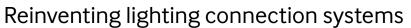
Vitesse Modular™





Welcome to CP Electronics

Leaders in energy saving controls for commercial, public sector and domestic environments

The global move towards energy saving

Reducing the energy consumption of buildings is no longer something to work towards. A range of pressing global drivers has made it an immediate requirement.

The unprecedented rise in energy prices, coupled with the radically altered economic landscape, has forced organisations to reduce their energy overheads in order to remain competitive.

Greater focus on preserving our natural environment is also forcing organisations to reduce their carbon footprint, not only to meet new legislation, but also the growing pressure from customers that their suppliers have proactive environmental policies.

Helping organisations to achieve their objectives

CP Electronics is a world leader in helping organisations to achieve their energy consumption objectives. We benefit from over 40 years in the design and manufacture of cutting-edge energy saving controls for heating, lighting and ventilation.

Our products and solutions are used in commercial, public sector and domestic environments of all sizes. Furthermore, we provide technical advice and customer care that ensure you always achieve the best results and an optimal return on investment.

Innovation. Functionality. Simplicity.

Every single CP Electronics product brings something new to lighting, heating and ventilation control. Our ethos has always been to innovate new ways for our customers to save money and minimise their environmental impact without sacrificing functionality or aesthetic.

These underpinning values are complemented by a constant drive towards simplicity. Design, installation and maintenance professionals benefit from practical simplicity, whilst end-users benefit from highly intuitive user-friendly controls.

A reputation for detail and quality

Attention to detail and quality has made CP Electronics a name to trust. Exceptional reliability has even enabled us to provide a 5 year warranty as standard, on all our products.

CP Electronics has achieved the following certified standards which reflect the highest levels of quality and performance:

BS EN ISO 14001:2004 – International recognition of the company's environmental management systems

ISO 9001 Accreditation – International recognition of quality management systems

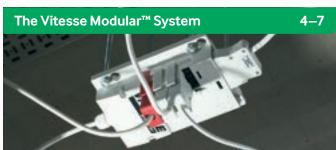
OHSAS 18001 Accreditation – Occupational Health and Safety Management

CE – All products where applicable carry the CE mark









An overview of the features and benefits Vitesse Modular brings you

Wiring Diagrams

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Typical wiring layouts for switching and dimming detectors

Product Overview

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Quick list of key components

Switching Products

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Four pole connections for standard non-dimming luminaires

2-Channel Switching Products

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2-channel is for use in applications that require two independently switched circuits.

Dimming Products

17-19

Six pole connections for luminaires fitted with a dimming ballast.

Technology Guide



Learn more about the innovative energy-saving features of our product ranges.

Presence and absence detection explained	21
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Direct dimming detectors with	
lux level sensing	22–23

The Vitesse Modular™ System



As its name suggests, Vitesse Modular relies on a modular design which means you simply add 'modules' as and when they are needed.

Packed with innovative features, Vitesse Modular is a cost effective method of providing power and control for lighting installations in industrial, commercial and retail buildings.

4-way Extender Module

An-10 wireless switching module.

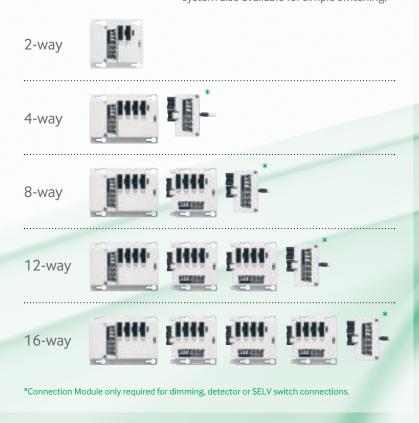
Starter Module

6 pole system for dimming illustrated. 4 pole system also available for simple switching.

It grows and adapts to suit the installation

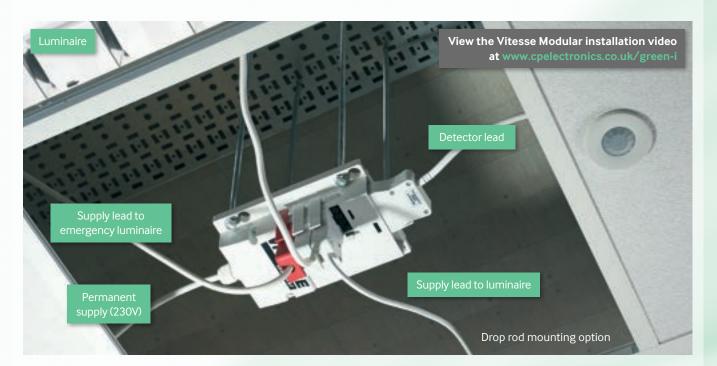
From 2-way to 16-way using the 4-way extender modules... it couldn't be simpler.

Once Vitesse Modular is installed, modules can be added (or removed) depending on future requirements. Also, as there are so few parts, you don't have to waste space in a warehouse or vehicle with a huge variety of different parts just in case you might need them.



Simple connectivity

The mains input is connected using the spacious wiring compartment; and control inputs and outputs are pluggable using industry standard connectors as shown as a typical layout below.



Ease of fixing

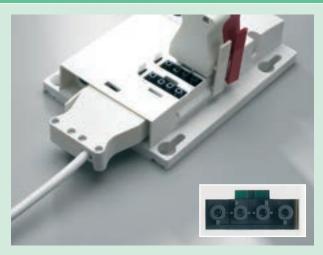
Vitesse Modular provides easy installation options for all locations.



Choice of switching or dimming

Vitesse Modular offers you the choice of switching or dimming to suit your installation.

Four pole connection for switching



Four pole connections for standard non-dimming luminaires allows switching or automatic control with Presence detectors or a SELV switching module. Available with 2-channel switching, see page 9.

Six pole connection for dimming



Six pole connections for luminaires fitted with a dimming ballast allows switching and dimming when used with Presence detectors or a SELV dimming module.

Flexible to your project demands

Vitesse Modular can adapt to various installation requirements with regards to functionality & connectivity.

SELV switching module



The Vitesse Modular SELV module removes the need for RCD protection and provides IEE 17th Edition compliant lighting installations.

Separate pluggable connections



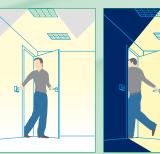
Separate pluggable connections for detectors and control devices so valuable channel outputs are not wasted.

PIR and microwave detectors



Full range of lighting control products such as PIR and Microwave Presence detectors. Presence detection provides automatic switch on and automatic switch off.

Easy presence/absence detector connection





Simple pluggable connection to provide presence/ absence detection when used with our full range of available detectors.

see page 21 for more information

Future-proof your lighting design

A project might evolve over time. Our simple solutions make adaption easy.

Programming handsets





Our range of infrared (IR) handsets have been designed to allow simple configuration, programming and maximum user convenience.

There's a handset to suit every user whether it's the commissioning engineer configuring hundreds of detectors, or a contractor setting up two of three detectors.

Embracing wireless technology through our An-10 system



An-10 wireless technology allows you to install a fully featured lighting control system easily and with minimal disruption.

An-10 has been specifically created to allow you to embrace the advantages of wireless technology, while at the same time offering all of the features and functionality demanded by modern day lighting control systems.

Visit our website for more details on An-10.

Versatile wiring options

Vitesse Modular has been designed for hassle-free wiring on-site.

Large terminal compartments and blocks



Lots of space for really easy connections.

Large terminals accept 4mm² cable.

Detachable cable entry plate and integral cable clamps



Detachable cable entry plate for hassle-free wiring.

Cable clamps can be used with grommets or cable glands.

Red luminaire connectors for emergency fittings



Red luminaire connectors easy to track emergency circuits whilst on-site.

Series 166 format pluggable connectors

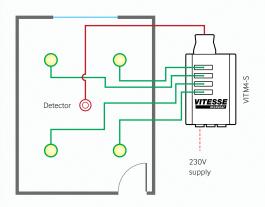


Series 166 format connectors—no need for proprietary connectors.

Easy to connect pluggable luminaires.

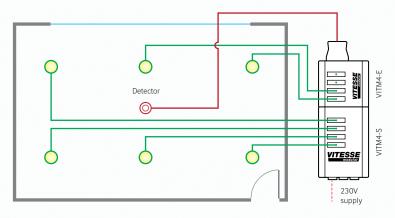
Typical wiring layouts for switching and dimming detectors

Switching



Four luminaire room

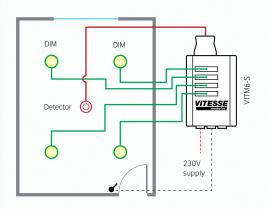
Presence non-dimming room with detector.



Six luminaire room

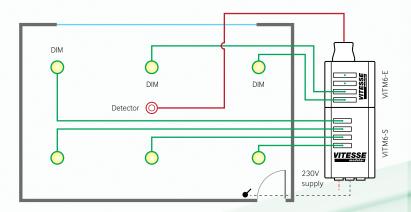
Presence non-dimming room with detector.

Dimming



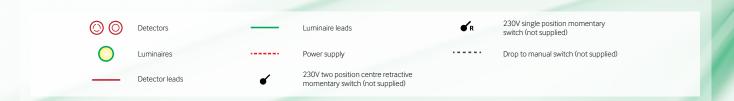
Four luminaire room

Absence and window row dimming room with detector.



Six luminaire room

Absence and window row dimming room with detector.



PLEASE NOTE: These wiring diagrams are to be used as a guide only. For further details please refer to our product user guides.

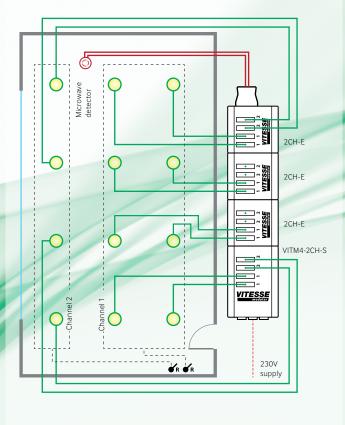
2-channel switching

Ideal for installations that have essential and non-essential supplies.



Non-dimming distribution box for use in applications that require supplies for switching lighting and/or ventilation circuits.

The 2-channel, 2-supplies VITM4-S-2CH-2S is ideal for hospitals where there is essential and non-essential supply. See page 14 for 2-channel products.



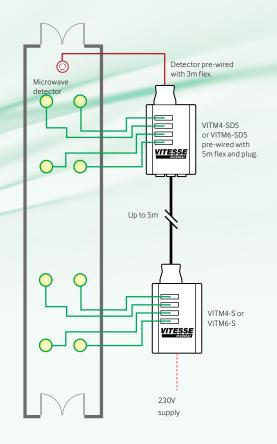
Dedicated corridor solution



Vitesse Modular offers a dedicated corridor solution.

Switching and dimming versions are available in a pre-wired configuration, VITM4-SD5 and VITM6-SD5, enabling luminaires in corridors or passageways to be easily connected.

See page 11 and 17 for corridor solution products.



PLEASE NOTE: VITM 4 and 6 are not intercompatible

Product overview

Switching Products				
	Code	Description	Pg	
3	VITM4-S	Starter module with 4 pole, 4 outputs	11	
0	VITM4-S2	Starter module with 4 pole, 2 outputs	11	
4	VITM4-E	Extender module with 4 pole, 4 outputs	11	
E,	VITM4-SL1	Pre-wired package	11	
	VITM4-SD5	Pre-wired corridor module.	11	
•	VITM4-EBDSPIR- PRM	Compact PIR presence/absence detector	12	
æ	VITM4-EBMHS-PRM	Miniature PIR presence detector	12	
6	VITM4-MWS6-PRM	Low profile microwave presence/absence detector	12	
9	VITM4-MWS3A-PRM	Adjustable head microwave presence/absence detector	12	
1	VITM-MCFUSC	VITM Marco basket fixing clip	13	
0	VITM4-SELVMOD	SELV switching module	13	
•	VITM-ROSE	Ceiling rose	13	
1		Luminaire leads & connectors	13	

	2-Channel Switching Products				
	Code	Description	Pg		
5	VITM4-S-2CH	Starter module with 4 pole, 4 outputs	14		
4	VITM4-E-2CH	Extender module with 4 pole, 4 outputs	14		
S.	VITM4-S-2CH-2S	Starter module with 4 pole, 4 outputs. 2-channel, 2-supplies	14		
1	VITM4-E-2CH-2S	Extender module with 4 pole, 4 outputs. 2-channel, 2-supplies	14		
•	EBDSPIR-PRM-2CH	Compact PIR presence/ absence detector	15		
0	MWS6-PRM-2CH	Low profile microwave presence/absence detector	15		
0	MWS3A-PRM-2CH	Adjustable head microwave presence/absence detector	15		

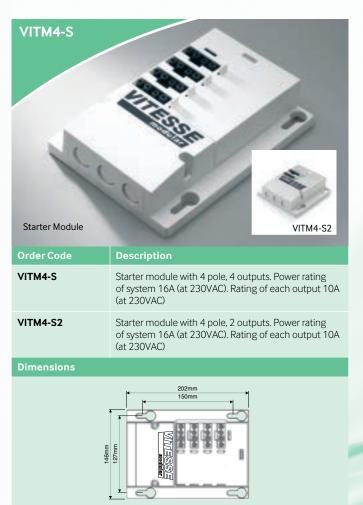
	2-channel detector leads	15
	Luminaire leads & connectors	16
VITM-MCFUSC	VITM Marco basket fixing clip	16

	Dimming Products				
	Code	Description	Pg		
9	BVITM6-S	Starter dimming module with 6 pole, 4 outputs	17		
1	BVITM6-S2	Starter module with 6 pole, 2 outputs	17		
1	BVITM6-E	Extender dimming module with 6 pole, 4 outputs	17		
3	BVITM6-SL1	Pre-wired dimming package	17		
N.	BVITM6-SD5	Pre-wired corridor module, 5 metres of cable	17		
•	VITM6-EBDSPIR- DD	Compact PIR presence/absence detector	18		
C	VITM6-EBMHS-DD	Miniature PIR presence detector			
0	VITM6-MWS6-DD	Low profile microwave presence/absence detector	18		
0	VITM6-MWS3A-DD	Adjustable head microwave presence/absence detector			
	VITM6-SELVMOD	SELV switching and dimming module			
(1)	VITM-ROSE	Ceiling rose	19		
1		Luminaire leads & connectors	19		
(1)	VITM-MCFUSC	VITM Marco basket fixing clip	19		

Programming Handsets					
	Code	Description	Pg		
1	UNLCDHS	Professional commissioning handset	12, 16, 18		
0	UHS5	Commissioning handset	12, 16, 18		
9	UHS7	User handset	12, 16, 18		

Vitesse Modular switching modules, detectors & accessories

Vitesse Modular provides easy installation options for all locations.

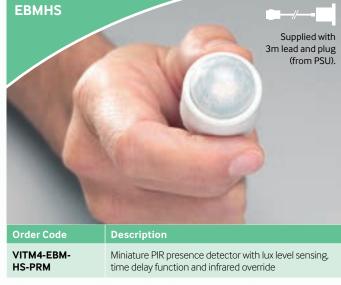




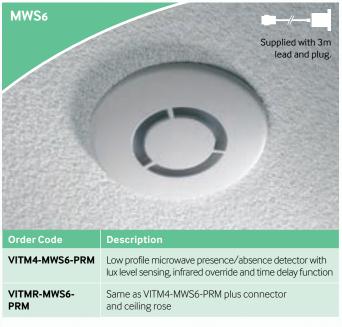


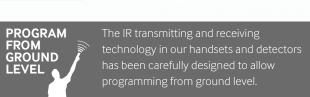






(Note: this detector does not support absence detection)

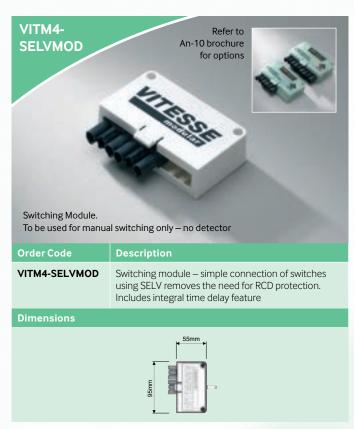




	Order Code	Description
1	UNLCDHS	Professional commissioning handset
0	UHS5	Commissioning handset
9	UHS7	User handset













^{*}Only for single channel detectors

Order Code Guidelines for Cables

Prefix	Poles	Lead	Core	Length in Metres	Cable Area	Туре	Plug Colour
VITM	4	L	3/4	03 or 05 (other lengths to order)	1.0mm ² (1.5mm ² to order)	O = Isf	W (White) or R (Red) B (Black) to order

2-channel switching options

Non-dimming distribution box for use in applications that require two independently switched lighting circuits, or lighting and ventilation circuits. Learn more on page 9.





2-channel, 2-supplies switching options

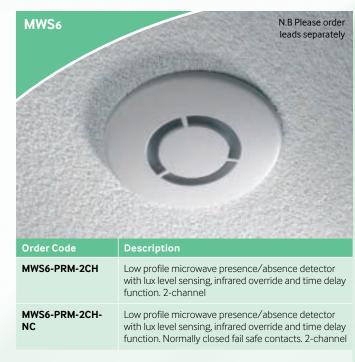
Non-dimming distribution box for use in applications that require two independent supplies for switching, lighting and/or ventilation circuits. Essential and non-essential. Learn more on page 9.







Order Code	Description
EBDSPIR-PRM-2CH	Compact ceiling mounted PIR presence/absence detector with lux level sensing, time delay function and infrared override. 2-channel
EBDSPIR-PRM-2CH- NC	Compact ceiling mounted PIR presence/absence detector with lux level sensing, time delay function and infrared override. Normally closed fail safe contacts. 2-channel





Order Code	Description
MWS3A-PRM-2CH	Adjustable head microwave presence/absence detector with lux level sensing, infrared override and time delay function. 2-channel
MWS3A-PRM-2CH- NC	Adjustable head microwave presence/absence detector with lux level sensing, infrared override and time delay function. Normally closed fail safe contacts. 2-channel

Detector Leads	
Order Code	Description
VITM4-L3-2CH	2-channel detector lead for single detector (3 metre)
VITM4-LD3-2CH	2-channel dual detector lead for two detectors (3 metre)
VITM4-L3-2CH-2S	2-channel, 2-supplies detector lead for single detector (3 metre)
VITM4-LD3-2CH-2S	2-channel, 2-supplies dual detector lead for two detectors (3 metre)

Order Code Guidelines for Cables

Prefix	Poles	Lead	Core	Length in Metres	Cable Area	Туре	Plug Colour
VITM	4	L	3/4	03 or 05 (other lengths to order)	1.0mm ² (1.5mm ² to order)	0 = Isf	W (White) or R (Red) B (Black) to order







The IR transmitting and receiving technology in our handsets and detectors has been carefully designed to allow programming from ground level.



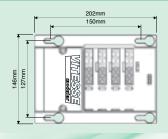
Vitesse Modular dimming modules, detectors & accessories

Our VITM6 range is designed for use with dimming luminaires.



Order Code	Description
BVITM6-S	Starter module with 6 pole, 4 outputs. Power rating of system 16A (at 230VAC). Rating of each output 10A (at 230VAC)
BVITM6-S	Starter module with 6 pole, 2 outputs. Power rating of system 16A (at 230VAC). Rating of each output 10A (at 230VAC)

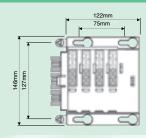
Dimensions





Order Code	Description
BVITM6-E	Extender module with 6 pole, 4 outputs. Power Rating of system 16A (at 230VAC). Rating of each output 10A (at 230VAC)

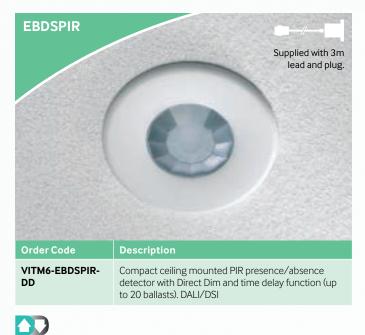
Dimensions





Order Code	Description
VITM6-SL1	Pre-wired dimming package includes 6 pole 4 output starter dimming module, Ceiling Rose, 4 pole connector plug and 1 metre of cable. BESA box not included

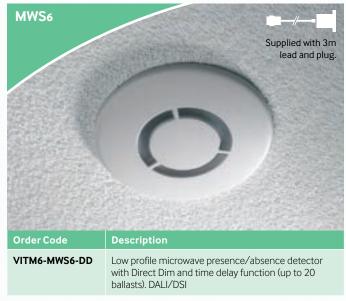






(Note: this detector does not support Absence detection)

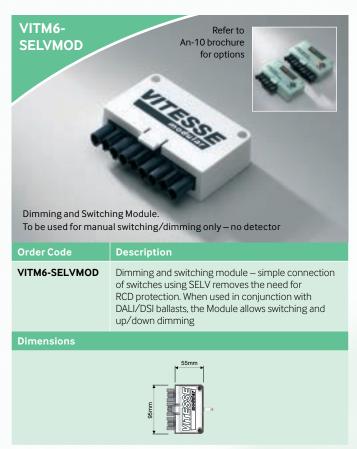








	Order Code	Description
1	UNLCDHS	Professional commissioning handset
0	UHS5	Commissioning handset
9	UHS7	User handset





Order Code	Description		
VITM6L303100W	3 core luminaire lead (white), 1.0mm² (3 metres)		
VITM6L305100W	3 core luminaire lead (white), 1.0mm² (5 metres)		
VITM6L403100R	4 core luminaire lead (red), 1.0mm² (5 metres)		
VITM6L405100R	4 core luminaire lead (red), 1.0mm² (3 metres)		
VITM6L503100W	5 core luminaire lead (white), 1.0mm², (3 metres)		
VITM6L505100W	5 core luminaire lead (white), 1.0mm², (5 metres)		
VITM6L603100R	6 core luminaire lead (red), 1.0mm², (3 metres)		
VITM6L605100R	6 core luminaire lead (red), 1.0mm², (5 metres)		
VITM6-LPW	6 pole luminaire connector (white)		
VITM6-LPR	6 pole luminaire connector (red)		
Other cable lengths are available upon request			





Order Code Guidelines for Cables

Pre	fix	Poles	Lead	Core	Length in Metres	Cable Area	Туре	Plug Colour
VIT	М	6	L	3/4/5/6	03 or 05 (other lengths to order)	1.0mm² (1.5mm² to order)	0 = lsf	W (White) or R (Red) B (Black) to order

Technology Guide

Our Vitesse Modular Lighting Connection System works with our cutting edge products.

Find out more about the technology behind our signature detector ranges through this comprehensive guide.

You can also download free BREEAM-compliant lighting specifications from www.cpelectronics.co.uk/apps

Presence and absence detection explained	21
PIRs and microwave detectors compared	21
Switching detectors with lux level sensing	22
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lux level sensing	22-23

Presence and absence detection explained

The choice between presence and absence detection for different spaces can make a big difference in user-friendliness and the amount of energy saved.

Detectors will switch on lighting automatically when a person enters the room, and switches off lighting automatically when no movement is detected.

Absence Detection



Upon entering the room the person switches on the light as normal, but on leaving the detector switches off the lighting automatically. Lights can also be switched off manually.

PIRs and microwave detectors compared

PIR detectors

PIR (Passive Infrared) presence detectors detect body heat and movement and are ideally suited where a defined detection pattern is required.

Microwave detectors

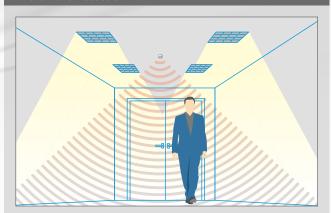
Microwave presence detectors are sensitive to movement and are ideal for large spaces and areas that have an awkward shape or where fine motion detection is required.

PIR (Passive Infrared) Detection



PIR detectors work on detecting the movement of body heat. They are better suited to smaller spaces or where a defined detection pattern is required.

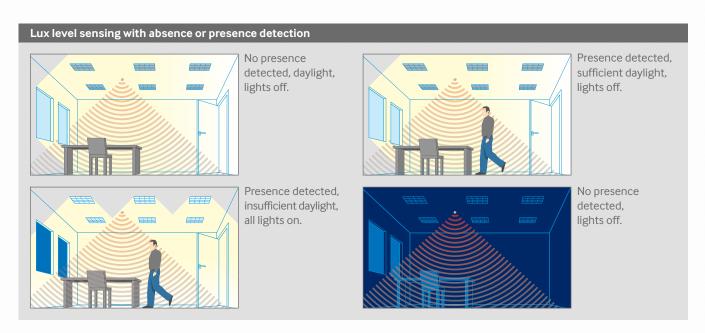
Microwave Detection



Microwave Detectors are sensitive to objects that move, with much greater coverage and sensitivity. They can detect through glass, therefore careful consideration on location is needed in certain applications.

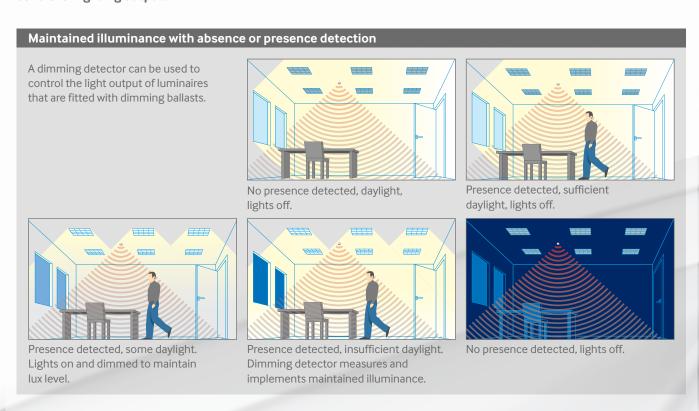
Switching detectors with lux level sensing

These presence detectors have built-in adjustable lux sensors which will keep the lighting switched off if there is sufficient natural light.



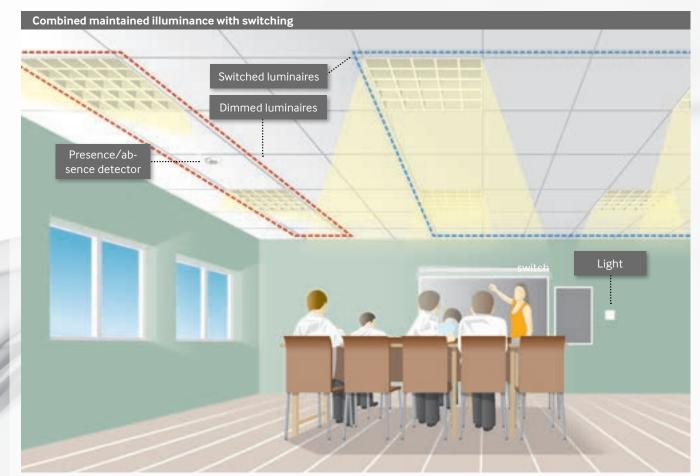
Direct Dimming detectors with lux level sensing

In addition to lux level sensing, dimming detectors are able to provide automatic control of lighting output.



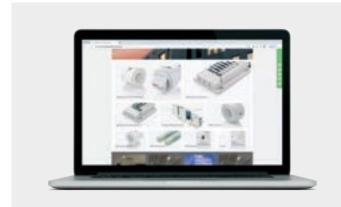
Additional features and applications:

- Provides either presence or absence detection with maintained illuminance in an office or area, allowing the user to manually override the maintained level, by dimming up or down, or switching off and on via momentary wall switch.
- After occupation and the time delay has ended, the dimming level can be programmed to dim for a time period before switching off, or programmed to never switch off, but instead stays at a low dimmed output during non-occupation. Very useful for warehousing with 24/7 operations, or corridors for health and safety reasons.
- Direct dimming detectors can also be programmed to switch on and off (at separate light levels) according to the local light level when the area is occupied, with or without a time delay (to avoid nuisance switching). This can be programmed as well as maintained illuminance on the same detector.
- Many lighting schemes can be 'over lit' because of the initial brightness of the new lamps, over compensation for dirt/lamp life, and over-design due to room shape and size. Dimming detectors allow installed lighting to be 'dimmed' to achieve the correct illuminance level, and increase gradually to compensate for the anticipated light loss over time.
- If the dimming and switched channels are separated, one channel can work in absence detection, whilst the other channel works in presence detection.
 For example, meeting room with: fixed output wall washers in presence detection mode on Channel 1 (no dimming), always on when room is occupied; Dimming fittings in centre of room (over table) on Channel 2 in absence mode, for dimming down/extinguishing when making presentations, etc.



The dimming detector can be configured to dim a row of luminaires (those closest to window) whilst simultaneously switching the other luminaires in the room.

Available on our website - www.cpelectronics.co.uk





Product Information

Our flagship range of programmable energy saving controls, systems and connection products for lighting, heating or ventilation.





Product Information

Our off-the-shelf range of easy to fit energy saving controls and connection products for lighting, heating or ventilation.











Energy Efficiency in Buildings

This product forms part of a wide range of devices to enable Energy Efficiency in Buildings – A structured and holistic approach to reducing the carbon footprint and increasing sustainability of businesses.















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connect with us







