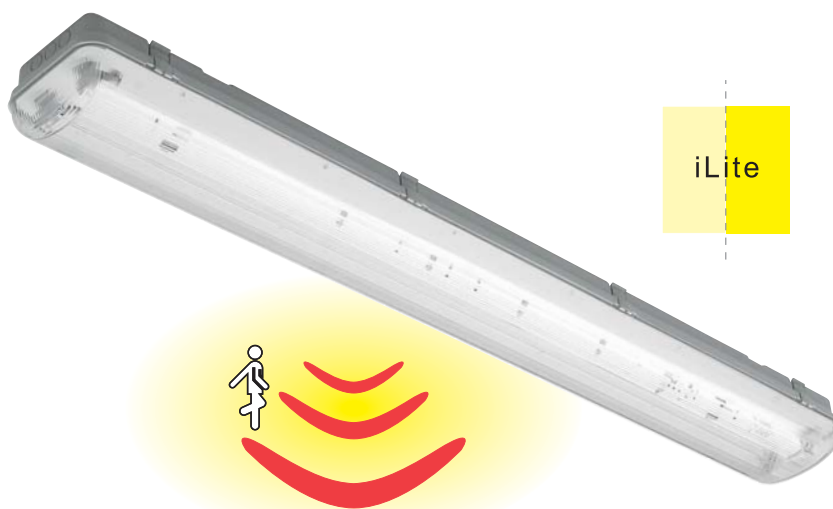


Surface Fluorescent Luminaires

Challenger T5 Courtesy Occupancy, durable IP65 enclosed non corrosive linear fluorescent luminaire. Ceiling or wall mounted and available with single or twin T5 high efficiency or high output lamp options. The courtesy function, iLite (Intelligent Light) provides constantly dimmed illumination in areas that are temporarily unoccupied. Upon sensing a presence, the luminaire immediately activates to full illumination. When the controlled area becomes unoccupied, the low energy light source fades, offering the ultimate in comfort & security and maintaining sustainable energy efficiency. iLite fades over a time period of 3 seconds, finally resting at a user defined ambient light level of 10%, 25% or 50%. iLite is ideal for use in a host of applications including corridors, stairways & toilets etc.



Features:

- IP65 (dust tight & water jet proof)
- IK9 (10 joule) shock resistance
- Single or twin T5 high efficiency (HE) or high output (HO) linear fluorescent light sources
- High frequency (HF) control gear ••
- Wall or ceiling mounting
- Durable construction
- Corrosion resistant
- Quick release clip on lens & gear tray
- 20mm through wiring feature
- Stainless steel mounting clips, no drilling of body required (maintaining IP65 integrity)

Options:

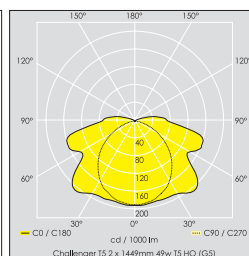
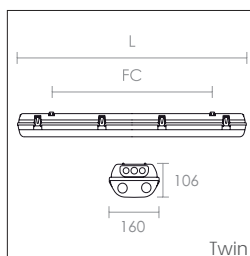
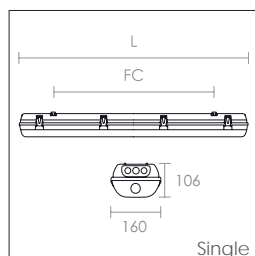
- Integral iLite courtesy function (see page 2) ••••
- iLite courtesy with Integral D-tect occupancy/light sensor Master (see page 2) ••••
- iLite courtesy with remote occupancy Slave (see page 2) ••••
- Integral 3hr. maintained emergency (E3) ••
- Wire suspension kit available on request
- Stainless Steel clips available in packs of 8 or 10

Material:

- Body: polycarbonate
- Lens: polycarbonate

Finish:

- Body: grey
- Lens: prismatic



Challenger T5 Courtesy Occupancy

Lamp type (Not supplied)	Length (L)	Fixing centre (FC)	Ordering Code	
			High frequency (HF)	Emergency (E3) (integral gear)
Single Master (with occupancy)				
1 x 1149mm 28w T5 HE (G5)	1270	900	FSCP 128/L12M	E3-FSCP 128/L12M
1 x 1449mm 35w T5 HE (G5)	1570	900	FSCP 135/L12M	E3-FSCP 135/L12M
Single Slave (without occupancy)				
1 x 1149mm 28w T5 HE (G5)	1270	900	FSCP 128/L12	E3-FSCP 128/L12
1 x 1449mm 35w T5 HE (G5)	1570	900	FSCP 135/L12	E3-FSCP 135/L12
Twin Master (with occupancy)				
2 x 1149mm 28w T5 HE (G5)	1270	900	FSCP 228/L1M	E3-FSCP 228/L1M
2 x 1449mm 35w T5 HE (G5)	1570	900	FSCP 235/L1M	E3-FSCP 235/L1M
2 x 1149mm 54w T5 HO (G5)	1270	900	FSCP 254/L1M	E3-FSCP 254/L1M
2 x 1449mm 49w T5 HO (G5)	1570	900	FSCP 249/L1M	E3-FSCP 249/L1M
2 x 1449mm 80w T5 HO (G5)	1570	900	FSCP 280/L1M	E3-FSCP 280/L1M
Twin (Slave)				
2 x 1149mm 28w T5 HE (G5)	1270	900	FSCP 228/L1	E3-FSCP 228/L1
2 x 1449mm 35w T5 HE (G5)	1570	900	FSCP 235/L1	E3-FSCP 235/L1
2 x 1149mm 54w T5 HO (G5)	1270	900	FSCP 254/L1	E3-FSCP 254/L1
2 x 1449mm 49w T5 HO (G5)	1570	900	FSCP 249/L1	E3-FSCP 249/L1
2 x 1449mm 80w T5 HO (G5)	1570	900	FSCP 280/L1	E3-FSCP 280/L1

Accessories		Ordering Code
Stainless Steel clips (8 pack) 1270mm body		FSCX 8/SS
Stainless Steel clips (10 pack) 1570mm body		FSCX 10/SS

These luminaires are designed to comply with EN 60598-1 (BS 4533:101) Emergency EN 60598.2.22 (BS 4533:102.22)



Energy Saving Controls

The Ultimate Sustainable Energy Saving Device

iLite (Intelligent Light) Courtesy Function provides the versatile combination of sustainable energy efficiency with an added element of security and comfort. The iLite function provides constantly dimmed illumination, set to a preset level, in areas that are temporarily unoccupied.

Upon sensing a presence, the luminaire immediately provides 100% illumination. When the controlled area becomes unoccupied, the light fades over a time period of 3 seconds, finally resting at a user defined ambient light level of 10%, 25% or 50%.

The iLite luminaire is available in two versions, Master and Slave. The Master operates with an integral occupancy D-tect sensor, and the Slave is designed for use in conjunction with either a Master unit or with a remote occupancy control.

The D-tect integral occupancy/light sensor ensures areas are only illuminated at 100% when occupied, or daylight diminishes below the required level. D-tect possesses all the features of a PIR occupancy/light sensor, but with additional advanced microwave technologies. D-tect master luminaires are capable of controlling slave luminaires up to a maximum total load of 500VA.

Features:

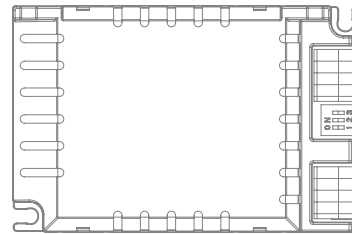
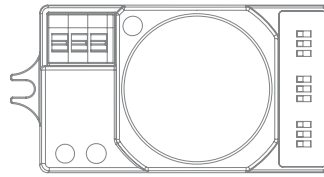
- Unobtrusive, no external indication that the area is being controlled
- Illumination (lux) adjustment, ensures luminaire remains at the courtesy dimmed function during daylight hours
- Time adjustment (8 seconds – 30 minutes), optimizes energy saving in heavy or light traffic areas
- Sensitivity/range adjustment, prevents interference from unnatural movement.

The adjustment dials are used to adjust the sensitivity/range, illumination (lux) and time.

Illumination (lux) adjustment (2 – 2000 lx)
The sensor can be adjusted to switch on the luminaire(s) at the chosen light level, ensuring the luminaire(s) only switch on when necessary.

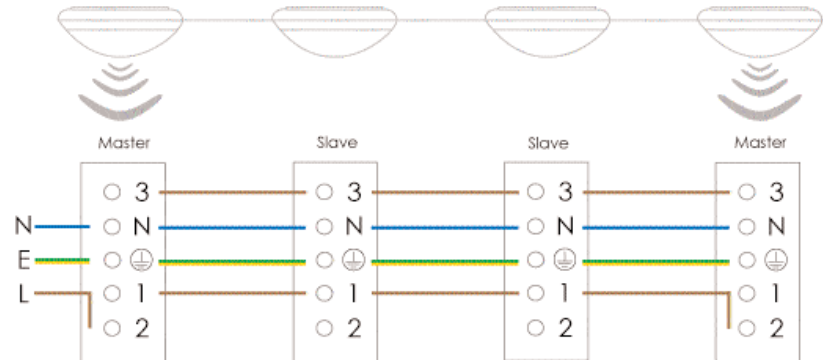
Time adjustment
The illumination time period can be adjusted between 8 seconds – 30 minutes from the last detection of movement. Ideally heavy traffic areas should have a longer setting, e.g. corridors & staircases etc.

Sensitivity/range adjustment
Areas in which microwave sensors are installed can sometimes be subjected to unwanted interference, therefore unnecessary switching on of the luminaire. The sensor can be adjusted to ignore such interference; depending on this setting, a reduced detection distance is possible.



Courtesy Ambient Light Level
Simple DIP switch adjusts the courtesy ambient light level to 10%, 25% or 50% options.

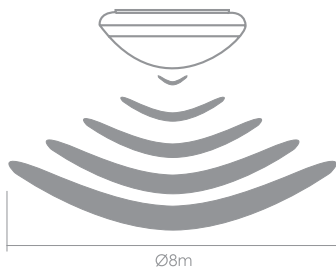
Schematic wiring diagram



Voltage 220-240v / 50-60Hz | Capable of controlling slave luminaires (max 500VA)

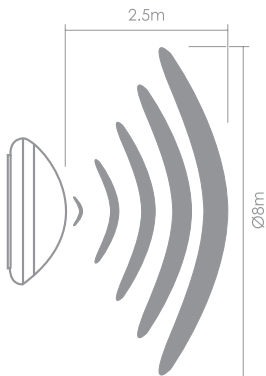
Detection distances

Ceiling Mounting



The sensor will cover a floor area of approximately 8m in diameter at an installed height of 2.5m.

Wall mounting



Please note the master luminaire(s) should not be positioned within 1m of ventilation equipment or fixed to a vibrating surface.

Potential savings example

Luminaire type	Existing lighting system	Controlled lighting system (iLite)	
	Typical 1 x 28w low energy luminaire (Switchstart control gear (type B2))	Ilite & D-tect 1 x 28w Master luminaire (High frequency iLite control gear (type A1))	Ilite 1 x 28w Slave luminaire (High frequency iLite control gear (type A1))
Quantity	200	100	100
Total luminaire power in Occupied function at 100% light (W)	36	29	29
Total luminaire power in Courtesy function at 10% light (W)	N/A	6.8	5.8
Hours of illumination per day in Occupied function at 100%	24	4	4
Hours of illumination per day in Courtesy function at 10%	N/A	20	20
Total lighting system power over 24 hours (W)	172800	25200	23200
Grand total (kWh per day)	172.80		48.40
Grand total (kWh per year)	63072		17666
Price per kWh	£0.10		£0.10
Annual energy cost (£)	£6307.20		£1766.66
Annual operating cost of existing system (£):			£6307.20
Annual operating cost of controlled system (iLite):			£1766.66
Energy saving (%):			71.9%
Energy saving (£):			£4540.54