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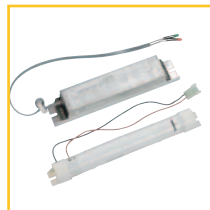
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Every lighting project must contain an emergency lighting element. There are 3 levels of emergency system available, ranging from the most basic self contained luminaires to fully comprehensive LED based central test and reporting systems.

Whitecroft Lighting offer three levels of emergency testing systems, each with differing levels of functionality. These are:

Central Test Central Battery

Pathfinder offers the most comprehensive emergency testing and reporting available. This networkable system can provide complete building-wide emergency lighting requirements, whilst the all LED solution dramatically reduces energy consumption compared to the parasitic load of conventional self contained systems.

Central Test Self Contained

Both COMEPS and COMET allow automated, efficient and cost-effective testing and reporting using self-contained luminaires. Although not as energy efficient as Pathfinder, these systems offer central testing at a low installed cost.

Self Contained

Self Contained emergency luminaires ensure legal requirements are met at the lowest installed cost. Integrating LED products can be energy efficient but manual testing via key switches is labour intensive and can be unreliable.



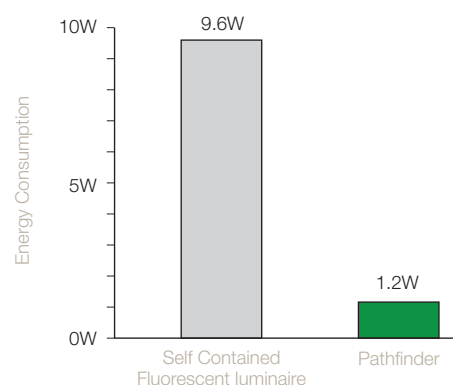


Pathfinder is a self contained central battery LED emergency lighting system designed to create the optimum emergency lighting scheme.

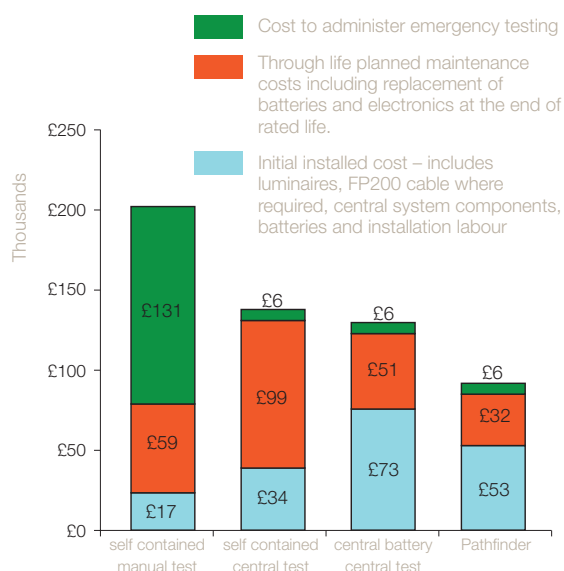


Driving Down Energy Consumption

LEDs have many advantages over traditional emergency lighting systems. Low energy consumption and a 50,000 hour life means that Pathfinder will dramatically reduce your through life maintenance and running costs. It is not generally recognised that integral emergency luminaires can add significantly to the overall energy consumption of a lighting installation. The constant trickle charge required to maintain emergency batteries can account for up to 14% of the luminaires overall energy consumption. This parasitic load can be reduced dramatically by using Pathfinder, as the extremely low energy consumption requires only a fraction of the power to charge.



Energy consumption of an emergency luminaire



Full Life Cycle costs based upon 300 lighting points over a 25 year cycle

Lowest Cost of Ownership

Self contained emergency lighting with an individual battery pack and inverter in each luminaire can offer the lowest installed cost for an emergency lighting scheme, however there are two issues which can make the solution very expensive over the full life cycle of an installation:

- Manual testing via key switches is labour intensive and can be unreliable
- A four year battery life requires frequent maintenance and replacement

Central testing systems can dramatically reduce the cost of emergency testing compared to manual testing, however maintenance and replacement of self contained batteries is still expensive.

Conventional central battery central test systems can significantly reduce the cost of battery maintenance and replacement due to ease of access.

Pathfinder LED central battery central test offers the lowest energy and life cycle cost solution. Low energy consumption means battery life capacity is only 5% of that for a conventional central battery system.

To Specify

Central battery, central test LED emergency lighting system. Fully addressable LED emergency lighting points. Control unit with programmable interface – as Whitecroft Lighting PATHFINDER

the pathfinder system

Pathfinder is a self contained, low power supply, central battery LED emergency lighting system. The system is capable of conducting automatic testing in accordance with BS5266 / EN50172 and contains a non volatile memory able to store up to 2,000 test events.

As Pathfinder is a dedicated emergency system it can be used to create an optimum emergency lighting scheme, that is simple and cost effective to install and is scalable to meet the changing needs of a building.

With simple and efficient testing regimes, utilising long life, low maintenance LEDs combined with cost effective installation, Pathfinder will deliver the lowest cost of ownership of any emergency system on the market today.

Control Panels

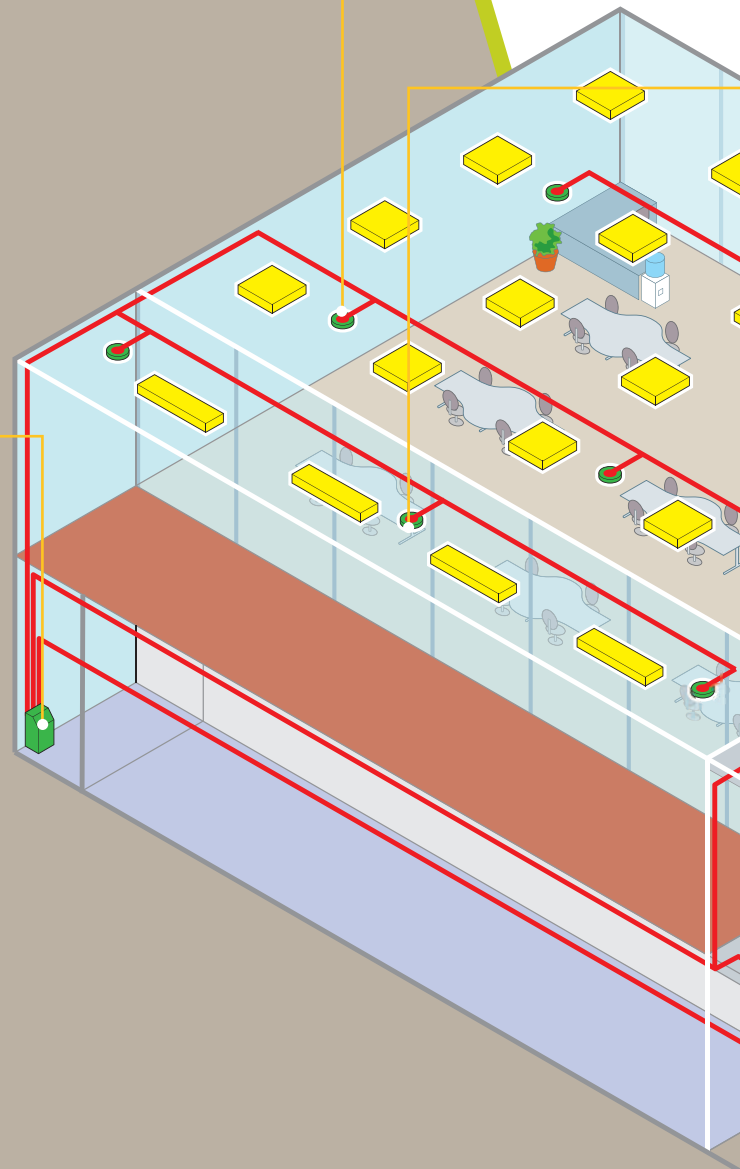


PFDANEL12AH
PFDANEL24AH



PFDANEL48AH

With the system utilising low energy LEDs, batteries are incorporated in the control panel and require significantly less space than traditional fluorescent central battery systems.



LED Heads



Delivering all the benefits of LEDs, the Pathfinder LED Head integrates effortlessly with its surroundings and due to its efficient, effective performance and with the ability to create an optimum emergency lighting scheme, initial installed costs are reduced. IP68 version also available.



The LED escape route head is especially effective in corridor applications.

LED Stairwell



For the architecturally demanding applications, the Pathfinder LED Stairwell provides a discreet emergency lighting solution. With a life span of 50,000 hours and robust construction, years of low through life maintenance costs are generated.

LED Exit Signs

Utilising the latest LED technology, Pathfinder Exit Signs are robust and have a much longer life than traditional fluorescent exit signs. Due to their compact size, Pathfinder Exit Signs offer architectural integration as standard and are less intrusive than comparative fluorescent products. Order legend panels separately, all legend panels comply with BS5266-1 2011 (ISO7010).



Specification

The Pathfinder emergency lighting system is a class 1 protection supply device for operating and monitoring up to 80 emergency LED luminaires, dependant upon loading of the control panel. The system uses addresses to allow identification and monitoring of individual luminaires.

The self contained unit incorporates all the control electronics and lead acid batteries for ease of installation. The front panel has indicators and LCD display for clear status of panel and LEDs. All control, administration, monitoring and testing can be performed through the front panel or remotely via a PC.

32 panels can be networked together on an existing TCP/IP network to create an IP addressable installation with web browser access.

Control Panels

Body

- IP20 power coated steel construction, wall mounted

Electrical

- Input voltage 230V AC +/- 10%
- Ambient -5 to +30°C
- Final circuits x 4
- 3A max per final circuit
- Output voltage 24V DC



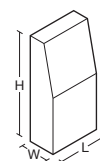
PFDANEL12AH
PFDANEL24AH



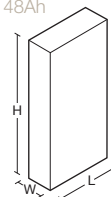
PFDANEL48AH

Dimensions

12/24Ah



48Ah



Version	L	W	H	KG
PFDANEL12Ah	253	120	470	15.0
PFDANEL24Ah	253	120	630	25.7
PFDANEL48Ah	400	170	800	56.5

Order Codes

LED Control Panel Maximum Loading Per Panel

Central Battery Control Panel 12Ah Capacity	2.9A	PFDANEL12AH
Central Battery Control Panel 24Ah Capacity	5.8A	PFDANEL24AH
Central Battery Control Panel 48Ah Capacity	11.6A	PFDANEL48AH

Note: Refer to website for Pathfinder loading charts

To Specify

Central battery, central test LED emergency lighting system. Fully addressable LED emergency lighting points. Control unit with programmable interface – as Whitcroft Lighting PATHFINDER

Programming Device

- An intelligent connection stick that programmes and saves the Pathfinder Panel device configuration
- Supplied with programming software (CD-ROM) to enable amendments to the device configuration using Microsoft Windows (7, XP or Vista)
- Can store and print logbooks from devices



Order Codes

Programming Device

PFDSTICK

3 Phase Monitor Relay

- Three phase monitor
- Detects phase or circuit failures in general lighting sub-distribution panels with volt free failure indication contact
- LED indication for L1, L2 and L3
- Monitoring low voltage and mains failure in three phase systems
- Voltage – 230V/400V AC 50/60 Hz
- To be installed in accordance with BS5266/EN50172



Order Codes

3 Phase Monitor Relay

PFD3PMONITOR

Integral Pathfinder LED Head

- An integral luminaire LED head with threaded body and lock nut for ease of installation
- Supplied complete with driver
- Small, discrete and high performing LED head
- Aluminium heat sink integrated in head
- 18mm diameter and 110° beam angle



Order Codes

NB: Product is supplied within a luminaire and not individually. To specify this product within a luminaire please consult our Technical Desk.

Mimic Panel

- A control monitoring device for external status and failure indication of upto 16 Pathfinder control panels (page 236)
- Manual and automatic function and battery duration test can be activated centrally at definable intervals
- Displays status of all connected Pathfinder control panels
- A central monitoring device for up to 16 Pathfinder panels.
- Includes:
 - One interface card for the connection of 8 Pathfinder control panels
 - A second interface card for a further 8 panels is available (supplied separately)
 - One button control
 - 4 volt-free contact, one of which can be programmed
 - 3 status LEDs
 - Central reset
 - Central blocking function
 - Connection by 3 wire bus cable



Order Codes

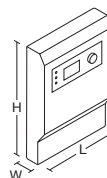
Mimic panel with 1 interface card for up to 8 Pathfinder control panels

PFDMIM

Additional interface card to enable expansion to up to 16 Pathfinder control panels

PFDINTCARD

Dimensions



Version	W	H	D	KG
PFDMIM	186	230	38	0.8

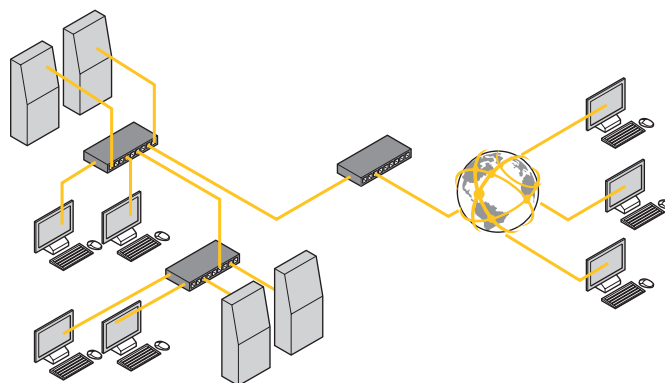
Web Control Software

- To centrally control and monitor up to 99 Pathfinder Control Panels via the Internet/Intranet remotely
- To be installed on a PC with Ethernet access and Windows XP, Vista or Windows 7

Functionality

- Automatic function/battery duration test
- Logbook function for all connected devices
- Email automatically sent at definable intervals in the event of tests or faults
- Overall status displayed (of all systems) by an icon on the task bar

Internal or External Control



Order Codes

Web control software

PFDWEBCS

Optics

- High performance, LED emergency luminaires supplied complete with driver
- Recessed - Open area, escape route and IP68 options available
- Surface Mounted - Open area, escape route options available
- Robust, compact and low energy solution

Body

- Cast aluminium body with integral heat sink
- Powder coated white or silver options
- Spring retaining clips for ceilings up to 16mm
- Input voltage 24V DC
- Supplied complete with driver
- Current consumption: 0.14A

Note: LED heads can only be used as part of a Pathfinder system



Escape Route Head



IP68 Head



Surface Mounted

Order Codes

LED Head

Recessed Emergency LED Silver Body – 3W

PFDRELEDS

Recessed Emergency LED White Body – 3W

PFDRELEDW

Surface Mounted Emergency LED Silver Body – 3W

PFDRELEDSSM

Surface Mounted Emergency LED White Body – 3W

PFDRELEDWSM

Escape Route LED Head

Recessed Emergency LED Silver Body – 3W

PFDCELEDS

Recessed Emergency LED White Body – 3W

PFDCELEDW

Surface Mounted Emergency LED Silver Body – 3W

PFDCELEDSSM

Surface Mounted Emergency LED White Body – 3W

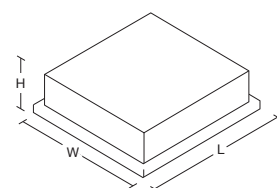
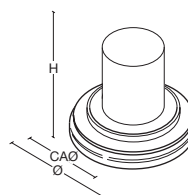
PFDCELEDWSM

IP68

Recessed Emergency LED Silver Body IP68 – 3W

PFDRELEDS/IP68

Dimensions



Recessed	Ø	H	CAØ	KG
LED Head	55	50	46	0.1
Escape Route	55	25	46	0.1
IP68	31	53	26	0.1

Surface mounted	L	W	H	KG
LED Head	140	140	42	0.53
Escape Route	140	140	42	0.53

Performance Guide Spacing Table



LED Head

Mounting height	Distance from wall	Distance between heads
2.50	2.40	5.60
3.00	2.60	5.80
4.00	3.10	7.00

Escape Route LED Head

Mounting height	Distance from wall	Distance between heads
2.50	4.60	10.90
3.00	4.90	12.10
4.00	4.20	12.20

To Specify

Central battery, central test LED emergency lighting system. Fully addressable LED emergency lighting points. Control unit with programmable interface – as Whitecroft Lighting PATHFINDER

Optics

- 16 or 22m viewing distance options
 - 16m – 4 x 0.5W LEDs
 - 22m – 6 x 0.5W LEDs
- LEFT, RIGHT, UP and DOWN printed acrylic legend panel to be ordered separately

Body

- Extruded aluminium body housing electronics and LEDs
- Three mounting options:
 - Ceiling
 - Wall
 - Suspended (Supplied with 1m wire suspension kit)
- Input voltage 24V DC
- Supplied complete with driver
- Current consumption:
 - 16m: 0.1A
 - 22m: 0.125A

Note: LED exit sign can only be used as part of a Pathfinder system

Order Codes

LED Exit Sign 16m

4 x 0.5W LED	Ceiling Mounted	PFDCEILING
4 x 0.5W LED	Wall Mounted	PFDWALL
4 x 0.5W LED	Suspended	PFDSUSPENDED

Legends

DOWN LEGEND	SINGLE SIDED	PFDLPSSD
UP LEGEND	SINGLE SIDED	PFDLPSSU
LEFT LEGEND	SINGLE SIDED	PFDLPSSL
RIGHT LEGEND	SINGLE SIDED	PFDLPSSR
DOWN LEGEND	DOUBLE SIDED	PFDLPDSD
UP LEGEND	DOUBLE SIDED	PFDLPDSU
TO SIDE LEGEND	DOUBLE SIDED	PFDLPDST

Note: Legends to be ordered separately

Options

22m version	Add suffix /22M	i.e. PFDCEILING/22M
22m version (LEGENDS)	Add suffix /22M	i.e. PFDLPSSD/22M

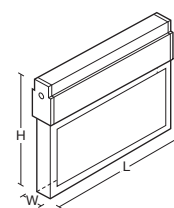


Wall Mount



Ceiling Mount

Dimensions



Version	L	W	H	KG
16m	176	28	134	0.6
22m	256	28	180	0.9

Legends



Up



Down



Left



Right

To Specify

Central battery, central test LED emergency lighting system. Fully addressable LED emergency lighting points. Control unit with programmable interface – as Whitecroft Lighting PATHFINDER

Optics

- 4 x 1W LED
- 22m viewing distance
- LEFT, RIGHT, UP and DOWN printed acrylic legend panel to be ordered separately

Body

- Brushed stainless steel body housing LEDs and electronics
- Three mounting options:
 - Ceiling
 - Wall
 - Suspended (Supplied with 1m wire suspension kit)
- Input voltage 24V DC
- Supplied complete with driver
- Current consumption: 0.2A

Note: LED architectural exit sign can only be used as part of a Pathfinder system



Order Codes

Architectural Exit Sign

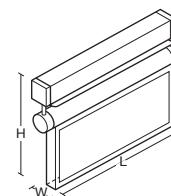
4 x 1W LED	Ceiling Mounted	PFDCEILING/ARCH
4 x 1W LED	Wall Mounted	PFDWALL/ARCH
4 x 1W LED	Suspended	PFDSUSPENDED/ARCH

Legends

DOWN LEGEND	SINGLE SIDED	PFDARCHSSD
UP LEGEND	SINGLE SIDED	PFDARCHSSU
LEFT LEGEND	SINGLE SIDED	PFDARCHSSL
RIGHT LEGEND	SINGLE SIDED	PFDARCHSSR
DOWN LEGEND	DOUBLE SIDED	PFDARCHDSD
UP LEGEND	DOUBLE SIDED	PFDARCHDSU
TO SIDE LEGEND	DOUBLE SIDED	PFDARCHDST

Note: Legends to be ordered separately

Dimensions



L	W	H	KG
286	55	231	1.95

Legends



Up



Down



Left



Right

To Specify

Central battery, central test LED emergency lighting system. Fully addressable LED emergency lighting points. Control unit with programmable interface – as Whitecroft Lighting PATHFINDER

Optics

- 22m viewing distance
- 3 x 1W LEDs
- LEFT, RIGHT, UP and DOWN acrylic legend panel to be ordered separately

Body

- Brushed steel body finished silver
- Housing has adjustable arms to simplify installation
- Smaller than conventional recessed exit signs making installation more attractive
- Supplied complete with driver
- Input voltage 24V DC
- Current consumption: 0.15A

Note: LED recessed exit sign can only be used as part of a Pathfinder system



Order codes

LED Recessed Exit Sign

3 x 1W LED Silver

Ceiling Mounted

PFDRECESSED

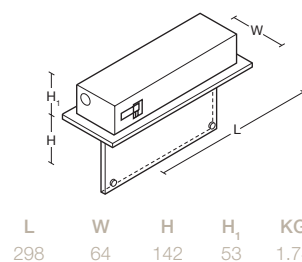
Legends

DOWN LEGEND	SINGLE SIDED
UP LEGEND	SINGLE SIDED
LEFT LEGEND	SINGLE SIDED
RIGHT LEGEND	SINGLE SIDED
DOWN LEGEND	DOUBLE SIDED
UP LEGEND	DOUBLE SIDED
TO SIDE LEGEND	DOUBLE SIDED

PFDRESSD
PFDRESSU
PFDRESSL
PFDRESSR
PFDRESDSD
PFDREDSU
PFDREDST

Note: Legends to be ordered separately

Dimensions



Legends



Up



Down



Left



Right

To Specify

Central battery, central test LED emergency lighting system. Fully addressable LED emergency lighting points. Control unit with programmable interface – as Whitecroft Lighting PATHFINDER

Optics

- 3 x 1W LED
- If used with legend, maximum 30m viewing distance
- Clear or opal polycarbonate or legend cover to be ordered separately

Body

- Slim white polycarbonate body
- IP43
- Cable entry from the top or rear of the product
- Input Voltage 24V DC
- Supplied complete with driver
- Current consumption: 0.125A

Note: IP43 bulkhead can only be used as part of a Pathfinder system



Clear Cover

Order Codes

LED IP43 Exit Bulkhead

3 x 1W LED

Wall Mounted

PFDEXIT/IP43

Legends

DOWN LEGEND

UP LEGEND

LEFT LEGEND

RIGHT LEGEND

CLEAR COVER

OPAL COVER

Note: Legends to be ordered separately

PFDCOVD/IP43

PFDCOVU/IP43

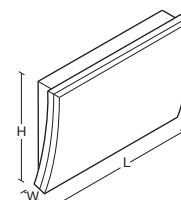
PFDCOVL/IP43

PFDCOVR/IP43

PFDCOVC/IP43

PFDCOVO/IP43

Dimensions



L	W	H	KG
337	72	160	0.6

Legends



Up



Down



Left



Right

To Specify

Central battery, central test LED emergency lighting system. Fully addressable LED emergency lighting points. Control unit with programmable interface – as Whitecroft Lighting PATHFINDER

Optics

- 4 x 1W LED
- If used with legend kit max 22m viewing distance
- Clear polycarbonate diffuser
- Legend kit to be ordered separately if required

Body

- Slim white polycarbonate body
- IP65
- Suitable for ceiling or wall mounting
- Input Voltage 24V DC
- Supplied complete with Driver
- Current consumption: 0.2A

Note: LED IP65 bulkhead can only be used as part of a Pathfinder system



Order Codes

LED IP65 Bulkhead

4 x 1W LED

Wall Mounted

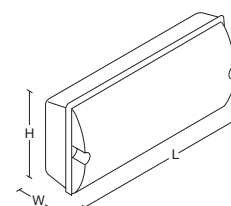
PFDEXIT/IP65

Legends

IP65 Legend Kit

PFDEXIT/IP65LKIT

Dimensions



L	W	H	KG
356	79	136	0.6

Legend Kit



To Specify

Central battery, central test LED emergency lighting system. Fully addressable LED emergency lighting points. Control unit with programmable interface – as Whitecroft Lighting PATHFINDER

Optics

- 2 x 1W LEDs
- Acrylic diffuser optic
- High output LEDs provide 50,000 hours life expectancy

Body

- Steel and aluminium body housing electronics & LEDs
- Suitable for wall mounting vertically or horizontally
- Input voltage 24V DC
- Supplied complete with driver
- Current Consumption: 0.115A

Note: LED stairwell can only be used as part of a Pathfinder system

Order Codes

LED Stairwell

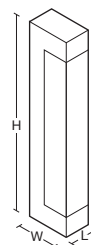
2 x 1W LED
2 x 1W LED

White
Silver

PFDSTAIRW
PFDSTAIRS



Dimensions



L	W	H	KG
30	50	230	0.5

To Specify

Central battery, central test LED emergency lighting system. Fully addressable LED emergency lighting points. Control unit with programmable interface – as Whitecroft Lighting PATHFINDER

Optics

- Opal or gridded cover available to control light distribution
- 3 x 0.5W LEDs

Body

- Powder coated sheet steel
- Front cover finished white or silver
- Total consumption 0.115A
- Driver included in fitting
- For installation in cavity wall box (included)



Gridded Cover

Order Codes

Safety LED Walkway Luminaire

Opal Cover White
Gridded Cover White

PFDWWOPW
PFDWWGRW

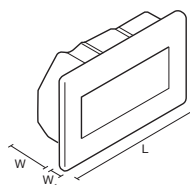
Options

SILVER FINISH

Replace W with S

i.e. PFDWWOPS

Dimensions



L	W	W ₁	H	KG
155	5	75	84	0.5

To Specify

Central battery, central test LED emergency lighting system. Fully addressable LED emergency lighting points. Control unit with programmable interface – as Whitecroft Lighting PATHFINDER

Application

Command Emergency Programmable System (COMEPS) is a DALI based automatic test system that allows the emergency lighting system to be tested over a robust DALI bus. It can be integrated into a total lighting control system along with other devices using the same two wire DALI bus.

The system is designed for organisations seeking an automated, efficient, cost effective and reliable means of meeting the mandatory requirements. The automatic central test systems guarantees regular testing and monitoring of emergency lighting and will reduce the cost of maintenance.

COMEPS can be purchased as a complete system or supplied as individual COMEPS compatible luminaires that can be integrated into other industry standard DALI Emergency Lighting Systems.

Emergency Operation

In any emergency situation when the mains supply fails, or in a test situation where the supply failure is simulated, the COMEPS unit will switch the light source from the normal ballast supply to the emergency inverter supplied from the batteries. COMEPS uses the industry standard IEC 62386 DALI communication protocol and can be commissioned and programmed to conduct duration and frequency emergency testing in line with the requirements of BS EN50172.

Specification

- Compatible with a wide range of Whitecroft's LED and non-LED luminaires
- Single system can monitor and test an unlimited number of luminaires
- Operated over the DALI bus that can be used to control the lighting control system
- Each luminaire has a unique address
- Test schedules can be programmed to suit the occupancy of the building
- Testing times and dates can be easily programmed
- Failures indicated locally at the luminaire and on the central controller
- All tests are automatically recorded and stored

Testing and monitoring

COMEPS is designed to automatically test and monitor the following parameters:

- Battery charging
 - Charging current
 - Battery voltage
- Function test
 - Lamp operation
 - Circuit operation
- Duration test
 - Lamp operation
 - Circuit operation
 - Battery charge capacity

COMEPS system components

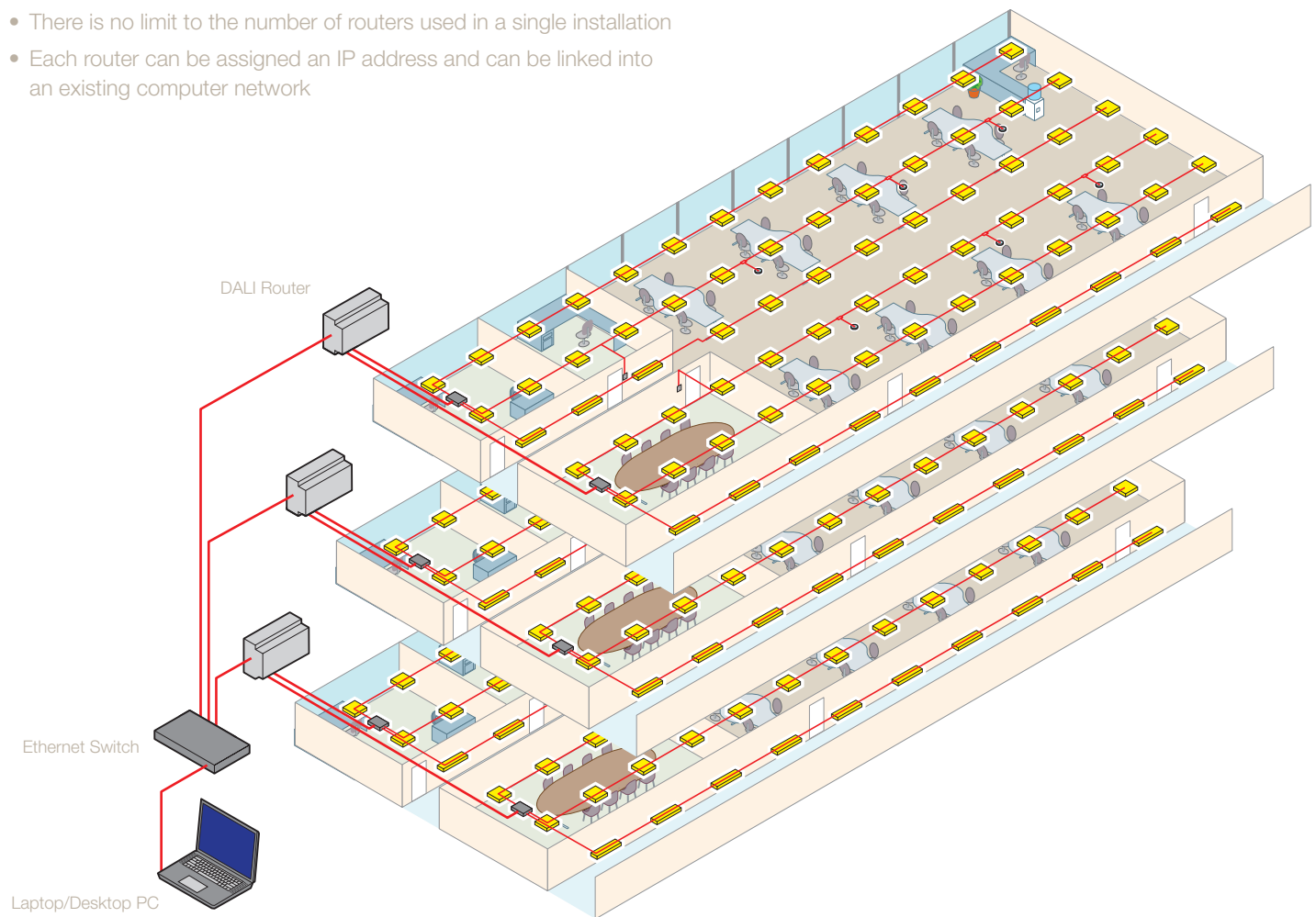
DALI Router

128 Addresses

- The DALI router can address 64 devices on each of 2 channels, giving a wider range than an individual hub.

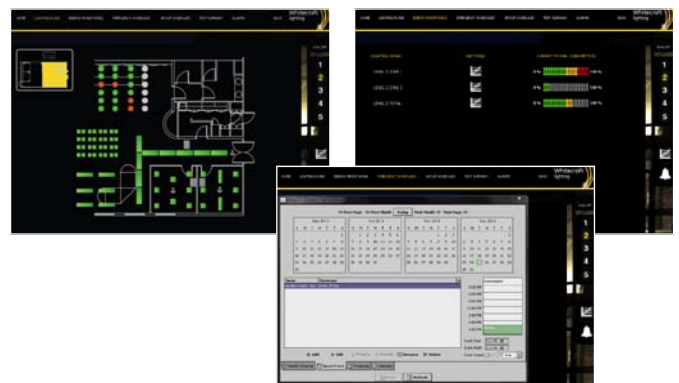
Scalable

- DALI Routers can be linked together by Ethernet cable
- There is no limit to the number of routers used in a single installation
- Each router can be assigned an IP address and can be linked into an existing computer network



Software Interface

Whitecroft have developed a user friendly interface that provides centralised testing, reporting and simplifies commissioning.



Application

COMMAND EMERGENCY TEST or COMET is designed for organisations seeking an automated, efficient, cost effective and reliable means of meeting the mandatory requirement to conduct and record fully diagnostic tests on emergency lighting installations. Its unique robust communication protocol allows it to monitor up to 16,000 luminaires making it particularly cost effective in larger buildings:

- Commercial offices
- Hospitals
- Education
- Retail stores

Operation

The COMET system will be commissioned at the end of installation so that brief details (22 characters) of every luminaire are recorded against each address. Test schedules will be pre-programmed so that the required tests will automatically take place on dates and times best suited to the occupier. COMET has three levels of test:

Status

A brief check of mains supply, battery charge presence and general electrical conditions.

Functional

An operational test putting the luminaire into emergency lighting mode for a few minutes to assess discharge conditions, light output, battery capacity etc.

Duration

The same tests as 'Functional' but operating the luminaires for the full rated duration to ensure lamp condition at the end of duration.

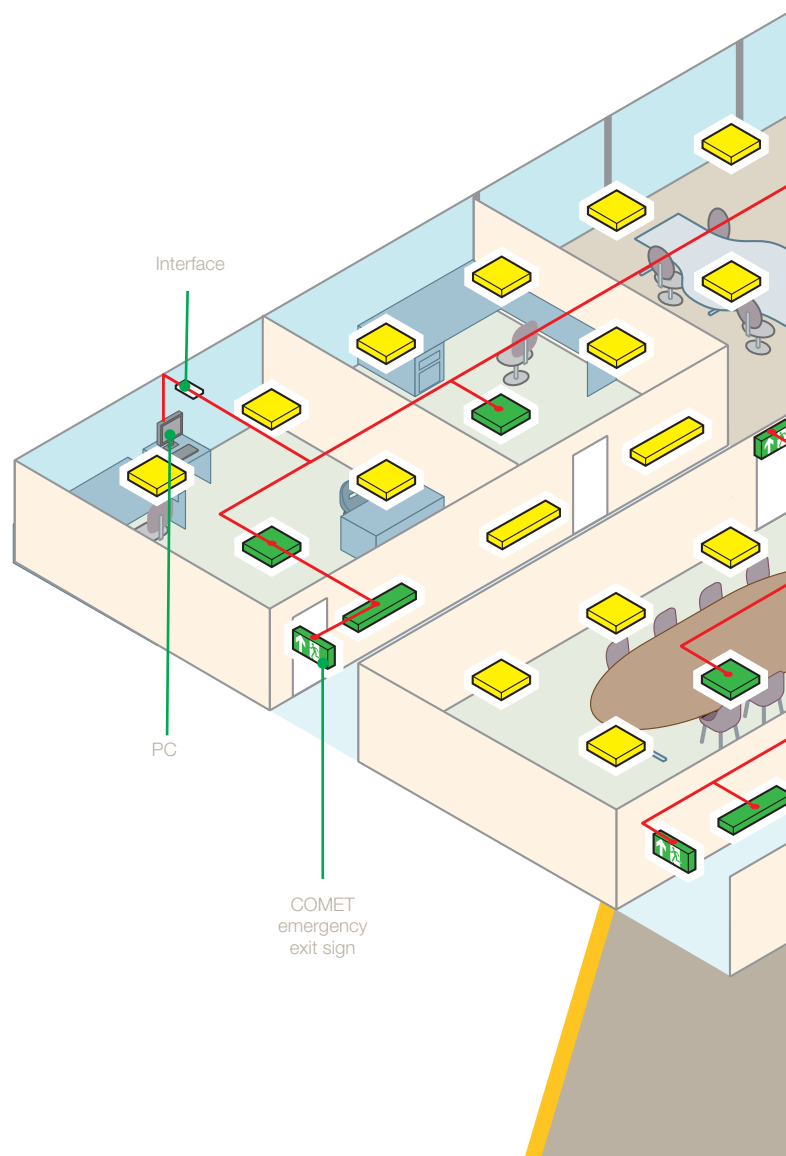
Any of these tests can be utilised at any time but a typical schedule would be to conduct status checks every week, Functional checks every month and duration checks every year in line with the European Standard.

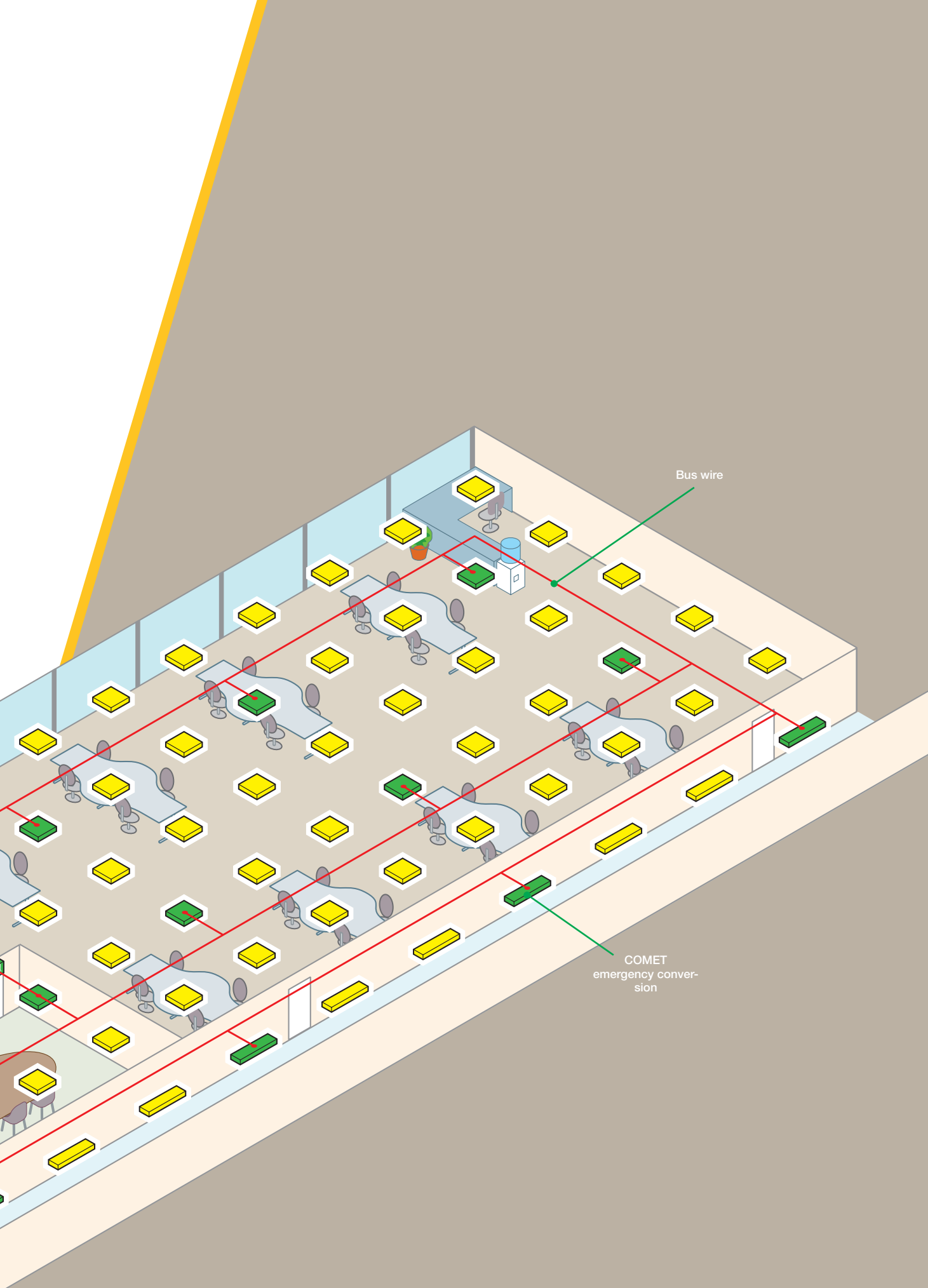
The COMET software allows tests to be carried out on groups of luminaires to avoid all luminaires being discharged at the same time. For example it may be decided to conduct Functional checks on all even numbered addresses at 10.00pm on the 22nd day of every month and on all odd numbered addresses at the same time on the 26th day of every month, then conduct a full Duration test on all luminaires at 1.00am on 31st December every year.

Every test is recorded in a text file for examination by any duly authorised person and the COMET software can be programmed to notify failures in various ways.

Specification

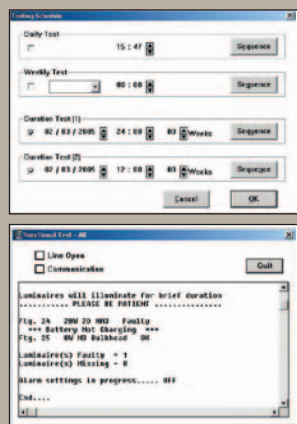
- Designed for all projects using Whitecroft fluorescent emergency luminaires
- Standard PC running Windows
- Single system can monitor up to 16,000 luminaires and different zones can be networked via a modem to a single central control position (recommended for larger projects)
- Simple twisted pair bus cable keeps installation cost low
- Test schedules can be programmed to suit the use and occupancy of any building type
- Each luminaire has unique address and descriptive text file
- Times and dates of tests easily programmed
- Luminaires may be tested individually or in groups
- Failures indicated locally at the luminaire and on the central controller
- All test details are automatically held in a text file





System Components

Central controller and software



Interface Units

Intelligent luminaires



COMET system components

central automatic
testing

Order Codes

COMET System Components

Standard personal computer available through Whitecroft if required

COMET/PCP

COMET interface unit required with PC installations and supplied with Command software

COMET/CIU

COMET isolator for introduction into the communication wiring breaking the installation into 'zones'

COMET/ISO

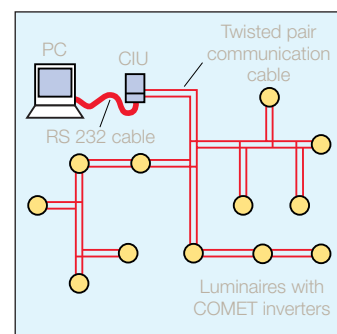
Most Whitecroft Lighting luminaires can be supplied to be suitable for the use with COMET emergency test systems. Please confirm compatibility with the Whitecroft technical department before placing your order.

Note: It is essential that the position and address of every COMET luminaire is recorded during installation. Whitecroft can then arrange a fast and effective commissioning of the system prior to hand over.

Communication Cables

The COMET system uses a very robust low baud communication protocol. There is no requirement for screened communication cables and any twisted pair, sized to minimise volt drop, will be acceptable. Whitecroft recommend 0.75mm² twisted pair (Belden 9407 or equivalent) for installations of up to 1000 luminaires (1000 metres of cable) and 2.5mm² twisted pair (Belden 9412 or equivalent) for larger installations involving long cable runs.

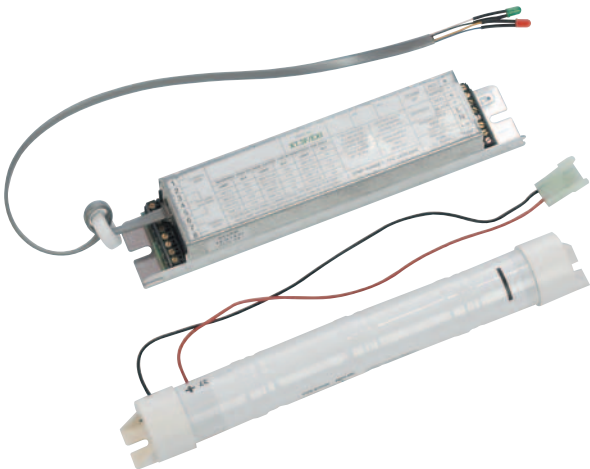
It is also recommended that for large installations COMET ISO data isolators are introduced in the communication cabling to break the installation into zones. This simplifies commissioning and the future addition of further COMET luminaires. Isolators are recommended for every 20 luminaires.



To Specify

Intelligent centralised automated emergency testing system using a simple twisted pair communication bus for conducting and recording fully diagnostic checks on up to 16,000 emergency luminaires. Control via central PC, individual or group testing, programmable to suit the usage and occupation of any type of building – as Whitecroft Lighting COMET

- Designed to operate in conjunction with a wide range of Whitecroft emergency luminaires
- Intelligent testing module for self-contained emergency lighting luminaires
- Emergency luminaire to comply to International Standards EN55015; EN61000; EN50082-2
- Capable of testing automatically to IEC62034
- Fault diagnostics indicating lamp, battery, and charger/inverter module status via supplied LED indicators
- 3 hour emergency durations as standard
- The default system tests luminaires weekly and annually in line with current legislation
- Low cost option to facilitate self test upgrade of luminaire at initial installation stage



Testing Procedure

The following testing procedure meets the recommendations of the latest European Standards including IEC62034

Weekly Test

The mains supply is interrupted at the charger/inverter unit
The lamp is checked for minimum light levels after 30 seconds

Annual Duration Test

The mains supply is interrupted at the charger/inverter unit
The lamp is checked for full rated battery duration

Emergency
Luminaire Status

The luminaire status is indicated as follows:

Status	LED
System okay	Green
Test underway	Flashing Green
Lamp fault	Fast Red
Charger fault	Fast Flashing Red
Battery fault	Slow Flashing Red

Optics

- 3W high output LED delivering 148 (recessed) or 56 (surface) lumens
- Open area and escape route distribution patterns
- Minimum life of 50,000 hours

Body

- White high performance LED emergency head and charge indicator with non-maintained driver, charger and battery
- 3 hour non-maintained
- Ambient temperature range of 0°C to +35°C
- Battery – Nickel Metal Hydride (NiMH)

Recessed

- Articulated plastic housing ensures a neat cut aperture hole and effective installation through fixed ceilings
- Suitable for ceiling thickness of 15-35mm with a minimum ceiling void of 160mm
- Stainless steel spring clips to secure lamp head in position

Surface

- Supplied with two lenses for open area or escape route distribution



Surface Mounting



Escape Route

Order Codes

Florin E3 Recessed

Open area distribution	FLE31
Escape route distribution	FLE32

Florin E3 Surface

Open area/escape route distribution	FLS31/EP**
-------------------------------------	-------------------

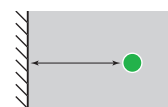
Options

EASYTEST	Add suffix /ET	i.e. FLE31/ET
COMEPS	Add suffix /EP	i.e. FLE31/EP
CENTRAL BATTERY	Add suffix /CB	i.e. FLE31/CB*

*Not available with surface Florin E3

**When not connected to the DALI system will operate as Easytest

Performance Guide Spacing Table (recessed version)



Open Area LED Head (0.5 Lux)

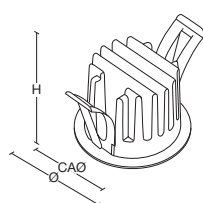
Mounting height	Distance from wall	Distance between heads
2.5	5.2	12.6
3.0	3.4	14.2
4.0	2.0	12.2

Escape Route LED Head (1 Lux)

Mounting height	Distance from wall	Distance between heads
2.5	5.7	15.4
3.0	5.8	16.4
4.0	2.7	11.9

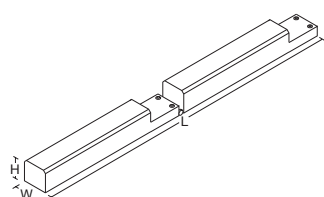
Dimensions

Recessed Florin E3 head



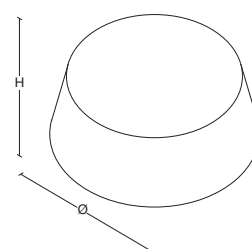
Ø	CAØ	H
50	43	80

Recessed Florin E3 articulated driver



W	L	H
29	414	28

Surface Florin E3 head



Ø	H
120	45

To Specify

Stand alone recessed or surface mounted white high performance LED emergency luminaire, complete with charge indicator, driver, charger and battery, capable of operation in non maintained mode. Driver to ensure constant light output independent of battery voltage for 3 hours from mains failure – as Whitecroft Lighting FLORIN E3

concert EX1S

surface or suspended
LED exit luminaire



Optics

- Power consumption
 - 12W maintained
- 28m viewing distance
- 15 long life white LEDs
- Complete with acrylic legend panel with double sided DOWN arrow screen print as standard
- LEFT, RIGHT and UP directions available to be ordered separately:
 - Simply open the panel blade and insert replacement legend print
- Legends supplied in accordance with BS 5266-1 2011 (ISO7010)

Body

- Wall, flag, ceiling or suspended mounting
- Mounting accessories required for installation to be ordered separately
- Extruded aluminium housing with brushed finish
- Smaller than conventional recessed exit signs making installation look more attractive
- Integral maintained 3 hour emergency lighting control gear
- Complete with Ni-Cd cells

Order Codes

Concert EX1S **3 hr Emergency**
Surface/suspended LED Exit Sign 3 hour maintained **EX1SM/7010**

Options

CEILING MOUNTING BRACKET		EX1SCBRK
WALL MOUNTING BRACKET		EX1SWBRK
END FIXING (FLAG) MOUNTING BRACKET		EX1SEBRK
WIRE SUSPENSION KIT	Adjustable to 1 metre maximum	EX1SWIRE
LEFT/RIGHT LEGEND	(Double sided set)	EX1LR/7010
UP LEGEND	(Double sided set)	EX1U/7010
EASYTEST	Add suffix /ET	i.e. EX1SM/7010/ET
COMEPS	Add suffix /EP	i.e. EX1SM/7010/EP

Note: Mounting brackets and legends to be ordered separately

Legends



Up

Down

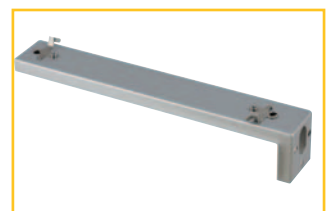


Left

Right



Ceiling Bracket



End Fixing Bracket

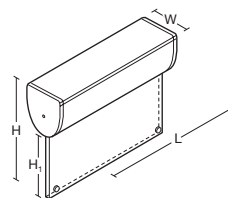


Wall Bracket



Wire Suspension Kit

Dimensions



L	W	H	H ₁	KG
300	50	220	50	1.2

To Specify

Surface or suspended LED exit luminaire with 15 long life LEDs – as Whitecroft Lighting CONCERT EX1S

concert EX1R

recessed LED
exit luminaire



Optics

- Power consumption
 - 12W maintained
- 28m viewing distance
- 15 long life white LEDs
- Complete with acrylic legend panel with double sided DOWN arrow screen print as standard
- LEFT, RIGHT and UP directions available to be ordered separately:
 - Simply open the panel blade and insert replacement legend print
- Legends supplied in accordance with BS 5266-1 2011 (ISO7010)

Body

- Steel body, finished white
- Smaller than conventional recessed exit signs making installation look more attractive
- Housing has adjustable arms to simplify installation
- Integral maintained 3 hour emergency lighting control gear
- Complete with Ni-Cd cells



Order Codes

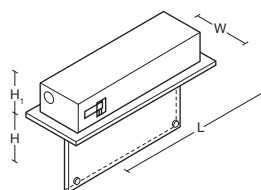
Concert EX1R **3 hr Emergency**
Recessed LED Exit Sign **EX1RM/7010**
3 hour maintained

Options

LEFT/RIGHT LEGEND	(Double sided set)	EX1LR/7010
UP LEGEND	(Double sided set)	EX1U/7010
EASYTEST	Add suffix /ET	i.e. EX1RM/7010/ET
COMEPS	Add suffix /EP	i.e. EX1RM/7010/EP

Note: Legends to be ordered separately

Dimensions



L	W	H	H ₁	CAØ	KG
355	112	150	66	350 x 95	1.2

Legends



Up

Down



Left

Right

To Specify

Recessed LED exit luminaire with 15 long life LEDs – as Whitecroft Lighting
CONCERT EX1R

Optics

- Power consumption
 - 10W maintained
 - 7W non-maintained
- Clear polycarbonate TP(a) lens with linear prisms
- Wide light distribution
- 16 long life white LEDs
- Low tack self adhesive legends to be ordered separately
 - 30 metre viewing distance
- Normal lamp output 90 lumen
- Emergency lamp output 90 lumen
- Legends supplied in accordance with BS 5266-1 2011 (ISO7010)

Body

- High impact polycarbonate tp(a) body finished light grey
- Surface and semi recessed
 - (with semi-recessing bezel kit – to be ordered separately)
- IP54
- 3 hour maintained (may be wired as non-maintained)
- High temperature Ni-Cd battery with constant current charger and LED charge indicator
- Hinged gear tray for easy maintenance
- Cable entry options along the sides and back of the body

Order Codes

Concert Tereo		3 hr Emergency
LED Emergency Bulkhead	3 hour maintained	TERNM3

Options

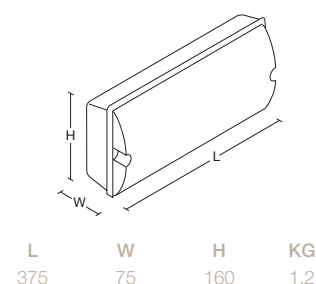
LEFT LEGEND		TER/AL/7010
RIGHT LEGEND		TER/AR/7010
DOWN LEGEND		TER/AD/7010
UP LEGEND		TER/AU/7010
SEMI RECESSING KIT		TER/SRK
EASYTEST	Add suffix /ET	i.e. TERNM3/ET
COMEPS	Add suffix /EP	i.e. TERNM3/EP

Note: Legends to be ordered separately

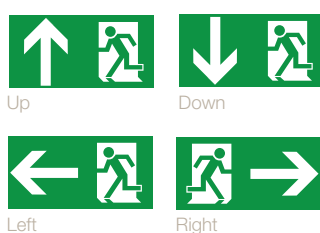


Semi-Recessing Bezel Kit

Dimensions



Legends



To Specify

Surface / Semi recessed LED bulkhead complete with all polycarbonate tp(a) construction. 3 hour self contained non maintained / maintained. – as Whitecroft Lighting Tereo

concert EX2S

wall mounted LED low
profile exit luminaire



Optics

- Power consumption
 - 10W maintained
 - 7W non-maintained
- 25 metre viewing distance
- 15 long life LEDs within a matrix dot coated reflector system for even illumination
- Complete with acrylic legend panel with down arrow as standard
- Legends supplied in accordance with BS 5266-1 2011 (ISO7010)

Body

- Wall mounted 'picture frame' style slim style steel body
- Wall mounted via key hole slot fixings
- Two part body for ease of installation, cover hooks over the backplate and is simply retained below
- High temperature Ni-Cd battery with constant current charger and LED charge indicator
- 3 hour maintained (may be wired as non-maintained)
- BESA cable entry



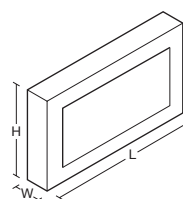
Order Codes

Concert EX2S	Legend	3 hr Emergency
LED Emergency Bulkhead	DOWN	3 hour maintained EX2S/7010
LED Emergency Bulkhead	LEFT	3 hour maintained EX2AL/7010
LED Emergency Bulkhead	RIGHT	3 hour maintained EX2AR/7010
LED Emergency Bulkhead	UP	3 hour maintained EX2AU/7010

Options

EASYTEST	Add suffix /ET	i.e. EX2S/7010/ET
COMEPS	Add suffix /EP	i.e. EX2S/7010/EP

Dimensions



L	W	H	KG
315	30	190	1.4

Legends



Up



Down



Left



Right

To Specify

Surface mounted slim LED 'picture frame' style emergency exit sign
– as Whitecroft Lighting EX2S

egress maxi

decorative low profile
emergency bulkhead



Optics

- Max 40m viewing distance
- Lamp options:
 - 1 x 8W T5
- Screen printed legend panel to be ordered separately
- Opal downlight panel illuminates escape route and door threshold
- Legends supplied in accordance with BS 5266-1 2011 (ISO7010)

Body

- Wall mounted
- Curved folded steel body, finished white
- Circuit Watts 8W (non-maintained), 20W (maintained)
- 3 hour maintained or non-maintained versions
- High temperature Ni - Cd battery with constant current charger and LED charge indicator
- Ambient 0 – 25°C



Order Codes

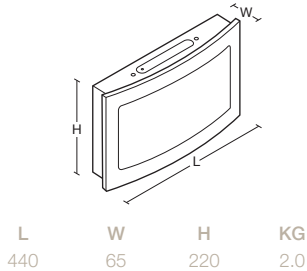
Egress Maxi		3 hr Emergency
T5 1 x 8W	3 hour non-maintained	EMANMF8
T5 1 x 8W	3 hour maintained	EMAMF8

Options

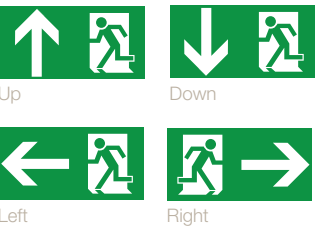
EASYTEST	Add suffix /ET	i.e. EMANMF8/ET
LEFT LEGEND		EMALL/7010
RIGHT LEGEND		EMALR/7010
DOWN LEGEND		EMALD/7010
UP LEGEND		EMALU/7010

Note: Available with COMET. Please refer to our sales office for details

Dimensions



Legends



To Specify

Decorative low profile wall mounted emergency bulkhead with curved folded steel body, finished white – as Whitecroft Lighting EGRESS MAXI



Optics

- Max 27m viewing distance
- Lamp options:
 - 1 x 8W T5
- 8mm thick Perspex legend panels, double sided, to be ordered separately
- Maximum projection below the ceiling 175mm
- Legends supplied in accordance with BS 5266-1 2011 (ISO7010)

Body

- Fully recessed white high grade polycarbonate body mounted in ceiling tile with winged fixings adjustable from below with white lip trim, recess depth 83mm. Light dispersal cover with slot for legend panel
- 3 hour maintained or non-maintained versions
- High temperature Ni - Cd battery with constant current charger and LED charge indicator
- Ambient 0 – 25°C
- Input voltage 230/240V – 50Hz
- Circuit Watts 8W (20W maintained version)



Order Codes

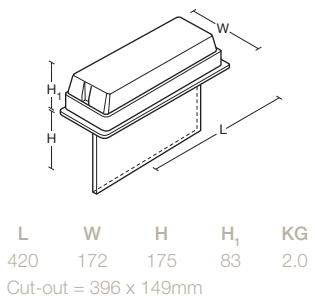
Slot		3 hr Emergency
T5 1 x 8W	3 hour non-maintained	SLOTNMF8
T5 1 x 8W	3 hour maintained	SLOTMF8

Options

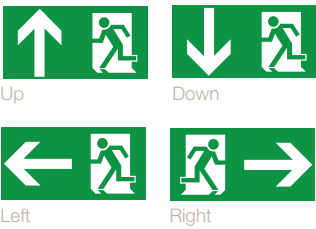
EASYTEST	Add suffix /ET	i.e. SLOTNMF8/ET
COMEPS	Add suffix /EP	i.e. SLOTNMF8/EP
LEFT/RIGHT LEGEND	(double sided)	SLOTLPL/RD/7010
DOWN LEGEND	(double sided)	SLOTLPDD/7010
UP LEGEND	(double sided)	SLOTLPUD/7010

Note: Available with COMET. Please refer to our sales office for details

Dimensions



Legends



To Specify

Recessed 8W T5 IP20 blade exit sign in 3 hour self contained maintained or non-maintained versions. Light dispersal cover with slot for 8mm thick Perspex legend panels, projection below the ceiling <176mm, polycarbonate body recess <83mm mounted in ceiling tile with winged fixings. High temperature Ni-Cd battery with constant current charger and LED charge indicator – as Whitecroft Lighting SLOT



Optics

- If used with legend, Max 22m viewing distance
- Lamp options:
 - 1 x 8W T5
- Clear polycarbonate TP(a) snap fix clear diffuser
- Low tack self adhesive legend to be ordered separately
- Normal lamp output 400 lumens
- Emergency lamp output 100 lumens
- Legends supplied in accordance with BS 5266-1 2011 (ISO7010)

Body

- White polycarbonate body
- Suitable for ceiling or wall mounting
- 3 hour maintained or non-maintained versions
- High temperature Ni-Cd battery with constant current charger and LED charge indicator
- BESA rear cable entry
- Ambient 0 – 25°C
- Circuit Watts 8W (20W maintained version)



Order Codes

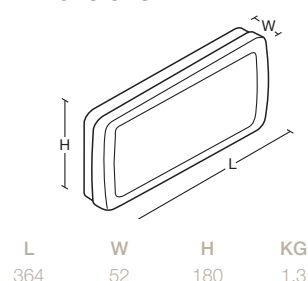
Slice		3 hr Emergency
T5 1 x 8W	3 hour non-maintained	CUTNMF8W
T5 1 x 8W	3 hour maintained	CUTMF8W

Options

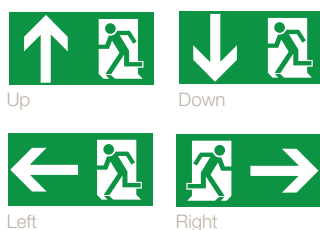
EASYTEST	Add suffix /ET	i.e. CUTNMF8W/ ET
COMEPS	Add suffix /EP	i.e. CUTNMF8W/ EP
LEFT LEGEND		CUTL/7010
RIGHT LEGEND		CUTR/7010
DOWN LEGEND		CUTD/7010
UP LEGEND		CUTU/7010

Note: Legends to be ordered separately
Available with COMET. Please refer to our sales office for details

Dimensions



Legends



To Specify

All polycarbonate ultra slim IP20 8W T5 indoor emergency bulkhead. Snap fix diffuser. White back body to facilitate first fix installation and wiring with clip in gear and lamp module. 3 hour self contained maintained or non-maintained versions. High temperature Ni – Cd battery with constant current charger and LED charge indicator – as Whitecroft Lighting SLICE



Optics

- Max 30m viewing distance
- Lamp options:
 - 1 x 8W T5
- Screen printed legend panel retained by screw fixed front frame to be ordered separately
- Legends supplied in accordance with BS 5266-1 2011 (ISO7010)

Body

- Rigid white powder coated steel housing and gear and lamp tray. Substantial downlight panels in body designed to give illumination at floor level
- 3 hour maintained or non-maintained versions
- High temperature Ni-Cd battery with constant current charger and LED charge indicator
- Cable entry via knockouts in sides and rear
- Ambient 0° – 25°C
- Circuit Watts 8W (20W maintained version)



Order Codes

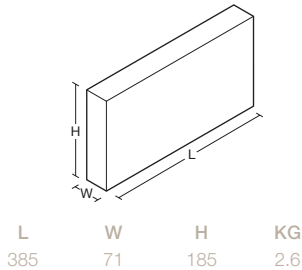
Exit		3 hr Emergency
T5 1 x 8W	3 hour non-maintained	SENEXNMF8
T5 1 x 8W	3 hour maintained	SENEXMF8

Options

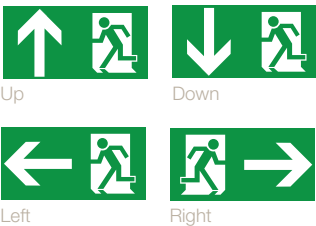
EASYTEST	Add suffix /ET	i.e. SENEXNMF8/ET
COMEPS	Add suffix /EP	i.e. SENEXNMF8/EP
LEFT LEGEND		SENLP/7010
RIGHT LEGEND		SENLR/7010
DOWN LEGEND		SENLPD/7010
UP LEGEND		SENLPD/7010

Note: Legends to be ordered separately
Available with COMET. Please refer to our sales office for details

Dimensions



Legends



To Specify

8W T5 IP20, 3 hour self contained maintained or non-maintained emergency exit sign with rigid white powder coated steel body and gear and lamp tray. Screen printed legend panels retained by screw fixed front frame. High temperature Ni-Cd battery with constant current charger and LED charge indicator – as Whitecroft Lighting EXIT



Optics

- If used with legend max 23m viewing distance
- Lamp options:
 - 1 x 8W T5
- Polycarbonate TP(a) screw fixed opal or clear prismatic diffuser with gasket to body
- Low tack self adhesive legend kit
- Normal lamp output 400 lumens
- Emergency lamp output 100 lumens

Body

- White ABS body. Surface and semi-recessed (with light grey semi – recessing bezel) option
- IP65
- 3 hour maintained or non-maintained versions
- High temperature Ni-Cd battery with constant current charger and LED charge indicator
- Cable entries on the side and back of the body
- Ambient 0 – 25°C
- Circuit Watts 8W (20W maintained version)



Order Codes

Opal Diffuser		3 hr Emergency
T5 1 x 8W	3 hour non-maintained	WBUNM3F8
T5 1 x 8W	3 hour maintained	WBUMA3F8

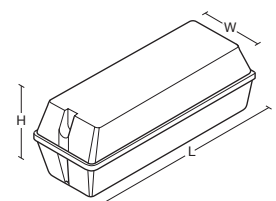
Clear Prismatic Diffuser		3 hr Emergency
T5 1 x 8W	3 hour non-maintained	WBCNM3F8
T5 1 x 8W	3 hour maintained	WBCMA3F8

Options

EASYTEST	Add suffix /ET	i.e. WBUNM3F8/ ET
COMEPS	Add suffix /EP	i.e. WBUNM3F8/ EP
SELF ADHESIVE LEGENDS KIT		WBULK/7010
SEMI RECESSING BEZEL KIT LIGHT GREY		WBUSRK

Note: Available with COMET. Please refer to our Technical Desk for details

Dimensions



L	W	H	KG
370	135	88	1.2

To Specify

Surface/semi recessed IP65 8W T5, 3 hour self-contained maintained/non-maintained outdoor emergency bulkhead with screw retained opal/clear prismatic diffuser. High grade polymer body finished white. High temperature Ni-Cd battery with constant current charger and LED charge indicator – as Whitecroft Lighting WEATHERPROOF

egress recessed

recessed emergency
luminaire



Optics

- Lamp options:
 - 1 x 8W T5
- Normal lamp output 400 lumens
- Emergency lamp output 100 lumens

Body

- Fully recessed high grade polycarbonate body mounted in ceiling tile with winged fixings adjustable from below with white lip trim, recess depth 70mm
- 3 hour maintained, non-maintained or mains voltage versions
- High temperature Ni-Cd battery with constant current charger and LED charge indicator
- Cable entry locations at rear
- Ambient 0 – 25°C
- Circuit Watts 8W (non-maintained), 20W (maintained) and 12W (mains)



Order Codes

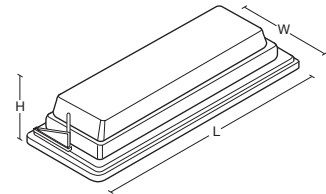
Egress Recessed		3 hr Emergency
T5 1 x 8W	3 hour non-maintained	EGRXNMF8
T5 1 x 8W	3 hour maintained	EGRXMF8
T5 1 x 8W	mains voltage	EGRXF8

Options

EASYTEST	Add suffix /ET	i.e. EGRXNMF8/ET
COMEPS	Add suffix /EP	i.e. EGRXNMF8/EP

Note: Available with COMET. Please refer to our sales office for details

Dimensions



L	W	H	KG
420	172	83	1.5

To Specify

Fully recessed 8W T5 IP20 emergency luminaire in 3 hour self contained maintained, non-maintained or mains voltage versions. Polycarbonate body recess <70mm mounted in ceiling tile with winged fixings. High temperature Ni-Cd battery with constant current charger and LED charge indicator – as Whitecroft Lighting EGRESS RECESSED



Optics

- If used with legend max 18m viewing distance
- Lamp options:
 - 1 x 8W T5
- Polycarbonate TP(a) snap fix diffuser optic is designed to deliver a directional light distribution
- Low tack self adhesive legend kit can be ordered separately
- Normal lamp output 400 lumens
- Emergency lamp output 100 lumens

Body

- High impact polycarbonate TP(a) body finished white. Surface and semi-recessed (with white semi-recessing bezel) option
- Wall or ceiling mounting (recessed option)
- IP65
- 3 hour maintained, non-maintained or mains versions
- High temperature Ni-Cd battery with constant current charger and LED charge indicator
- Cable entry options on the side and back of body
- Ambient 0 – 25°C
- Circuit Watts 8W (20W maintained version)



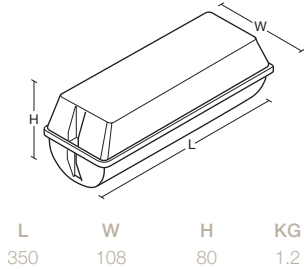
Order Codes

Sentry		3 hr Emergency
T5 1 x 8W	3 hour non-maintained	SENBHNMF8
T5 1 x 8W	3 hour maintained	SENBHMF8
T5 1 x 8W	mains voltage	SENBHMAINSF8

Options

EASYTEST	Add suffix /ET	i.e. SENBHNMF8/ET
SELF ADHESIVE LEGEND KIT		SENLK/7010
RECESSING BEZEL KIT WHITE		SENRK

Dimensions



To Specify

Surface/semi recessed IP65 8W T5, 3 hour self contained maintained/non-maintained indoor emergency bulkhead with snap fix diffuser optic delivering a directional light distribution. High impact polycarbonate body finished white. High temperature Ni-Cd battery with constant current charger and LED charge indicator – as Whitecroft Lighting SENTRY

twin spot

twin beam emergency indoor
lighting for high ceilings



Optics

- Supplied with twin 20W low voltage halogen spots sealed in white plastic housings with clear polycarbonate lenses

Body

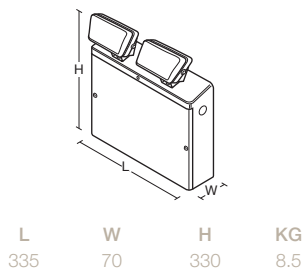
- Lamp projector assembly allows head adjustment in the horizontal and vertical planes. Projector location on the enclosure allows head alignment to meet the anti-glare requirement provided it is mounted at least 30° above the line of sight
- White powder coated steel body with removable front panel for access
- 2 x 12v 7Ah sealed lead acid battery, 3-5 year design life
- Single LED for battery charge monitor and dual lamp filament monitor
- Cable entry via 20mm knock outs
- Ambient 0 – 25°C
- Must be mounted vertically
- Fixing via 4 keyhole points in the back of the body



Order Codes

Twin Spot		
TH 2 x 20W	3 hour non-maintained	SENCT20NM
Options		
EASYTEST	Add suffix /ET	i.e. SENCT20NM/ET
COMEPS	Add suffix /EP	i.e. SENCT20NM/EP

Dimensions



To Specify

Twin 20W TH emergency unit, steel housing and fully adjustable twin spot heads, removable front panel for access. 2 x 12v 7Ah sealed lead acid battery with access panel – as Whitecroft Lighting TWIN SPOT