



nadap  
**aeos**

*Security Management Solutions*

## *A New Focus in Security Management*

**Nedap AEOS, enhancing buildings with smart Net-enabled security management solutions.**

*With business and technology changing so quickly, the wisest strategic direction isn't always clear. But one thing is: the world is becoming more and more connected.*

*Whether you're responsible for the premises, the architect, consulting engineer or installation expert, professionals such as yourself need a rational approach to the complicated trade-offs in today's security management. Cost vs. performance. Functionality vs. design. Initial vs. total lifetime investment.*

*In a word, you need a blueprint for resolving key issues related to the security, connectivity, aesthetics and control of 'your' premises. AEOS provides it.*

In the years ahead, three main trends will have a major impact on security management systems.



## ***The Security Management Dilemma***

*In the years ahead, three main trends will have a major impact on security management systems.*

The first of these is the speed of innovation. Every day, new technologies are developed that have the potential to change the way we secure physical property. Macro-economic changes and mergers & acquisitions mean business environments can change virtually overnight. And changes in society can represent a major security risk. In such a world, it has become virtually impossible to determine your future security needs.

At the same time, the lifetime of currently available security devices is becoming shorter. Every few months, readers and CCTV cameras are replaced by newer versions. Is it really a good idea to rely on today's products to cope with future security requirements?

The third trend is that security management systems are becoming integrated into the workplace. Not only do they take care of physical access control; the same badge can also be used by an employee to pay for a meal in the cafeteria or gain access to the company's computer network. So whenever a company decides to cope with new requirements by replacing its system, this can have a huge impact on the day-to-day running of the organisation.

Together, these three trends create what we refer to as the Security Management Dilemma.

New products based on existing technology clearly cannot provide a satisfactory answer to this dilemma. Nedap has chosen a fundamentally different approach.

We've developed a new architecture called Device Web Architecture. An architecture that is based on open industry standards.

With this architecture the full potential of the new generation of Internet-enabled devices can be used in the search for a satisfactory answer to the Security Management Dilemma.

AEOS has been designed with ease of installation and support in mind.



# AEOS Smart Management Solutions

Combining decades of experience with use of the latest technology, Nedap has developed AEOS – an extremely secure access control system that integrates all current card technologies, any type of analogue and/or digital sensor, and alarm management. AEOS provides today's security managers with all the hardware and software options they need.

### Cost-effective

The AEOS system has been designed in an extremely modular fashion, allowing for maximum scalability with respect to desired system size, security levels, user permissions and functionality.

AEOS consists of hardware (AEpacks) and software components. A wide range of specific company requirements can be met by combining these components. This intelligent, modular structure enables unlimited extension and/or modification of the complete AEOS system. For instance, you might want to add new offices, extend existing areas with specific functionality or increase the security level of existing systems in a stepwise fashion.

With AEOS, structural cost reductions can be achieved, thanks to its flexible design and a raft of user-friendly options that together provide a sound basis for securing your premises (including ASP-based solutions).

### Freeing up valuable resources

With AEOS you only purchase what you currently need. Unlike traditional systems, there's no need to invest capital up front in resources you don't (and maybe won't) require. This principle applies equally to the needs of small and medium-sized enterprises as it does to those of large multinational companies. What's more, with AEOS you're not investing in rapidly aging technologies but in an industry-standard architecture.

### Integrated communication

Via its IP interface AEOS can communicate and integrate with any IP-based device that's available in the network, using the most secure form of data transfer, a VPN. Special interfaces enable the easy integration of CCTV and Fire and Burglary alarms.

### Hardware

#### Practical components







AEpacks provide a unique variety of options that anticipate the current trend towards increasing interaction between security and facility management. There is a range of AEpacks available – from readers for any current card technology, via analog and digital ports and power supply units, to intelligent door controllers.







#### Time-saving installation

The modules in the AEOS system (the AEpacks) are installed on DIN rails and they can be replaced or added while the system continues to operate – in short, they're hot swappable.

#### Intelligent remote maintenance

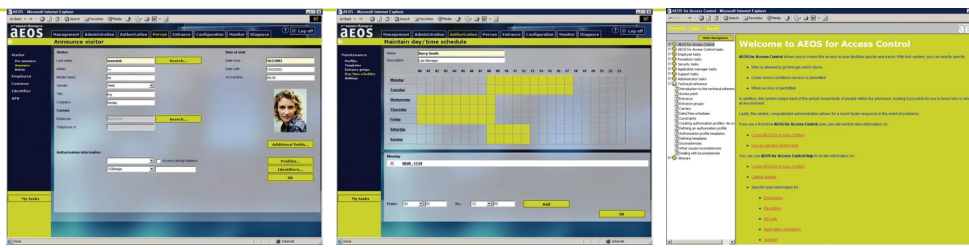
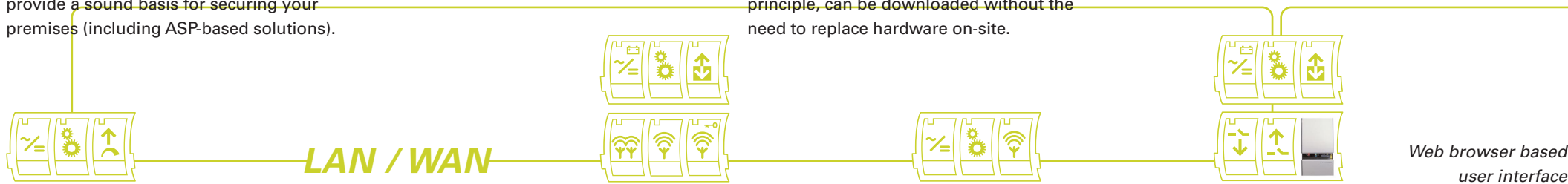
Due to the fact that hardware functionality is co-determined by software components, additional functionality, e.g. the Four-Eyes principle, can be downloaded without the need to replace hardware on-site.

-  **Proximity Reader**  
For Nedap cards up to 40cm
-  **Hands-free Reader**  
For Nedap cards up to 150cm
-  **Reader Interface**  
For the integration of all current card technologies
-  **MaXS Hands-free Reader**  
For the integration of DES encrypted Nedap cards
-  **Mifare Reader**  
For the integration of Mifare cards
-  **AEPU**  
The local processing unit

-  **Duoproxs Reader**  
Double antenna connection for e.g. in/out registration
-  **Smart Power Supply**  
Processor controlled power supply with class1 protection & UPS option
-  **Standard Power Supply**  
Power Supply with class1 protection
-  **16 Digital Inputs**  
For the integration of digital sensors
-  **4 Analog Inputs**  
For the integration of analog sensors
-  **10 Relay Outputs**  
For the connection of additional systems

### Software

AEOS contains all the software components you could conceivably need to meet your company's security management needs. Special configuration software ensures quick installation, even before actual on-site mounting has started. A variety of components support additional security options, such as Anti-Pass-Back. Role-based user interfaces, e.g. for receptionists, security staff and system administrators, are based on individual access rights and there's a handy quick-help program. An easy-to-use 'pre-announce' function for visitors, remote maintenance software and alarm management (tailored to the layout of the building) complete the list. As with the hardware, only software components that are actually required need to be purchased.



Web browser based user interface

**Main Features**



*Secured and stylish housing*

*Clear view on LED indicators*

*Easy access to connectors*

*DIN rail-based AEPU ensures easy installation*

*Test button runs full stand-alone script*

*A local service port is available on each AEPU*

*All AEPU are hot swappable for optimal uptime*

*All software is downloadable, so there's no need for EPROMs*

*New hardware and software are constantly being developed*

# Designing Security into Buildings

*AEOS provides a unique mix of functionality and aesthetics.*

Thanks to true hands-free identification, entrances can now be made more spacious and welcoming without compromising security. This gives you new options for the design of lobbies and corridors.

Over twenty years of design experience allows Nedap to integrate antennas invisibly into walls and doors. We offer the widest possible range of award-winning antenna designs.

Research shows that Nedap hands-free technology is preferred by a vast majority of users over other forms of identification, such as those requiring close proximity or magnetic swipe cards.

Security management systems can now enhance the look of buildings – offering convenience rather than raising barriers to good taste.

AEOS® allows architects to focus on design – rather than forcing them to use their ingenuity to hide inelegant technology.

*In glass intergrated antenna*



# AEOS provides a unique mix of functionality and aesthetics.



## **AEOS gives you the freedom to choose**

*With AEOS you have the freedom to make the right decisions, now and in the future.*

### **Freedom in identification**

AEOS solutions have been designed to integrate all forms of identification into a single security management system. Within the same system, Nedap hands-free technology for employees can be combined with bar-code badge numbers for visitors. And technologies such as Mifare® or HID® can also be combined with our microwave reader technology.

Our software can also distinguish between identification technologies. This avoids the all-too familiar problems caused by conflicts between badge numbers from different manufacturers.

### **Freedom in functionality**

The behaviour of a particular management system can be adapted to meet specific security needs. Thanks to the distributed intelligence within the system, tailored security procedures are easy to implement.

### **Freedom in installation**

As AEOS management software can be accessed via a standard Internet browser, complex installation procedures for attaching additional workstations are a thing of the past.

Based on open software standards, AEOS can make full use of the potential offered by the new generation of wireless handheld devices.

### **Freedom in user interface**

The user interface can easily be adapted to match your corporate identity. This allows seamless integration with your corporate intranet – which, for example, can now be used to pre-announce visitors.

### **Freedom in performance**

With AEOS you can choose an optimal balance between performance and cost. If additional AEPUs are added to the configuration, intelligent agents automatically distribute the new business logic over the system. This ensures optimal performance and reliability.

### **Freedom in configuration**

If you have limited performance requirements, you will need only a small number of AEPUs. You can subsequently add more to the configuration to match changes in your performance requirements.

# Low cost of ownership with easy installation and support

AEOS has been designed with ease of installation and support in mind. AEOS solutions can be tested and monitored bottom up and top down.

Script-based bottom-up support makes installation simple – even for the most complex systems.

Each AEPack is equipped with a test button, which runs a fully automated test script that checks all contacts, antennas and locks, even when no network connection is available. This enables standard engineers to install hardware components without the need for specific product training.

When the AEPU is connected with the AEPacks and the network, the system handles the configuration of the components. The architecture on which AEOS is based detects all connected DWeb® enabled devices, and automatically distributes the required software objects.

If a network connection is unavailable, the AEPU can be accessed through its service port.

After hardware installation a ‘sign off’ report can be run, showing whether all hardware has been properly installed. This can be used as the basis for an acceptance test.

Once the system is up and running occasional problems may still arise. If so, embedded top-down support software will pinpoint the problem area within seconds: the system itself provides answers to questions such as ‘Why does employee X have no access to door Y?’

A comprehensive set of reports is available, providing clear insight into the full status of the system. Long before they cause system failure, potential problems can be detected and corrected (e.g. dead battery packs, non-optimal antenna adjustments or unexpected increases in power consumption by door locks).

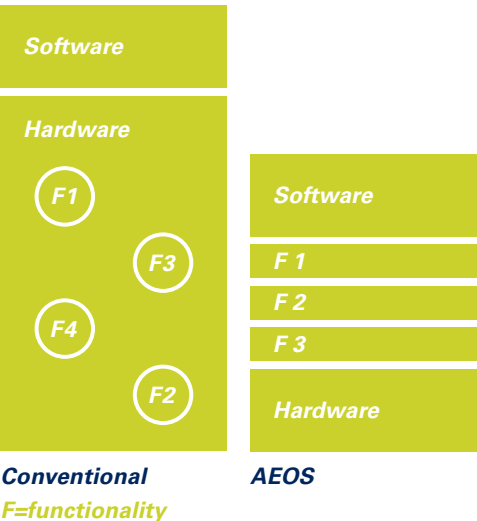
By lowering installation and support costs, AEOS significantly reduces the total cost of ownership of security management systems.

# Flexible pricing

With AEOS you don’t so much pay for products as invest in infrastructure. This significantly improves your organisation’s ability to cope with future changes.

When investing in hardware you often have to pay up front for functionality (F) you might need in the future. Or, even worse, you may find yourself paying for features you’ll never use, simply because they are an integral part of the hardware. Since AEOS distinguishes between hardware and embedded software, you’re able to invest in precisely the functionality you need rather than in hardware that traditionally includes features you don’t need.

This simple, yet frustrating fact of life further aggravates the Security Management Dilemma. With AEOS, such concerns become a thing of the past.



## *Nedap, a unique organisation*

Expertise in electronics, software, optics and precision engineering enables Nedap to design and build smart products and systems in close partnership with customers, using the latest technology and production methods. We provide tailored solutions based on rapid development, flexibility and quality assurance.

Nedap is a leading supplier of a wide range of applications. To identify just a few: the intelligent electronics that control modern central heating systems and sunroofs, as well as the switch mode power supplies for medical equipment, industrial processes and office automation.

Nedap supplies specific groups of customers with state-of-the-art electronic systems. Our innovative anti-shoplifting approach, which is based on remote service and maintenance, is currently setting the standard for the 21st century. We provide systems for livestock management and are market leaders in the design and construction of computerised voting systems.

As a systems house, Nedap does its own hardware and software development, providing products, service and consultancy in security and logistics. We deliver industrial solutions for automatic vehicle identification, production automation and retail article tracking.

As an organisation, Nedap is innovative, and entrepreneurial. For seven decades our success has been built on highly successful co-operation with our customers.

At our modern headquarters at Groenlo in the east of the Netherlands, all Security Management activities are located under one roof, from R&D to production and marketing. This ensures a rapid and comprehensive response to our customers' needs. We are well represented internationally, with a network of subsidiaries and sales offices throughout Europe, where staff who speak your language can advise and support you locally.

Nedap shares are quoted on the Amsterdam Exchanges.

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