pursuant to this Clause to the party giving the notice.

**13.6** The failure of either party to exercise or enforce any rights under this Agreement shall not amount to a waiver of those rights.

**13.7** The illegality or invalidity of any part of these Conditions shall not affect the legality or validity of the remainder of them.

## Customer Services

For general product information,  
orders and delivery status,  
please contact us at:

Phone: +46 8 629 03 00

Fax: +46 8 627 00 96

Email: [order@bewator.se](mailto:order@bewator.se)

## Technical Support

For technical questions,  
please contact us at:

Phone: +46 8 627 0300

Email: [support@bewator.se](mailto:support@bewator.se)

## Address

Bewator AB

P.O. Box 1275

SE-171 24 Solna

Sweden

### Visitor's address

Englundavägen 7

Solna Business Park

[www.bewator.com](http://www.bewator.com)



# BEWATOR

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