



**EOS pro control systems**

**HunterDouglas**

WINDOW COVERINGS

SUN CONTROL

The image features a large, multi-paned window that fills most of the frame. Through the window, a cityscape is visible, including several buildings with red-tiled roofs and a prominent church spire. The scene outside is slightly hazy, suggesting a misty or overcast day. In the foreground, below the window, the dark silhouettes of a row of chairs are visible, indicating an interior space like a meeting room or a lounge. The overall lighting is soft and diffused, coming from the natural light outside.

**HunterDouglas**

**Powerful, Versatile  
Control Solutions**



A comfortable and pleasant indoor environment is the goal of virtually any building designer. An office building must provide an attractive and productive working environment for several decades. The same is true for hospitals and schools.

The HunterDouglas® EOS pro control system helps optimize sun control with uncompromising performance, delivered by unmatched engineering. From roller blinds, external blinds and sun louvres, to fully automated control systems, the HunterDouglas® EOS pro control system integrates the management of daylight and energy.

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# EOS pro control concept

Control over the working environment is a very important factor in our quality of life. It can profoundly influence the perceived ambience of indoor environments. Easy control over window coverings and Sun Control Systems helps to create a comfortable environment and increase the productivity of the occupants.

## CREATING THE RIGHT ENVIRONMENT

The indoor climate is influenced by conditions outside, such as solar radiation, weather conditions and outdoor air quality.

Window Coverings and Sun Control systems play an important role in regulating the influence of these external conditions on interior comfort.



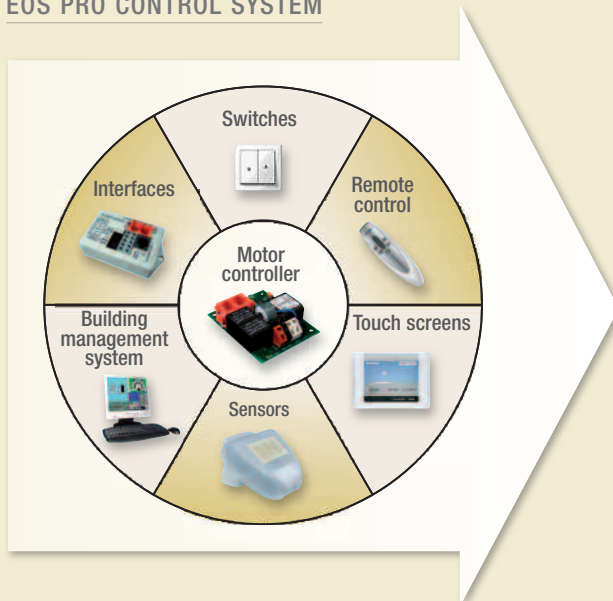


## HunterDouglas® EOS PRO CONTROL SYSTEM

Over decades of experience Hunter Douglas has developed extensive knowledge in product systems and controls that optimize window coverings and sun control solutions.

The HunterDouglas® EOS pro control system is a highly flexible system that offers occupants the type of control they need instead of the more limited controls of competing packages.

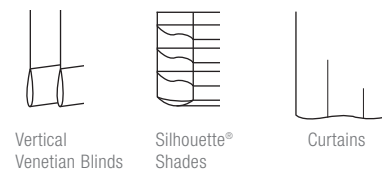
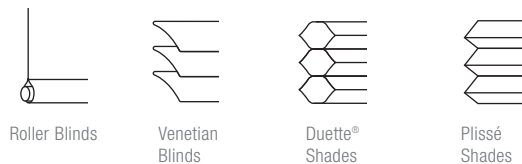
## EOS PRO CONTROL SYSTEM



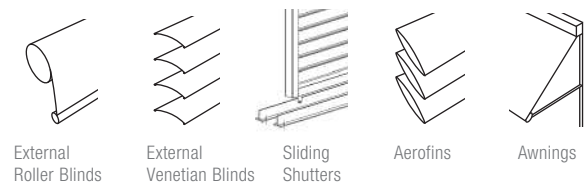
## HunterDouglas® WINDOW COVERINGS AND SUN CONTROL SYSTEMS

An expert in sun shading solutions, Hunter Douglas offers a wide variety of high performance shading products and solutions including; Venetian Blinds, Roller Blinds, Duette® Shades, Silhouette® Shades, External Blinds, Aerofins, Sliding Shutters that contribute to optimal light and heat control and save energy costs.

### Window Coverings



### Sun Control



# Functionality

## Key features:

### UNIVERSAL

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Universal Motor Controllers are the heart of the HunterDouglas® EOS pro control system. The Universal Motor Controllers can command any type of motor with any type of input device, from basic switches to advanced solar tracking systems.

The EOS pro control system lets you combine different types of motors for window covering and sun control in an easy way.

For example, DC motors for Roller Blinds & Venetian Blinds can be combined with AC motors for external Aerofoils, both controlled by the Universal Motor Controllers. The control systems can easily be integrated into a Building Management System.

### FLEXIBLE

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The control system offers the user optimal flexibility in controlling the shades in the building.

The Universal Motor Controllers will take commands from any compatible input device, offering the user unprecedented control: from Switches to Building Management Systems, from Sensor Control to PC Control and Internet Control, from Remote Controls to HunterDouglas® Sun Tracking Systems. The wide array of control possibilities can fulfill virtually any project specification.



**HunterDouglas®**

### SCALABLE

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Using the same range of Universal Motor Controllers, the control system can be used for small projects with several blinds up to large projects covering several buildings and floors.

The scalability of the system also allows easy extension after the system has been installed. So, when the business and office space expand, the control system seamlessly follows.

**Personal temperature control of +/- 3 °C resulted in a 3% increase in overall productivity and a 7% increase in productivity of repetitive tasks.**

*Source: Wyon 1996*

### **EASY INSTALLATION**

The control system is based on a plug and play system with clear instructions on the products that allow easy, hassle free installation.

### **OPTIMAL FUNCTIONALITY**

HunterDouglas® EOS pro control system offers occupants a high level of functionality including:

- Various intermediate positions for window coverings and sun control systems;
- Individual control, group control, and central control of all products;
- Various tilt positions for tiltable products;
- Security functions for window washers and fire alarms;
- Automatic functions for sensor control.

In addition, EOS pro control system enables facility managers to define the functionality and accessibility of the system as well as the location and type of input devices.



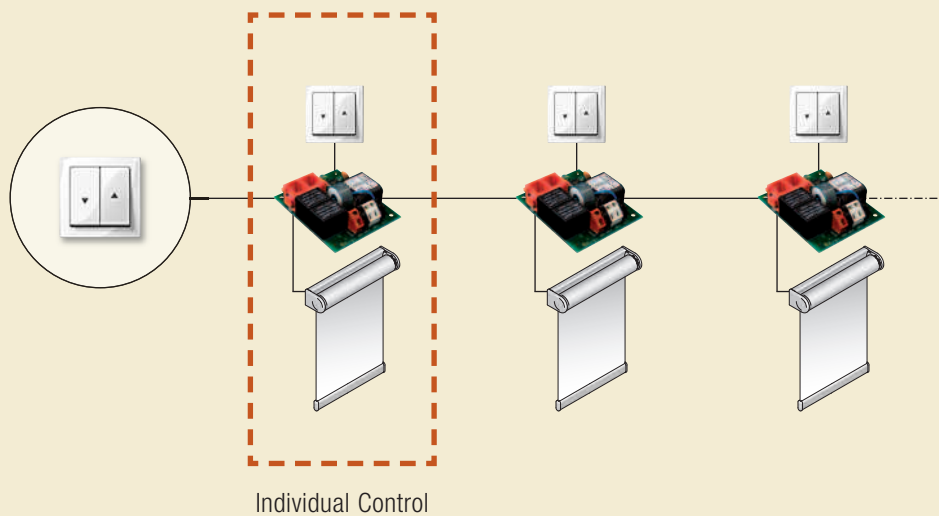
Well-designed daylighting & shading systems can dramatically reduce power usage and CO<sub>2</sub> from lighting & HVAC

*Source: Lighting Research Center at RPI, 2005*

# Basic Control Solution

The HunterDouglas® EOS pro control system offers practically unlimited scalability, allowing control of a single blind up to more than 45,000 units.

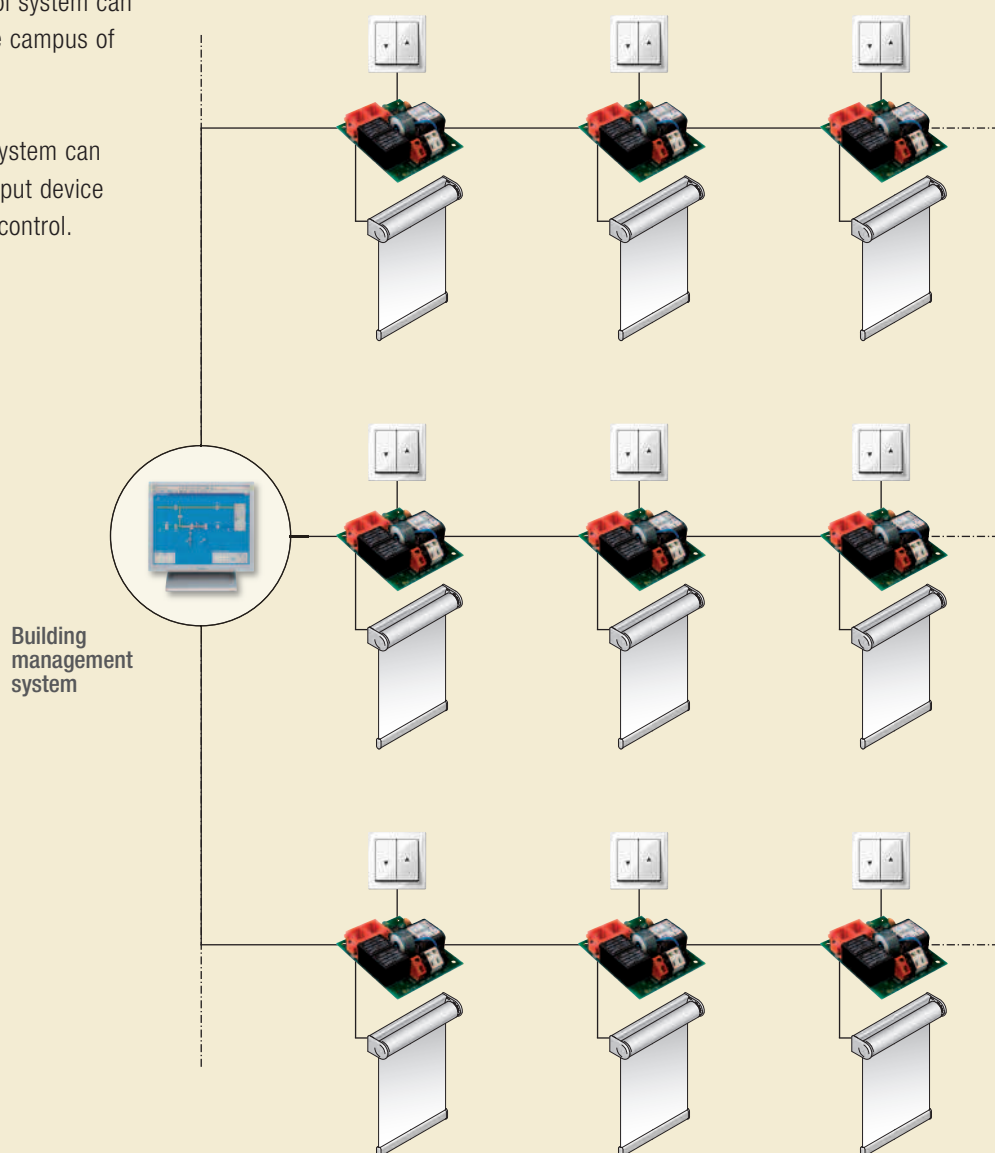
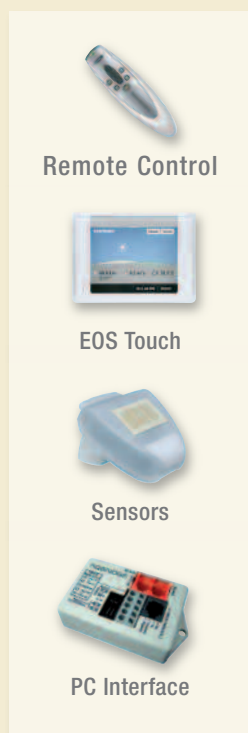
The basic control solution offers individual control and group control by means of switches and are facilitated by HunterDouglas® Universal Motor Controllers.



# Advanced Control Solution

In the advanced HunterDouglas® EOS pro control system, the same Universal Motor Controllers can be used to build a centrally controlled system integrating into a Building Management System (BMS). EOS pro control system allows the occupants to control the blinds or sun control systems individually, per group or per zone and the control system can cover one building or a complete campus of buildings.

The input device of the control system can be a switch or another type of input device such as a PC, sensor or remote control.



# KNX Operation



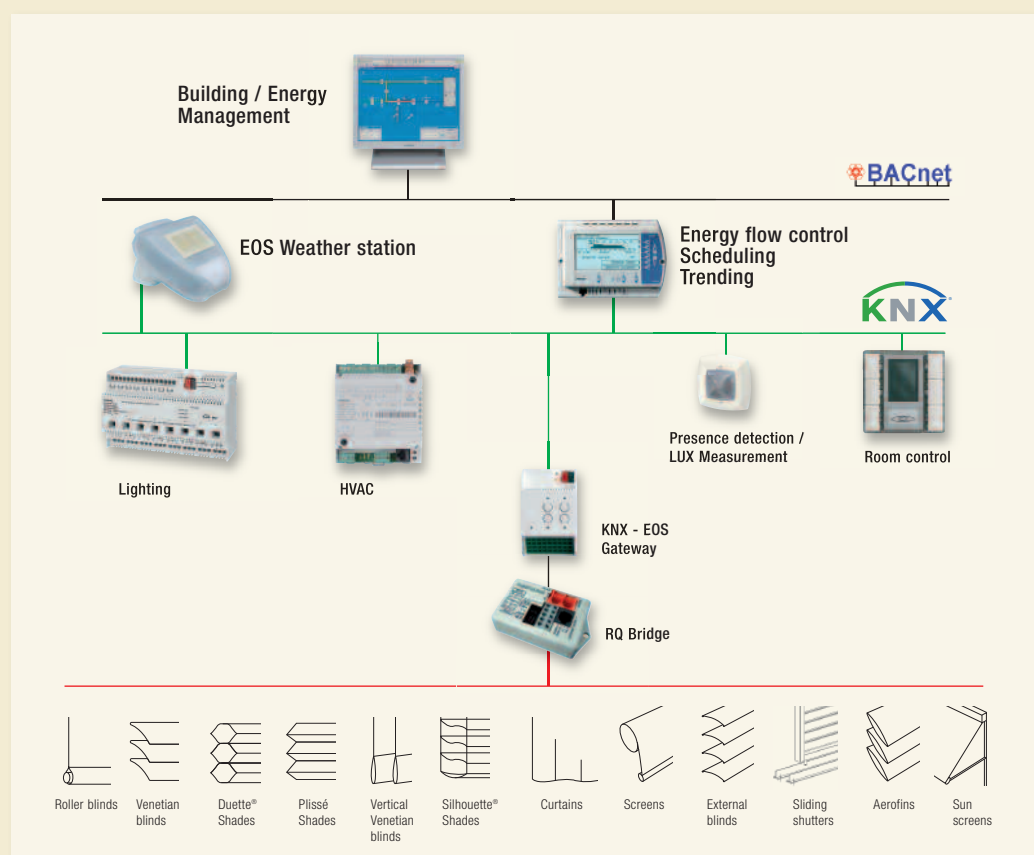
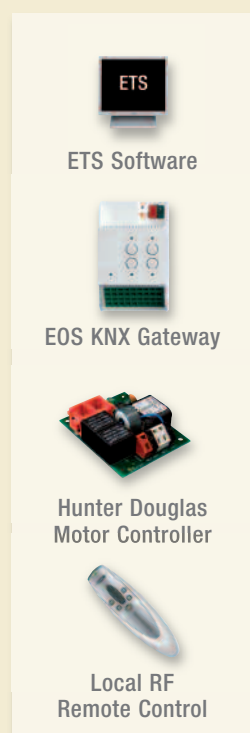
Hunter Douglas® EOS pro can be used easily in a KNX/EIB installation. The EOS KNX interface makes it possible to control Hunter Douglas products completely from KNX including roller blinds, Venetian blinds, screens, Duette® shades and sliding shutters, etc.

Because of the unique tilt programming functions we are able to offer the best operation with regard to regulating light, power, comfort and heating in combination with our own window covering and facade products.

This offers advantages in relation to:

- Installation and programming time
- Easy to program with ETS software
- More than 25 products per group interface
- Local EOS pro control, with RF remote control always possible

Hunter Douglas has its own KNX in-house specialists who ensure that project support and implementation are a standard component of our service!



# Building Management System



European regulators are becoming increasingly concerned to ensure that buildings are maximally energy-efficient. Only by integrating the various ventilation, cooling, heating, lighting and air conditioning systems with the window covering or sun control systems used, can this requirement be met.

The HunterDouglas® Pro Control System is ready for this. By means of various interface systems the Pro Control System can communicate with any building management system: ION/KNX/IP/RS232-422

By properly aligning sun control devices with (natural) light, temperature and cooling in relation to each other in every area, optimal comfort and energy solutions can be created, as well as making a significant contribution to the labour productivity of the users in these areas.

The new European standard NEN 15232 which deals with the energy performance of buildings and the regulations specified for building management will play an important role. The following classification summary indicates that Class A will deliver optimum energy performance. In order to attain this, NEN 15232 prescribes that the operation of sun control devices, lighting and HVAC will have to be completely integrated in building management!

## CLASSIFICATION OF THE ENERGY PERFORMANCE OF BACS ACCORDING TO EUROPEAN STANDARD - EN 15232

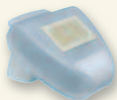
Class	Automation level	Energy efficiency ratio	Sunlight Regulation
A	Very energy efficient	0.70 - 0.86 (thermal) 0.86 - 0.96 (electric)	Integrated
B	Advanced	0.80 - 0.91 (thermal) 0.93 - 0.98 (electric)	Motorized Automatically controlled
C	Standard	1 (thermal and electric)	Motorized Manually controlled
D	Not energy efficient	1.10 - 1.51(thermal) 1.05 - 1.10 (electric)	Fully manual



PC interface



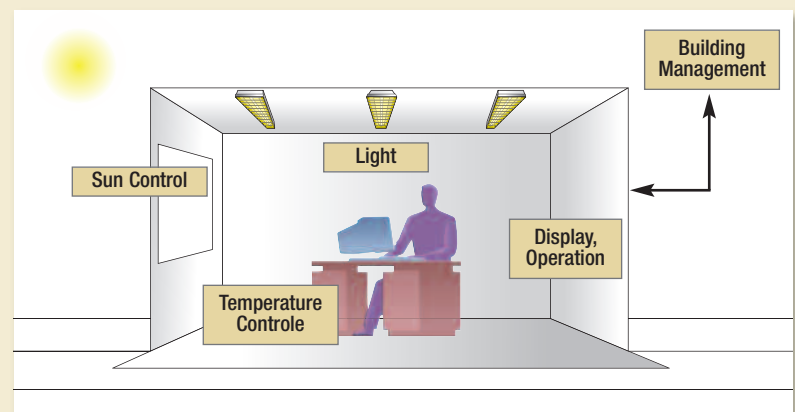
EOS KNX Gateway



EOS KNX  
Weather station



Hunter Douglas  
Motor Controller

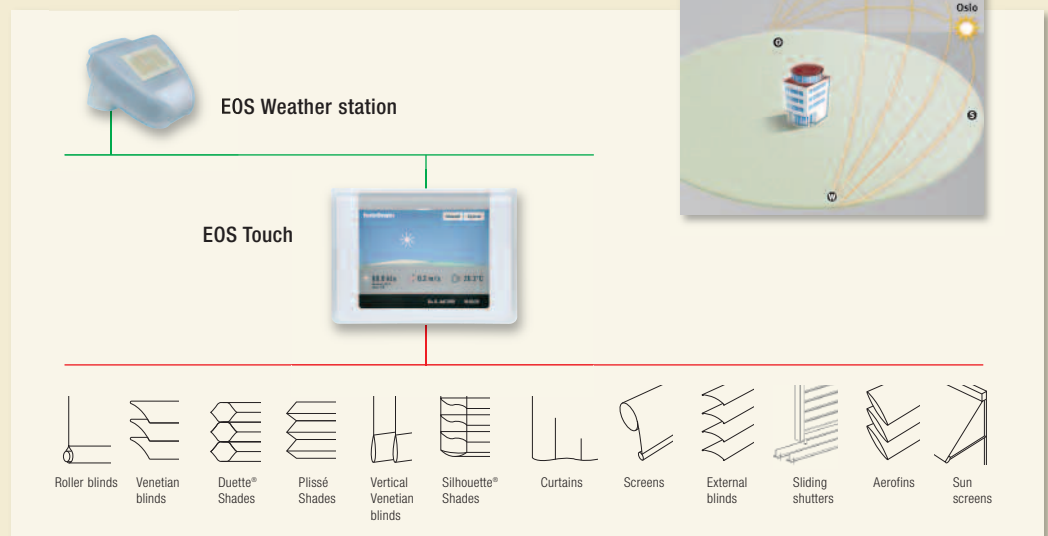


# Weather station solutions

## EOS TOUCH

- Max. of 6 facades to be programmed
- Max. of 100 systems and/or groups
- Integrated sun / wind / rain / temperature sensor
- Hunter Douglas product groups can be selected
- Programming of middle positions is possible for each product category and values can be set for temperature and (sun) light.

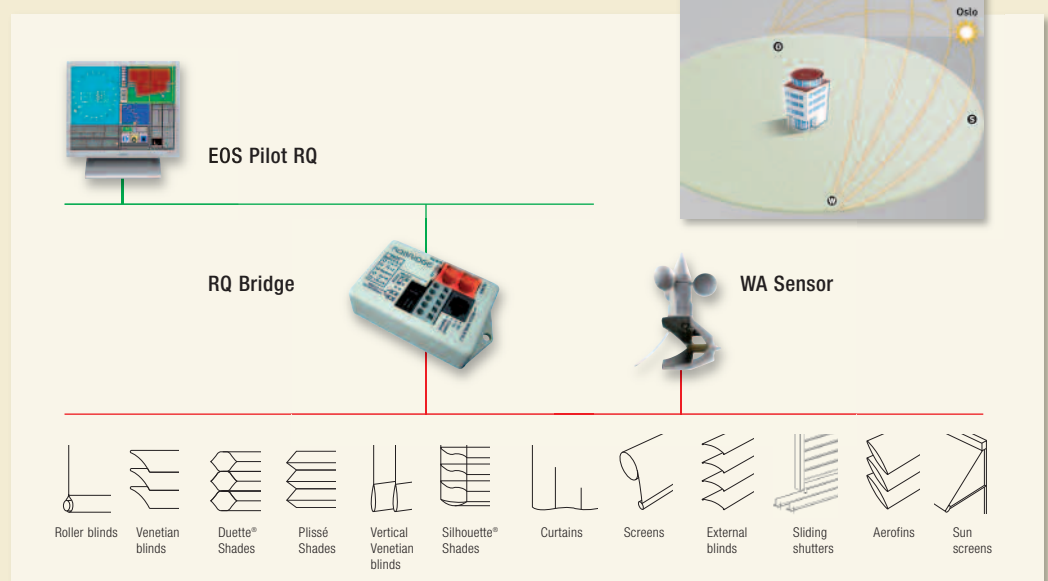
### Small scale GPS Weather station



## EOS PILOT RQ

- Works together with all available operations for the EOS pro control system
- Sensors for sun, wind, rain and temperature
- Automatic operation on the basis of previously lodged weather variables (sun, rain, wind, temperature) and a sun tracking system
- The system has a huge capacity (max of 15,000 window covering products and/or groups)

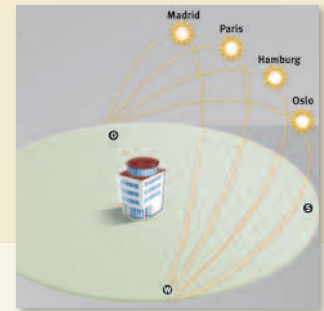
### Large scale GPS Weather station



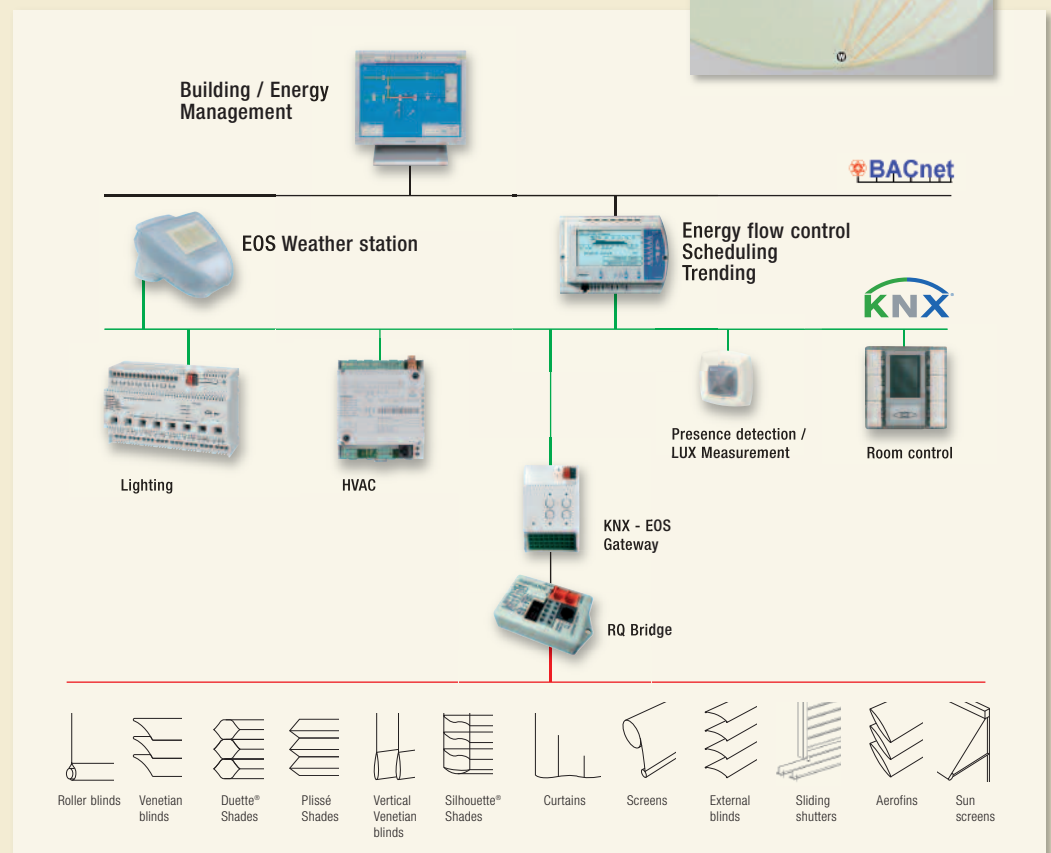
- The system has more than 60 settings at its disposal
- Flexible system settings and set-up of the driver can be easily changed
- In-between positions can be set for each product category and adjusted to weather variables
- EOS Pilot RQ can be used as stand alone or in a LAN
- Supports installation over the network
- Remote support and maintenance are possible
- Optional: connection to a building management system.

## EOS KNX SUNTRACER

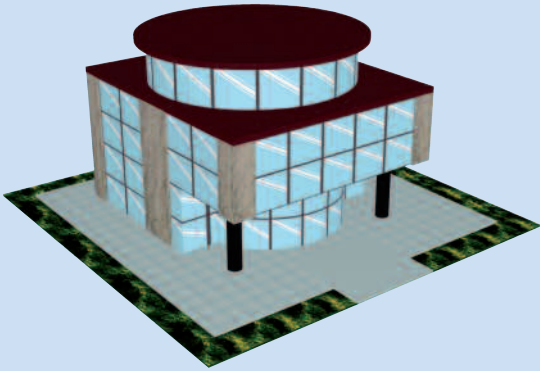
- KNX compatible
- Can be seamlessly incorporated into a KNX building management system
- KNX weather station for sun, wind, rain and temperature
- Automatic control on the basis of previously set weather variables (sun, rain, wind, temperature) and a sun tracking system
- Maximum flexibility and functionality on the basis of KNX
- Optional: connection to EOS pro control motor controllers by means of the EOS KNX gateway.



## KNX Weerstation



# Case Study



## Basic and Advanced Control

### PROJECT DESCRIPTION

5 floor office building with a combination of Interior and Exterior Sun Shading Systems requiring:

### System demands

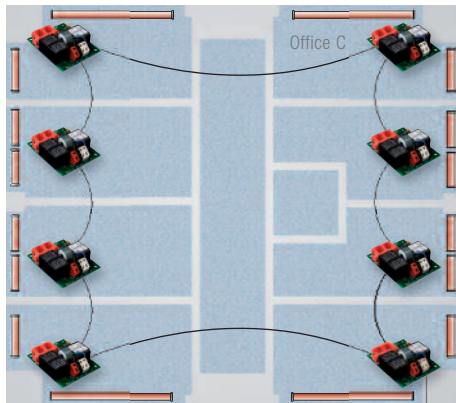
- Central control system at the reception from a desktop PC
- Central control to manage shading units for the entire building per office
- Central control to control the units of the entire building per office/per shading unit
- Each office should be able to control the relevant unit with a switch;
- The reception and the boardroom at the 5th floor need a higher level of control
- For maintenance purposes it should be possible to open and lock all the units during maintenance.

### PROJECT SPECIFICATIONS

Floor	Room type	Quantity Rooms	Shading System Type	Units per Room	Total Shading Units
1	Reception	1	Interior	8	8
	Offices A	4	Interior	2	8
2	Offices B	8	Interior	2	16
3	Offices C	8	Interior	2	16
4	Offices D	8	Interior	2	16
5	Offices E	4	Exterior	3	12
	Board Room	1	Exterior	4	4
Total number of Shading Units					80

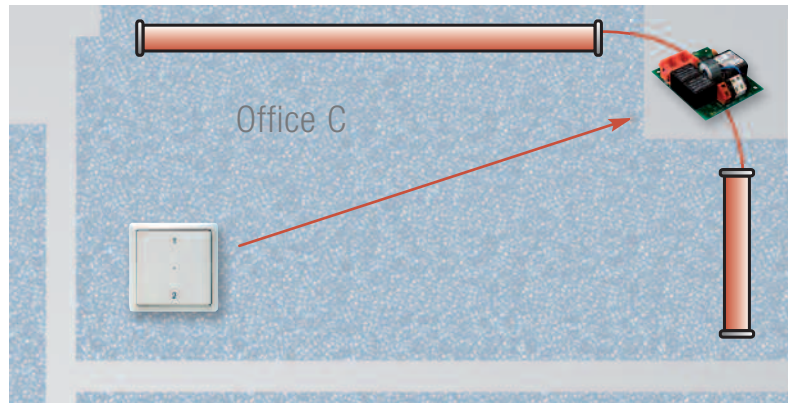
# Shading Solution

## BASIC CONTROL SOLUTION



Floor 3: (8 Offices type C)

Reception



### Basic control:

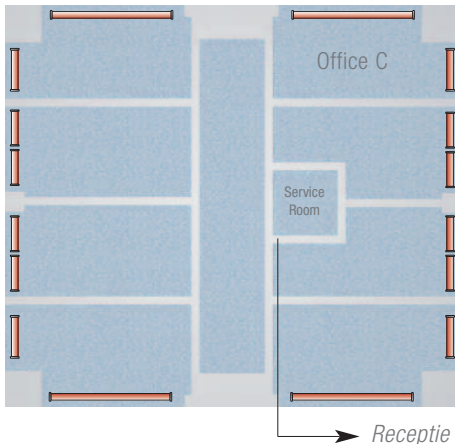
The 2 units are controlled and connected to 1 Universal Motor Controller. The input device in the office is 1 switch for both shading units.

## PROJECT SOLUTION

Floor	Room Type	Quantity Rooms	Quantity Shading Units	Input Device	Basic Control Solution		Advanced Control Solution	
					Universal Controller (UC)	Quantity Motor Controllers	Universal Controller (UC)	Quantity Motor Controllers
1	Reception	1	8	PC Control	Individual control	8	Individual control	8
	Offices A	4	2	Switch	Group control	4	Individual control	8
2	Offices B	8	2	Switch	Group control	8	Individual control	16
3	Offices C	8	2	Switch	Group control	8	Individual control	16
4	Offices D	8	2	Switch	Group control	8	Individual control	16
5	Offices E	4	3	Switch	Group control	4	Individual control	12
	Board Room	1	4	Touch Screen	Individual control	4	Individual control	4
Total number of Universal Controllers					44		80	

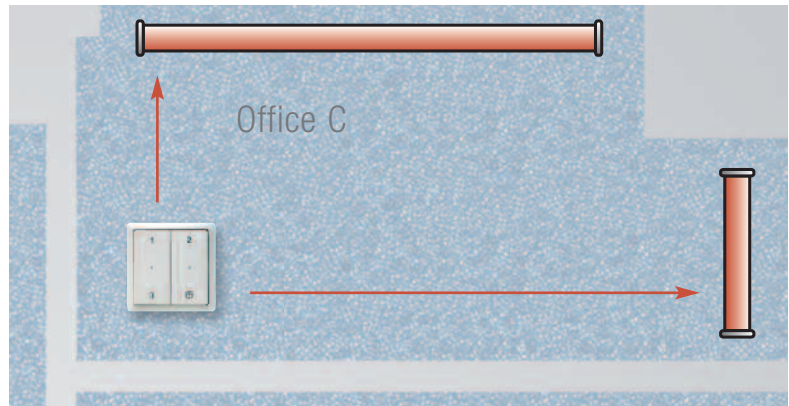
# Shading Solution

## ADVANCED CONTROL SOLUTION



### Floor 3: (8 Offices type C)

Service Room = Location for the Universal Motor Controllers and connected to the reception.



### Advanced control:

The 2 units are individually controlled and each unit is connected to 1 Universal Motor Controller, located in the service room. Each shading unit has 1 switch.

## BASIC CONTROL CONCLUSION

- Application of motor controllers, which control 2 motors
- Motor controllers are decentralized in each office
- Easy installation: motor controllers can be prepared and programmed before installation, which saves extensive time in programming on site.

## ADVANCED CONTROL CONCLUSION

- Each office has individual unit control
- Flexible in floor plan design due to centralizing the motor controllers and use of one Universal Motor Controller per unit
- Easy installation: motor controllers can be prepared and programmed before installation, which saves substantial time in programming on site.
- Easy maintenance: motor controllers are centralized in the service room
- More additional input devices can be added at a later stage
- Easy implementation of the Building Management System (BMS)

In this case study scenario the HunterDouglas® EOS pro control system easily created multiple solutions within the same project. The solution delivers flexibility in the general set up of the system and types of input devices used.

The solutions complies fully to the project requirements.

# Technical Project Support

Hunter Douglas is in a position to support partners completely in projects. Hunter Douglas Service & Support takes care of all product and project support.

## THE SUPPORT CONSISTS OF:

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- Preliminary stage
- Commissioning
- After-sales service
- Training

## PRELIMINARY STAGE

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In this phase Hunter Douglas Service & Support can provide guidance and advice with regard to selecting the most suitable control components and in the area of connection schemes. The desired usage configurations are then discussed and developed in consultation with the Hunter Douglas partner. Hunter Douglas Service & Support also has expertise and experience in the implementation and use of KNX systems, so we can help guide you through the best KNX configurations right from the conceptual stage of a project.

## COMMISSIONING

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EOS pro control can be pre-programmed in the factory in order to reduce the number of programming actions on site. Hunter Douglas Service & Support also offers a commissioning service for the EOS pro control system on site.



## AFTER-SALES SERVICE

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After installation Hunter Douglas also offers Service & Support concerning Hunter Douglas Motors & Controls products. Our service engineers are ready to answer your questions.

## TRAINING

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Hunter Douglas also offers training for partners with regard to the EOS pro control system. The training covers the installation and programming of the EOS pro control system.

## HUNTER DOUGLAS ARCHITECTURAL PRODUCTS

In the last 50 years, we've been fortunate enough to help turn countless innovative sketches into innovative buildings.



Architects, designers, investors and contractors from around the world have taken advantage of Hunter Douglas' unmatched product development, service and support. Chances are, you've seen more of Hunter Douglas than you think.

With major operation centres in Europe, North America, Latin America, Asia and Australia, we've contributed to thousands of high-profile projects, from retail and commercial facilities to major transit centres and government buildings.

Not only are the world's architects and designers our partners, they're our inspiration. They continue to raise the bar for excellence. We create products that help bring their visions to life: Window Coverings, Ceilings, Sun Control Systems and Façades.



Promoting sustainable  
forest management  
[www.pefc.org](http://www.pefc.org)



*Hunter Douglas products and solutions are designed to improve indoor environmental quality and conserve energy, supporting built environments that are comfortable, healthy, productive, and sustainable.*



*Our paint and aluminium melting processes are considered to be one of the industry standards in terms of clean production processes. All aluminium products are 100% recyclable at the end of their lifecycle.*

## ARCHITECTURAL SERVICES

We support our business partners with a wide range of technical consulting and support services for architects, developers and installers. We assist architects and developers with recommendations regarding materials, shapes and dimensions and colours and finishes. We also help creating design proposals, visualisations and mounting drawings. Our services to installers range from providing detailed installation drawings and instructions to training installers and advising on the building site.



## HunterDouglas

CEILING



**HUNTER DOUGLAS** is a publicly traded company with activities in more than 100 countries with over 150 companies.

The origin of our company goes back to 1919, in Düsseldorf, Germany. Throughout our history, we have introduced innovations that have shaped the industry, from the invention of the continuous aluminium caster, to the creation of the first aluminium Venetian Blinds, to the development of the latest high-quality building products.

Today we employ more than 16,500 people in our companies with major operation centres in Europe, North America, Latin America, Asia and Australia.

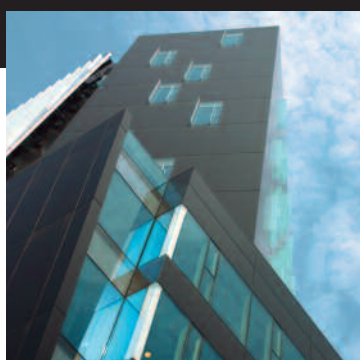
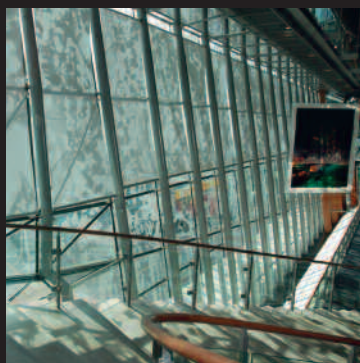
## Innovative Products Make Innovative Projects

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# HunterDouglas

WINDOW COVERINGS

CEILING

SUN CONTROL

FAÇADES