Pierlite Australia
Phone:1300 799 300
pierlite.com.au

Pierlite New Zealand
Phone: 0508 743 754
pierlite.co.nz

INSTALLATION / WARRANTY INSTRUCTIONS   Issue Date: 03-06-2020

Vandalux LED with Lumen Select - 4FT 4000K

PLEASE READ THESE INSTALLATION INSTRUCTIONS CAREFULLY BEFORE INSTALLING OR MAINTAINING THIS EQUIPMENT. THE PRODUCT IS DESIGNED FOR INSTALLATION AND MAINTENANCE IN ACCORDANCE WITH RELEVANT AUSTRALIAN STANDARDS (AS/NZ3000), THESE INSTRUCTIONS AND LOCAL REGULATIONS (WHERE APPLICABLE), BY AN AUTHORISED AND LICENCED ELECTRICIAN. THE INSTALLATION INSTRUCTIONS WERE CORRECT AT THE TIME OF PRINT. TO REFLECT CHANGES IN TECHNOLOGY AND AUSTRALIAN STANDARDS; PIERLITE RESERVES THE RIGHT TO AMEND THE INSTRUCTIONS WITHOUT NOTICE. UPDATED GUIDELINES CAN BE FOUND ON RELEVANT BRAND WEB SITE.

IMPORTANT - THE PRODUCT MUST BE MAINTAINED AND OPERATED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS, FAILURE TO DO SO MAY DAMAGE THE PRODUCT AND SERVICES. IT IS STRONGLY RECOMMENDED THAT THIS IMPORTANT NOTE BE COMMUNICATED TO THE OWNER AND OR OPERATOR OF THE INSTALLATION AT THE TIME OF SITE COMMISSIONING. GOOD PRACTICE DOES NOT RECOMMEND THE 24/7 USE OF PRODUCTS WITHOUT THE APPLICATION OF SUITABLE SWITCH CYCLE INTERVALS. PIERLITE IS NOT RESPONSIBLE FOR ANY PRODUCT NOT MAINTAINED IN ACCORDANCE WITH THE RECOMMENDED PROCEDURES. ALL PRODUCTS SHOULD BE THOROUGHLY CLEANED ON A REGULAR BASIS TO ENSURE THE OPTICAL PERFORMANCE, TOGETHER WITH THE ELECTRICAL, MECHANICAL AND STRUCTURAL INTEGRITY AS DESIGNED, IS MAINTAINED THROUGHOUT THE SERVICE LIFE OF THE PRODUCT.

1. PRODUCT SPECIFICATION:
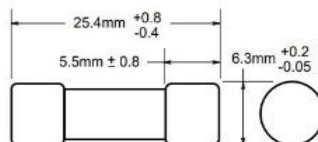
Type of protection	Class I luminaire
IP rating	IP66
IK rating	IK10
Nominal voltage	240V
Nominal frequency	50 Hz
Number of wattages per fitting	5
Available wattages	Refer to section 13 Lumen Select
Power factor	>0.8 to >9
Surge protection rating	(8/20us): L-N 6KA, L-E: 4KA, N-E: 4KA
	Maximum impulse voltage, 10KV (where installed)
Inrush current	Cold start 10A(twidth=46µs
	measured at 50% Ipeak) at 230VAC
Earth leakage	0.4mA
Rated operating ambient temperature	0 to +50°C (63W@45°C)
LED lifetime (L70) rated	>60,000 hours
Colour temperature	4000K
Colour rendering index (CRI)	80
LED control gear	DALI
Available in emergency	Yes, DALI and self testing
Emergency battery technology	2-hour Lithium Iron Phosphate (LiFePO4)
Electrical connection	Direct to 6.0mm² terminal block
Cable entry	2x 20mm
Installation orientation	Vertical or horizontal
Dimensions (LxWxH)	Refer to table in section 6
Net weight of luminaire	Refer to table in section 6

2. CONSUMABLES

Description	QTY Required Per Fitting	Brand	Component Part Number	Dimensions (LxWxH) mm
2 amp fuse	1	Cooper Bussmann	TDC180-2A	25.4x6.3x6.3
2 hour Lithium Iron Phosphate (LiFePO4)	1	Pierlite	DGLCEM3200/1L11 / DGLCEM3200/2L12	80x70x28

3. LUMEN SELECT METHODOLOGY

Fitting Type	Diffuser	Wattage	Fitting Size	Control gear	Colour Temperature	Emergency	Rail Spec	Sensor
VX = Vandalux	O = Opal	LS = Multi Wattage - Factory default = 53W	4 = 4 foot (1310mm)	D= DALI	4 = 4000K	M2 = Maintained 2hr	PB = Rail Spec	H = High Frequency Microwave Sensor *

* DALI Broadcast sensor (No addressing)

8. **APPROVALS:** The RCM marking of this product applies to AS/NZS CISPR15 (EMC) "Limits and methods of measurement of radio disturbance characteristics of electrical lighting and similar equipment". This product is designed to conform to AS/NZS60598 "Luminaires, general requirements and tests".

9. **STORAGE:** Prior to installation products are to be stored in cool and dry conditions.

11. **APPLICATION:** The installation application and orientation of the product is designed in accordance with the nominated product IP rating, class designation and these installation installations. Installation environments outside these conditions are not recommended.

15. Service & Operation (Emergency Version)

Normal Operation: Maintained Emergency Operation.

Battery: Sealed **Lithium Iron Phosphate (LiFePO4)** rechargeable battery pack. As per AS/NZS 2293, it is required that the battery pack is discharged and recharged at least once every 6 months.

In case of a replacement, same brand and type of battery pack must be used. Allow 24 hours charging time before carrying out any discharge tests.

Charge Duration: 16 Hours
Discharge Duration: 2 Hours (Initial Test)

Test Switch: If manual test switch pressed, the fixture will operate from its battery supply.
Please ensure battery plug is connected to the inverter battery terminal.

4. ELECTRICAL CHARACTERISTICS

SKU to Order	Selectable Wattages by Dip Switches (W)	Line Current (A)	Power Factor	Colour Temperature	Emergency	Rail Spec	Factory Default Setting
VXOLS4D4 VOXLS4D4H	63	0.274	0.95		No	No	
	53	0.232	0.94		No	No	Yes
	37	0.173	0.88		No	No	
	30	0.153	0.83		No	No	
	22	0.112	0.82		No	No	
VXOLS4D4M2 & VOXLS4D4HM2	68	0.3	0.95		Yes	No	
	57	0.25	0.94		Yes	No	Yes
	42	0.2	0.88		Yes	No	
	35	0.18	0.83		Yes	No	
	26	0.13	0.82	4K	Yes	No	
VXOLS4D4PB	63	0.274	0.95		No	Yes	
	53	0.232	0.94		No	Yes	Yes
	37	0.173	0.88		No	Yes	
	30.3	0.153	0.83		No	Yes	
	22	0.112	0.82		No	Yes	
VXOLS4D4M2PB	68	0.3	0.95		Yes	Yes	
	57	0.25	0.94		Yes	Yes	Yes
	42	0.2	0.88		Yes	Yes	
	35	0.18	0.83		Yes	Yes	
	26	0.13	0.82		Yes	Yes	

5. DALI CONTROL GEAR: The LED driver and emergency control gear are both controllable through the DALI RAPIX system. A DALI connection is not required in a non-systemized electrical system, if DALI is not required do not connect it.
Note: when designing the DALI system please refer to the table below for the number of DALI addresses.
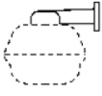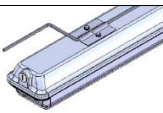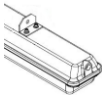
Control gear	Function	Number of Addresses	RAPIX Ready
LED Driver	Dimming, on/off & feedback	1	YES
Emergency Inverter	Testing & Reporting	1	YES

6. LINE DIAGRAMS AND DIMENSIONS

Fitting Size	Length in mm	Width in mm	Height in mm	Weight in Kg
4 foot	1310	138	114	8
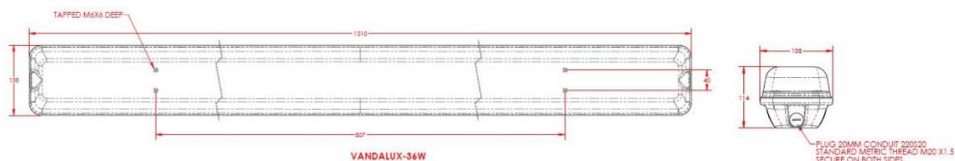
VANDALUX-36W

7. OPTIONAL MOUNTING TYPE

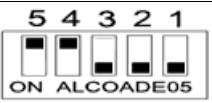| Fitting Size	Mounting Bracket/ Accessory	Part Number	Manufactured From	Modification to body	Drawings
4 foot	Horizontal Wall Mounting Bracket KIT	C29VANDALUX (Double Bracket)	Cast	Drill holes where indents are internally provided	
	Catenary Wire Kit To Suit 7mm Wire	C31VANDALUX	Aluminum	Nil, threaded holes have been provided	
	Universal Bracket	C35VANDALUX	Aluminum	Nil, threaded holes have been provided	
	Ceiling Mount Bracket	C36VANDALUX	Aluminum	Nil, threaded holes have been provided	
	Pipe Clamp Bracket	PMB32/VAN	This is Stainless steel only.	Nil, threaded holes have been provided	
		PMB40/VAN			
	Wire Suspension Bracket	C37VANDALUX	Aluminum	Nil, threaded holes have been provided	

12. INSTALLATION / GENERAL: Installation of the product is to be completed by an authorized and licensed electrician, in accordance with these instructions, relevant Australia standards and local regulations (where applicable). Termination of product wiring, together with the installation of the product must be in a manner that maintains the integrity of the designated IP rating of the product for electronic control equipment (when supplied) DO NOT MEGGER between A and N.

13. LUMEN SELECT (contractor selectable output)

Pierlite's lumen select products allows all licensed electricians to purchase one luminaire that can be set as multiple fixed wattages/fixed lumen outputs. By offering this capability within one fitting it provides the following benefits

- One fitting multiple fixed outputs
- Less stocked items
- One fitting on the shelf or in the van
- Variable onsite options
- Easy to change settings
- IES files available for all available for wattages shown in the below table
- No control system or software required to change fixed output

The Vandalux luminaire and retrofit kit has been factory set to 55W/6153lm, if a different wattage/lumen output is required the licensed electrician can easily change the driver dip switches to the settings shown in the below table.
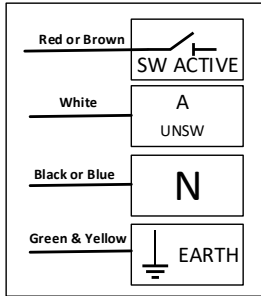
System Wattage (W)	Driver Settings (mA)	Lumen Output (lm)	Driver Dip Switch Settings
63	1400	7121	5 4 3 2 1 — ON ALCOADE05
53W (factory default setting)	1150	6153	5 4 3 2 1 — ON ALCOADE05
37	850	4576	5 4 3 2 1 — ON ALCOADE05
30	700	3837	5 4 3 2 1 — ON ALCOADE05
22	500	2812	5 4 3 2 1 — ON ALCOADE05

14. INSTALLATION / GENERAL: Installation of the product is to be completed by an authorized and licensed electrician, in accordance with these instructions, relevant Australia standards and local regulations (where applicable). Termination of product wiring, together with the installation of the product must be in a manner and orientation that maintains the integrity of the designated IP rating of the product for electronic control equipment (when supplied) DO NOT MEGGER between A and N.
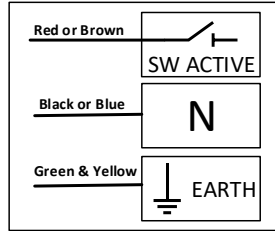
Installation:

Ensure the appropriate bracket has been ordered for your installation type. Refer to the bracket installation instructions for further information.

a) Isolate the supply circuit as per the Australian standard and your SWMS.

b) Remove both the diffuser and the gear tray using a 5mm hex head and place in a safe location to ensure the product does not get damaged while the housing is being installed.

c) Install the housing with the selected bracket system.

d) Suspend the gear tray from the lanyards

e) Connect the supply wires to the supplied 6mm² terminal block. Ensure sure all connections and cabling complies to AS3000.
   Note: Ensure the correct wires go to the correct terminals as per below

Red or Brown — SW ACTIVE	Red or Brown — SW ACTIVE
White — A UNSW	Black or Blue — N
Black or Blue — N	Green & Yellow — EARTH
Green & Yellow — EARTH	
Emergency & Mains Wiring Connections	**Mains Only Wiring connections**

f) Select the wattage/lumen output by changing the dip switches on the LED driver, please refer to section 12 of this installation sheet. **Note:** 55W/6153lm is the factory default for this fitting.

g) Secure the gear tray to the luminaire body ensuring all cables a clear from pinching or possible damage.

h) Tighten the screws securing the gear tray to a maximum of 4Nm

i) Installation of the diffuser, lightly screw the supplied hex head screws into the 6 holes around the diffuser. Place diffuser to the body and tighten screws to a maximum of 4Nm.

j) Ensure the IP rating of the installation is equal to that of the tested IP rating of the fitting. **Note**: the IP rating of the fitting is IP66.

k) Test fitting as per the relevant Australian standard and as per your SWMS.

16. MAINTENANCE:
(a) The supply must be isolated before opening or accessing the luminaire. Product maintenance is IMPORTANT and is critical to the products designed performance. The product is to be maintained in accordance with the manufacturer's instructions. For the latest product maintenance guides please go to relevant brand web site. Pierlite is not responsible for any product not maintained in accordance with the recommended procedure or intervals.
(b) Lamps (where provided): The product is designed with the supplied (LEDs) / LAMP/s and it is strongly recommended that any LAMP / (LEDs) changes (if any) be made in accordance with the type, colour and brand supplied. For recommended LAMP / LED maintenance or operating guides (inclusive of recommended product switch cycles and mandatory run-in procedures for HID and Fluorescent lamps when used with dimming circuits), Pierlite recommends the application of the lamp manufacturer's operating guidelines, which can be found on manufacturer's website. Pierlite is not responsible for the product performance of alternative lamp/s used. As a member of FluroCycle, we encourage recycling of lamps and components.
(c) Battery (where provided): The battery is designed with a rated average battery design life of 50,000 hrs. in standby mode. The battery is supported with a standard **Four (4) year warranty**; conditional of the product being maintained and operated in accordance with the manufacturer's guidelines and tested in accordance with AS/NZS2293. For guidelines see product installation instructions or visit the relevant brand web site.
(d) For products supplied with glass visors or covers, do not operate the product with a damaged visor or cover; it is recommended the product be turned off, area surrounding the product vacated and the damaged glass replaced by a professional installer immediately.

17. WARRANTY INSTRUCTIONS: For the purpose of warranty claims (if any) the following instructions apply:
Warranty period - The above components are provided with a warranty of **Five (5) years** against manufacturing defects or failure to perform to specifications for products installed by an authorised installer in accordance with the manufacturer's installation instructions and which have not been subject to incorrect operation or maintenance, unauthorised modification or damage arising from any intervening cause.
Warranty reference - The warranty reference date commences from the date of purchase.
Warranty point of contact – Pierlite Pty Ltd, 96 Gow Street Padstow NSW 2211,
phone T 1300 799 300 contact – Pierlite After Sales Support.

Warranty claim procedure – For the purpose of making a claim the customer must:
1. Contact the "point of contact" above and upon provision of proof of purchase the customer will receive a goods return advice (GRA) number. 2. At the customer's expense, collect and return the goods to the "point of contact" with the issued GRA number. 3. Upon receipt of the goods, Pierlite will review the claim and if found to be accepted, Pierlite will return a replacement product to the customer to install at the customer's expense. Alternatively, if the claim is rejected, the customer may request the return of the goods at their expense. **Consumer Contracts** - The benefits to the customer given by the Pierlite warranty are in addition to other rights and remedies of the customer if the goods are the subject of a Consumer Contract under the Australian Consumer Law. In that event the following statement is required to be brought to the Consumer's attention: - *Our goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and for compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.* **Limitation of Liability** – if the goods are not purchased by the customer under a Consumer Contract within the Australian Consumer Law then but not otherwise;- (a) the Company is not liable in tort for any loss or damage suffered by the customer or by any third party; and (b) in no circumstances is Pierlite liable to the customer or to any third party for any loss of profits, loss of anticipated savings, economic loss or interruption of business or for any indirect or consequential loss
(Consequential Loss).
Terms of Sale – these Warranty provisions are in substitution for any inconsistent provisions in the Pierlite Terms and Conditions of Sale in so far as they apply to the Warranty components.

INSTALLATION / WARRANTY INSTRUCTIONS   Issue Date: 03-06-2020

Vandalux LED with Lumen Select - 2FT 4000K

PLEASE READ THESE INSTALLATION INSTRUCTIONS CAREFULLY BEFORE INSTALLING OR MAINTAINING THIS EQUIPMENT. THE PRODUCT IS DESIGNED FOR INSTALLATION AND MAINTENANCE IN ACCORDANCE WITH RELEVANT AUSTRALIAN STANDARDS (AS/NZ3000), THESE INSTRUCTIONS AND LOCAL REGULATIONS (WHERE APPLICABLE), BY AN AUTHORISED AND LICENCED ELECTRICIAN. THE INSTALLATION INSTRUCTIONS WERE CORRECT AT THE TIME OF PRINT. TO REFLECT CHANGES IN TECHNOLOGY AND AUSTRALIAN STANDARDS; PIERLITE RESERVES THE RIGHT TO AMEND THE INSTRUCTIONS WITHOUT NOTICE. UPDATED GUIDELINES CAN BE FOUND ON RELEVANT BRAND WEB SITE.

IMPORTANT - THE PRODUCT MUST BE MAINTAINED AND OPERATED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS, FAILURE TO DO SO MAY DAMAGE THE PRODUCT AND SERVICES. IT IS STRONGLY RECOMMENDED THAT THIS IMPORTANT NOTE BE COMMUNICATED TO THE OWNER AND OR OPERATOR OF THE INSTALLATION AT THE TIME OF SITE COMMISSIONING. GOOD PRACTICE DOES NOT RECOMMEND THE 24/7 USE OF PRODUCTS WITHOUT THE APPLICATION OF SUITABLE SWITCH CYCLE INTERVALS. PIERLITE IS NOT RESPONSIBLE FOR ANY PRODUCT NOT MAINTAINED IN ACCORDANCE WITH THE RECOMMENDED PROCEDURES. ALL PRODUCTS SHOULD BE THOROUGHLY CLEANED ON A REGULAR BASIS TO ENSURE THE OPTICAL PERFORMANCE, TOGETHER WITH THE ELECTRICAL, MECHANICAL AND STRUCTURAL INTEGRITY AS DESIGNED, IS MAINTAINED THROUGHOUT THE SERVICE LIFE OF THE PRODUCT.
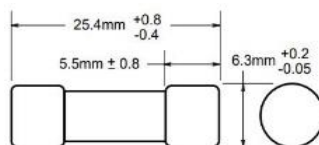
1. PRODUCT SPECIFICATION:

Type of protection	Class I luminaire
IP rating	IP66
IK rating	IK10
Nominal voltage	240V
Nominal frequency	50 Hz
Number of wattages per fitting	5
Available wattages	Refer to section 13 Lumen Select
Power factor	>0.8 to >9
Surge protection rating	(8/20us): L-N 6KA, L-E: 4KA, N-E: 4KA
	Maximum impulse voltage, 10KV (where installed)
Inrush current	Cold start 10A(twidth=46µs
	measured at 50% Ipeak) at 230VAC
Earth leakage	0.4mA
Rated operating ambient temperature	0 to +50°C – (33W@45°C)
LED lifetime (L70) rated	>60,000 hours
Colour temperature	4000K
Colour rendering index (CRI)	80
LED control gear	DALI
Available in emergency	Yes, DALI and self testing
Emergency battery technology	2-hour Lithium Iron Phosphate (LiFePO4)
Electrical connection	Direct to 6.0mm² terminal block
Cable entry	2x 20mm
Installation orientation	Vertical or horizontal
Dimensions (LxWxH)	Refer to table in section 6
Net weight of luminaire	Refer to table in section 6

2. CONSUMABLES

Description	QTY Required Per Fitting	Brand	Component Part Number	Dimensions (LxWxH) mm
2 amp fuse	1	Cooper Bussmann	TDC180-2A	25.4x6.3x6.3
2 hour Lithium Iron Phosphate (LiFePO4)	1	Pierlite	DGLCEM3200/1L11 DGLCEM3200/2L12	80x70x28

3. LUMEN SELECT METHODOLOGY

Fitting Type	Diffuser	Wattage	Fitting Size	Control gear	Colour Temperature	Emergency	Rail Spec
VX = Vandalux	O = Opal	LS = Multi Wattage - Factory default = 55W	2 = 2 foot (600mm)	D= DALI	4 = 4000K	M2 = Maintained 2hr	PB = Rail Spec

8. APPROVALS: The RCM marking of this product applies to AS/NZS CISPR15 (EMC) "Limits and methods of measurement of radio disturbance characteristics of electrical lighting and similar equipment". This product is designed to conform to AS/NZS60598 "Luminaires, general requirements and tests".

9. STORAGE: Prior to installation products are to be stored in cool and dry conditions.

11. APPLICATION: The installation application and orientation of the product is designed in accordance with the nominated product IP rating, class designation and these installation installations. Installation environments outside these conditions are not recommended.

15. Service & Operation (Emergency Version)

Normal Operation: Maintained Emergency Operation.

Battery: Sealed **Lithium Iron Phosphate (LiFePO4)** rechargeable battery pack. As per AS/NZS 2293, it is required that the battery pack is discharged and recharged at least once every 6 months.

In case of a replacement, same brand and type of battery pack must be used. Allow 24 hours charging time before carrying out any discharge tests.

Charge Duration: 16 Hours
Discharge Duration: 2 Hours (Initial Test)

Test Switch: If manual test switch pressed, the fixture will operate from its battery supply.
Please ensure battery plug is connected to the inverter battery terminal.

4. ELECTRICAL CHARACTERISTICS

SKU to Order	Selectable Wattages by Dip Switches (W)	Line Current (A)	Power Factor	Colour Temperature	Emergency	Rail Spec	Factory Default Setting
VXOLS2D4 & VOXLS4D4H	33	0.15	0.95		No	No	
	28	0.14	0.94		No	No	Yes
	20	0.1	0.88		No	No	
	16	0.086	0.83		No	No	
VXOLS2D4M2 & VOXLS4D4HM2	36	0.18	0.95		Yes	No	
	31	0.16	0.94		Yes	No	Yes
	23	0.12	0.88		Yes	No	
	20	0.11	0.83	4	Yes	No	
VXOLS2D4PB	33	0.15	0.95		No	Yes	
	28	0.14	0.94		No	Yes	Yes
	20	0.1	0.88		No	Yes	
	16	0.086	0.83		No	Yes	
VXOLS2D4M2PB	36	0.18	0.95		Yes	Yes	
	31	0.16	0.94		Yes	Yes	Yes
	23	0.12	0.88		Yes	Yes	
	20	0.11	0.83		Yes	Yes	

5. DALI CONTROL GEAR: The LED driver and emergency control gear are both controllable through the DALI RAPIX system. A DALI connection is not required in a non-systemized electrical system, if DALI is not required do not connect it.
Note: when designing the DALI system please refer to the table below for the number of DALI addresses.
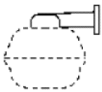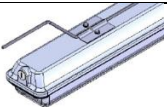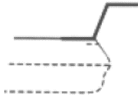
Control gear	Function	Number of Addresses	RAPIX Ready
LED Driver	Dimming, on/off & feedback	1	YES
Emergency Inverter	Testing & Reporting	1	YES

6. LINE DIAGRAMS AND DIMENSIONS

Fitting Size	Length in mm	Width in mm	Height in mm	Weight in Kg
2 foot	700	138	114	4
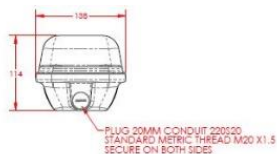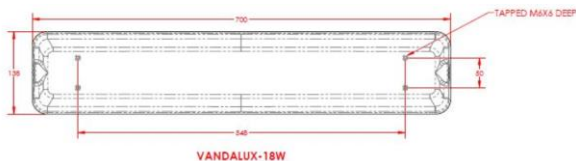
VANDALUX-18W

7. OPTIONAL MOUNTING TYPE

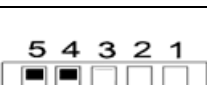| Fitting Size	Mounting Bracket/ Accessory	Part Number	Manufactured From	Modification to body	Drawings
2 foot	Horizontal Wall Mounting Bracket Kit	C28VANDALUX (Double Bracket)	Cast aluminum	Drill holes where indents are internally provided	
	Catenary Wire Kit To Suit 7mm Wire	C31VANDALUX	Aluminum	Nil, threaded holes have been provided	
	32mm Spigot Attachment	C32VANDALUX	Cast aluminum	Nil, threaded holes have been provided	
	Universal Bracket	C35VANDALUX	Aluminum	Nil, threaded holes have been provided	
	Ceiling Mount Bracket	C36VANDALUX	Aluminum	Nil, threaded holes have been provided	
	Pipe Clamp Bracket	PMB32/VAN	This is Stainless steel only.	Nil, threaded holes have been provided	
		PMB40/VAN			
	Wire Suspension Bracket	C37VANDALUX	Aluminum	Nil, threaded holes have been provided	

12. INSTALLATION / GENERAL: Installation of the product is to be completed by an authorized and licensed electrician, in accordance with these instructions, relevant Australia standards and local regulations (where applicable). Termination of product wiring, together with the installation of the product must be in a manner that maintains the integrity of the designated IP rating of the product for electronic control equipment (when supplied) DO NOT MEGGER between A and N.

13. LUMEN SELECT (contractor selectable output)
Pierlite's lumen select products allows all licensed electricians to purchase one luminaire that can be set as multiple fixed wattages/fixed lumen outputs. By offering this capability within one fitting it provides the following benefits
- One fitting multiple fixed outputs
- Less stocked items
- One fitting on the shelf or in the van
- Variable onsite options
- Easy to change settings
- IES files available for all available for wattages shown in the below table
- No control system or software required to change fixed output

The Vandalux luminaire and retrofit kit has been factory set to 28W/3351lm, if a different wattage/lumen output is required the licensed electrician can easily change the driver dip switches to the settings shown in the below table.
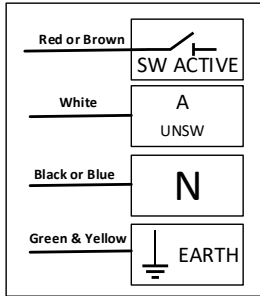
System Wattage (W)	Driver Settings (mA)	Lumen Output (lm)	Driver Dip Switch Settings
33	1400	3861	5 4 3 2 1 — ON ALCOADE05
28W (factory default setting)	1150	3351	5 4 3 2 1 — ON ALCOADE05
20	850	2510	5 4 3 2 1 — ON ALCOADE05
16	700	2114	5 4 3 2 1 — ON ALCOADE05

14. INSTALLATION / GENERAL: Installation of the product is to be completed by an authorized and licensed electrician, in accordance with these instructions, relevant Australia standards and local regulations (where applicable). Termination of product wiring, together with the installation of the product must be in a manner and orientation that maintains the integrity of the designated IP rating of the product for electronic control equipment (when supplied) DO NOT MEGGER between A and N.
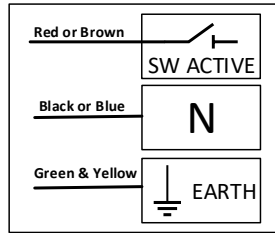
Installation:

Ensure the appropriate bracket has been ordered for your installation type. Refer to the bracket installation instructions for further information.

a)   Isolate the supply circuit as per the Australian standard and your SWMS.

b)   Remove both the diffuser and the gear tray using a 5mm hex head and place in a safe location to ensure the product does not get damaged while the housing is being installed.

c)   Install the housing with the selected bracket system.

d)   Suspend the gear tray from the lanyards

e)   Connect the supply wires to the supplied 6mm² terminal block. Ensure sure all connections and cabling complies to AS3000.
Note: Ensure the correct wires go to the correct terminals as per below

Red or Brown — SW ACTIVE	Red or Brown — SW ACTIVE
White — A / UNSW	Black or Blue — N
Black or Blue — N	Green & Yellow — EARTH
Green & Yellow — EARTH	

Emergency & Mains Wiring Connections   **Mains Only Wiring connections**

f) Select the wattage/lumen output by changing the dip switches on the LED driver, please refer to section 12 of this installation sheet. **Note:** 28W/3351lm is the factory default for this fitting.

g) Secure the gear tray to the luminaire body ensuring all cables a clear from pinching or possible damage.

h) Tighten the screws securing the gear tray to a maximum of 4Nm

i) Installation of the diffuser, lightly screw the supplied hex head screws into the 6 holes around the diffuser. Place diffuser to the body and tighten screws to a maximum of 4Nm.

j) Ensure the IP rating of the installation is equal to that of the tested IP rating of the fitting. **Note**: the IP rating of the fitting is IP66.

k) Test fitting as per the relevant Australian standard and as per your SWMS.

16. MAINTENANCE:
(a) The supply must be isolated before opening or accessing the luminaire. Product maintenance is IMPORTANT and is critical to the products designed performance. The product is to be maintained in accordance with the manufacturer's instructions. For the latest product maintenance guides please go to relevant brand web site. Pierlite is not responsible for any product not maintained in accordance with the recommended procedure or intervals.
(b) Lamps (where provided): The product is designed with the supplied (LEDs) / LAMP/s and it is strongly recommended that any LAMP / (LEDs) changes (if any) be made in accordance with the type, colour and brand supplied. For recommended LAMP / LED maintenance or operating guides (inclusive of recommended product switch cycles and mandatory run-in procedures for HID and Fluorescent lamps when used with dimming circuits), Pierlite recommends the application of the lamp manufacturer's operating guidelines, which can be found on manufacturer's website. Pierlite is not responsible for the product performance of alternative lamp/s used. As a member of FluroCycle, we encourage recycling of lamps and components.
(c) Battery (where provided): The battery is designed with a rated average battery design life of 50,000 hrs. in standby mode. The battery is supported with a standard **Four (4) year warranty**; conditional of the product being maintained and operated in accordance with the manufacturer's guidelines and tested in accordance with AS/NZS2293. For guidelines see product installation instructions or visit the relevant brand web site.
(d) For products supplied with glass visors or covers, do not operate the product with a damaged visor or cover; it is recommended the product be turned off, area surrounding the product vacated and the damaged glass replaced by a professional installer immediately.

17. WARRANTY INSTRUCTIONS: For the purpose of warranty claims (if any) the following instructions apply:
Warranty period - The above components are provided with a warranty of **Five (5) years** against manufacturing defects or failure to perform to specifications for products installed by an authorised installer in accordance with the manufacturer's installation instructions and which have not been subject to incorrect operation or maintenance, unauthorised modification or damage arising from any intervening cause.
Warranty reference - The warranty reference date commences from the date of purchase.
Warranty point of contact – Pierlite Pty Ltd, 96 Gow Street Padstow NSW 2211,
phone T 1300 799 300 contact – Pierlite After Sales Support.

Warranty claim procedure – For the purpose of making a claim the customer must:
1. Contact the "point of contact" above and upon provision of proof of purchase the customer will receive a goods return advice (GRA) number. 2. At the customer's expense, collect and return the goods to the "point of contact" with the issued GRA number. 3. Upon receipt of the goods, Pierlite will review the claim and if found to be accepted, Pierlite will return a replacement product to the customer to install at the customer's expense. Alternatively, if the claim is rejected, the customer may request the return of the goods at their expense. **Consumer Contracts** - The benefits to the customer given by the Pierlite warranty are in addition to other rights and remedies of the customer if the goods are the subject of a Consumer Contract under the Australian Consumer Law. In that event the following statement is required to be brought to the Consumer's attention: - *Our goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and for compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.* **Limitation of Liability** – if the goods are not purchased by the customer under a Consumer Contract within the Australian Consumer Law then but not otherwise;- (a) the Company is not liable in tort for any loss or damage suffered by the customer or by any third party; and (b) in no circumstances is Pierlite liable to the customer or to any third party for any loss of profits, loss of anticipated savings, economic loss or interruption of business or for any indirect or consequential loss
(Consequential Loss).
Terms of Sale – these Warranty provisions are in substitution for any inconsistent provisions in the Pierlite Terms and Conditions of Sale in so far as they apply to the Warranty components.

HCD038/BT   DALI Output

Bluetooth · CB · CE · SELV · IP20 · emc

Product Description

HCD038/BT is a Bluetooth DALI control base with 30mA DALI power supply built in. They work with a wide range of microwave and PIR sensor heads. They are ideal for plastic luminaires as compared to metal luminaires because Bluetooth signal can transmit through plastic. They are suitable for any typical indoor applications such as office, classroom, car park, warehouse and other commercial/industrial areas. With Bluetooth wireless mesh networking, it makes communication much easier without any hardwiring, which eventually adds values to luminaires and saves costs for projects. Meanwhile, simple device setup and commissioning can be done via app. **Koolmesh**™

HCD038/BT

App Features

- Quick setup mode & advanced setup mode
- Tri-level control
- Daylight harvest
- Circadian rhythm (Human centric lighting)
- Floorplan feature to simplify project planning
- Web app/platform for dedicated project management
- Koolmesh Pro iPad version for on-site configuration
- Grouping luminaires via mesh network
- Scenes
- Detailed motion sensor settings
- Dusk/Dawn photocell (Twilight function)
- Push switch configuration
- Schedule to run scenes based on time and date
- Astro timer (sunrise and sunset)
- Staircase function (master & slave)
- Internet-of-Things (IoT) featured
- Device firmware update over-the-air (OTA)
- Device social relations check
- Bulk commissioning (copy and paste settings)
- Dynamic daylight harvest auto-adaptation
- Power-on status (memory against power loss)
- Offline commissioning
- Different permission levels via authority management
- Network sharing via QR code or keycode
- Remote control via gateway support HBGW01
- Interoperability with Hytronik Bluetooth product portfolio
- Compatible with EnOcean switch EWSSB/EWSDB
- Continuous development in progress…

Hardware Features

- HCD038/BT: 30mA DALI broadcast output for up to 15 LED drivers
- Plug'n'Play for flexible installation and cost saving assemble
- Support to control DT8 LED drivers (HCD038/BT)
- 2 Push inputs for flexible manual control(HCD038/BT)
- Zero crossing detection circuit to reduce in-rush current and prolong relay lifetime (HC038V/BT)
- Loop-in and loop-out terminals for efficient installation (HC038V/BT only)
- 5-year warranty

Bluetooth 5.0 SIG mesh

iOS 10.0 or later
Android 5.0 or later
Koolmesh Pro for iPad

for iOS   for Android   for iPad

for Web

Web app/platform:
iot.koolmesh.com

EnOcean
Self-powered IoT

Fully support
EnOcean switch
EWSSB/EWSDB


Subject to change without notice.

Technical Specifications (HCD038/BT)

| Bluetooth Transceiver	
Operation frequency	2.4 GHz - 2.483 GHz
Transmission power	4 dBm
Range (Typical indoor)	10~30m
Protocol	Bluetooth® 5.0 SIG Mesh

Safety & EMC	
EMC standard (EMC)	EN55015, EN61000, EN61547
Safety standard (LVD)	EN60669-1, EN60669-2-1
RED	EN300328, EN301489-1/-17
Certification	Semko, CB, CE , EMC, RED, RCM

Input & Output Characteristics	
Operating voltage	220~240VAC 50/60Hz
Stand-by power	<1W
Load ratings:	
HCD038/BT	Capacitive: 400W; Resistive: 800W 30mA (max. 15 devices)
Warming-up	20s

Environment	
Operation temperature	Ta: -20°C ~ +55°C
Case temperature (Max.)	Tc: +75°C
IP rating	IP20

Mechanical Structure & Dimensions
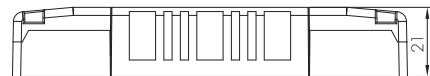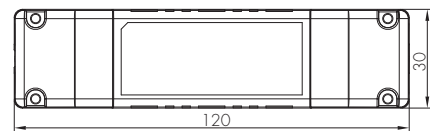
HCD038/BT (DALI output)
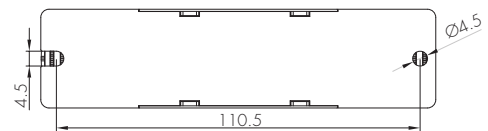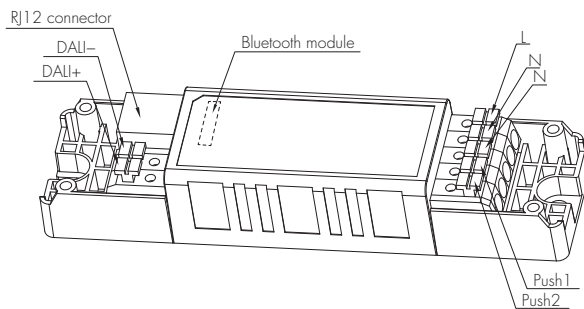
Wire Preparation

To make or release the wire from the terminal, use a screwdriver to push down the button.

Wiring Diagram

HCD038/BT
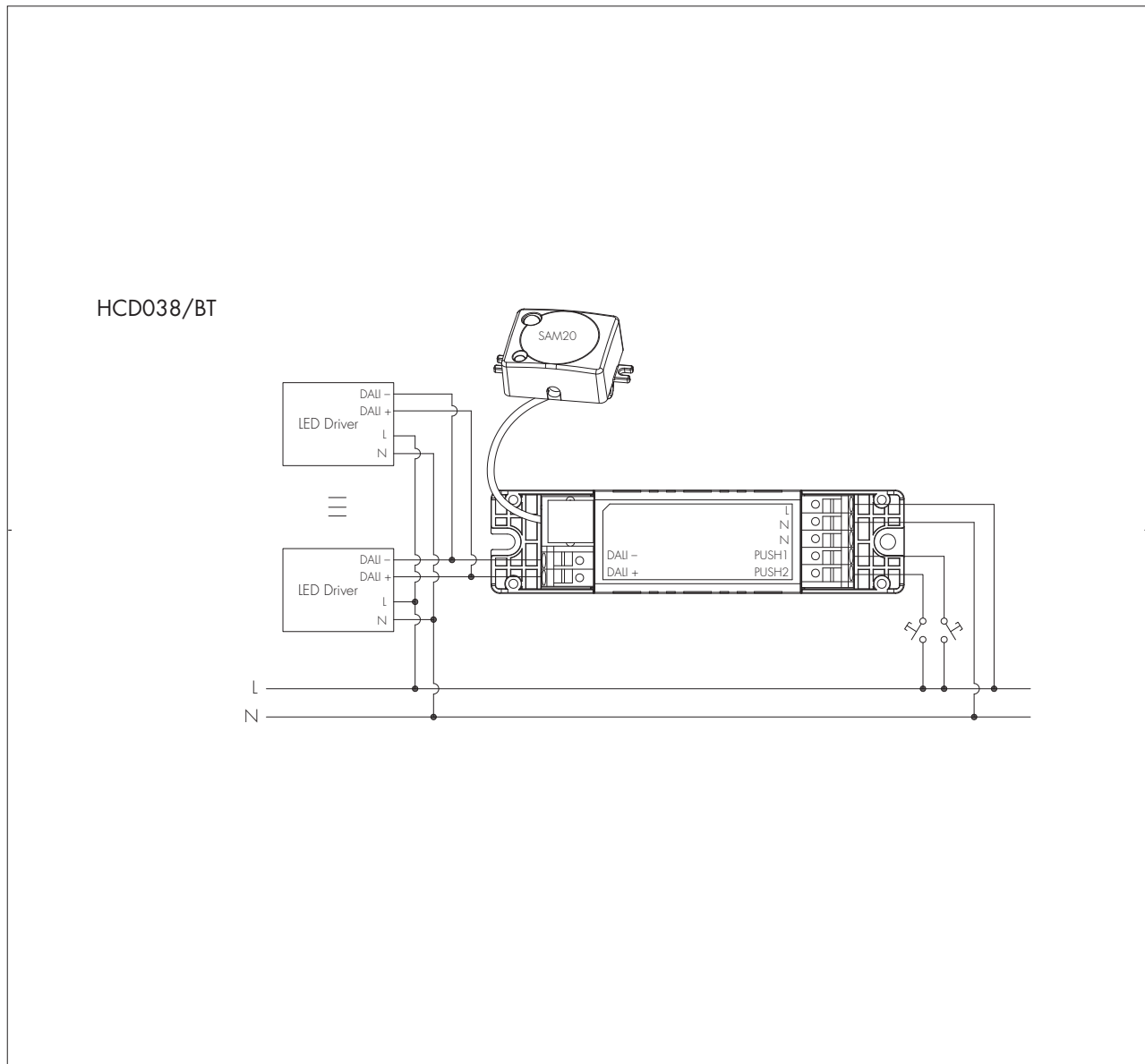
Technical Specifications for Sensor Heads

| PIR Sensor Properties	
Sensor principle	PIR detection
Operating voltage	5VDC
Detection range *	HIR05 & HIR05/FM & & HIR07 Max installation height: 3m Max detection range: 6m (diameter) HIR11 Max installation height: 15m (forklift) 12m (single person) Max detection range: 24m (diameter) HIR12 Max installation height: 15m (forklift) 12m (single person) Max detection range: 18m * 6m (L * W)

HF Sensor Properties	
Sensor principle	High Frequency (microwave)
Operating voltage	5VDC
Operation frequency	5.8GHz +/- 75MHz
Transmission power	<0.2mW
Detection range *	SAM20 / SAM21 / SAM22 Max installation height: 3m Max detection range: 12m (diameter) SAM23 Max installation height: 15m (forklift) 12m (single person) Max detection range: 20m (diameter)

* The detection range is heavily influenced by sensor placement (angle) and different walking paces.
  It may be reduced under certain conditions.

PIR & microwave sensor heads

The range of PIR and microwave sensor heads below offers powerful number of Plug'n'Play feature options to expand the flexibility of luminaires design. This approach to luminaire design reduces space requirements and component costs whilst simplifying production.
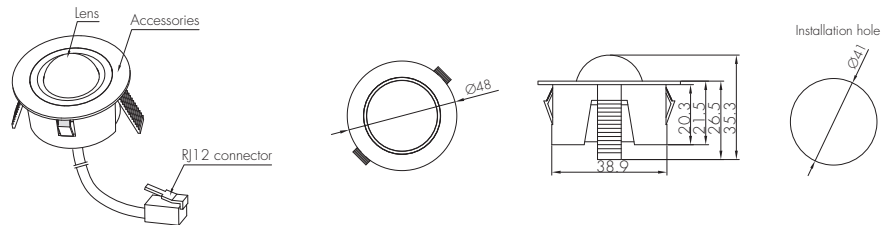
A. HIR05
PIR sensor head
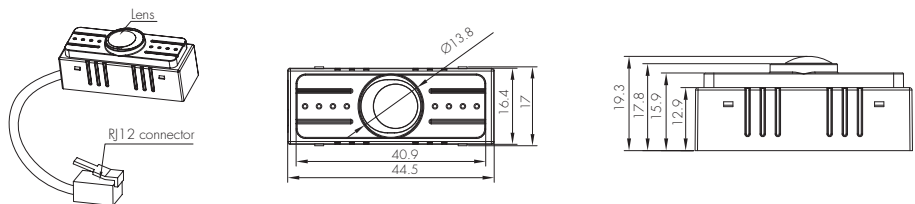The cable length is around 65cm.
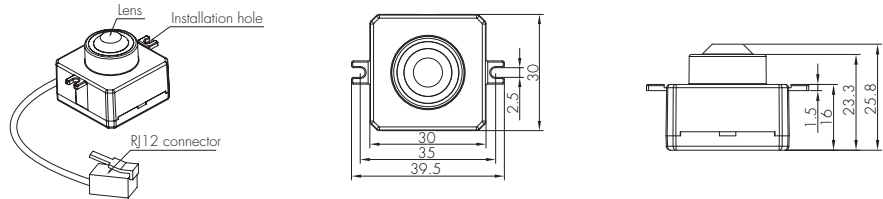
B. HIR05/FM
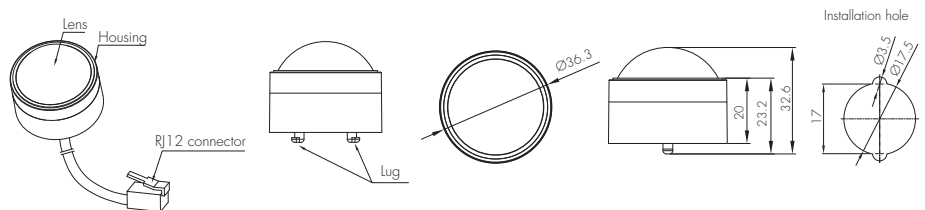PIR sensor head
The cable length is around 65cm.

C. HIR07
PIR sensor head
Photocell Advance™
The cable length is around 30cm.

D. HIR11/S
PIR sensor head
Surface mounting
For highbay application
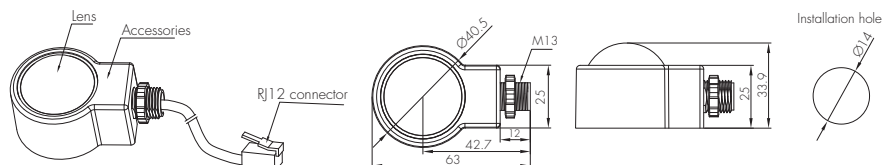IP65 (facia / lens part)
The cable length is around 65cm.

E. HIR11/F
PIR sensor head
Flush mounting
For highbay application
IP65 (facia / lens part)
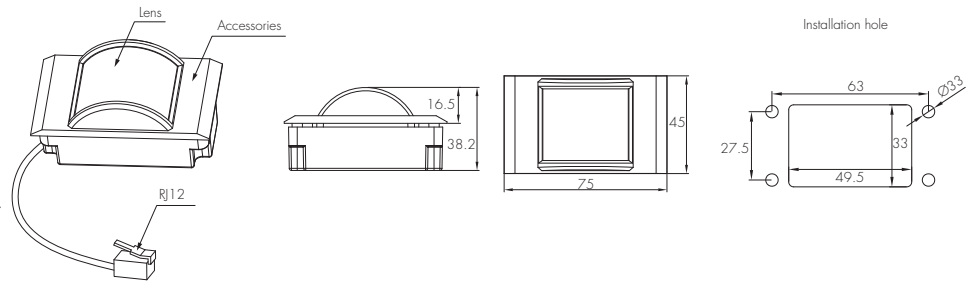The cable length is around 65cm.
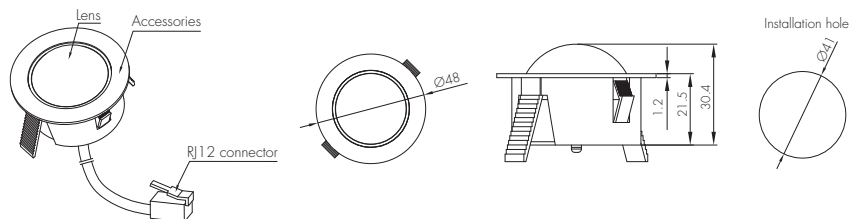
F. HIR11/C
PIR sensor head
Screw to the luminaire by conduit
For highbay application
IP65 (facia / lens part)
The cable length is around 65cm.

G. HIR12

PIR sensor head
For highbay application
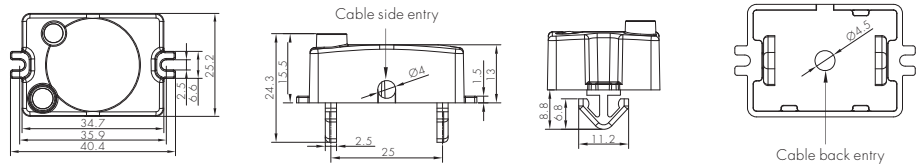IP65 (facia / lens part)
The cable length is around 65cm.

Lens
Accessories
RJ12
Installation hole

16.5
38.2
45
75
63
Ø33
27.5
33
49.5

Installation for HIR12

Thickness: 0.8mm – 1.6mm

We suggest that the metal plate thickness to be 0.8mm – 1.6mm to ensure perfect focal length for the PIR lens.

H. SAM20

HF sensor head
Photocell Advance™
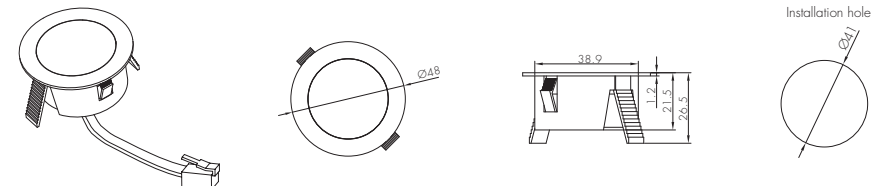The cable length is around 30cm.

Cable side entry
Cable back entry
ØA
25.2
2.2
6.6
34.7
35.9
40.4
24.3
15.5
1.5
13
8.8
6.8
2.5
25
11.2
Ø4.5

I. SAM21

HF sensor head
IP65
The cable length is around 65cm.

HF antenna module
ØA1
13.9
40.3
M16
14.6
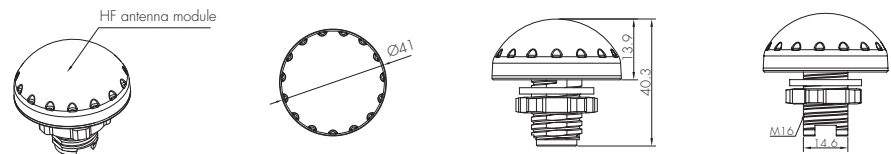
J. SAM22

HF sensor head
Flush mount
The cable length is around 65cm.

Installation hole
Ø48
38.9
1.2
21.5
26.5
ØA1

K. SAM23

HF sensor head
Photocell advance™
For highbay application
The cable length is around 30cm.

Infrared remote receiver
Photocell advance™
Daylight sensor
Slots for T5 or T8 tube
Slots for T8 tube
45.2
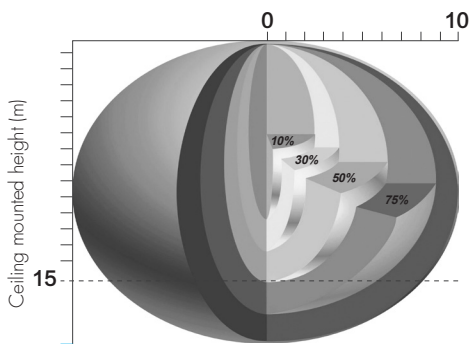32.2
2.5
33.5
15
12
50.2
26.5
9
2
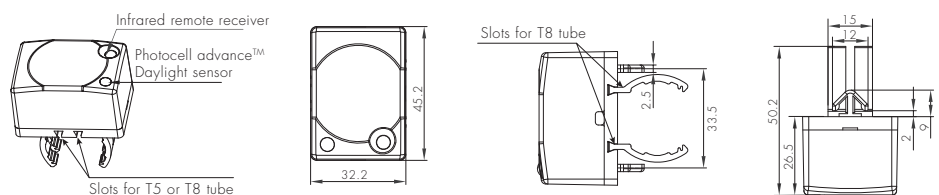
Optional Accessory: Reinforced Bluetooth Antenna

For some special applications, customers may need a larger Bluetooth transmission for both smartphone to device and device to device. Thanks to the reinforced Bluetooth antenna (optional black or white color to choose from), with it being added to the control base HC038V/BT & HCD038/BT, the transmission distance (smartphone to device) enlarges to 20m, the distance of device to device is around 50m.
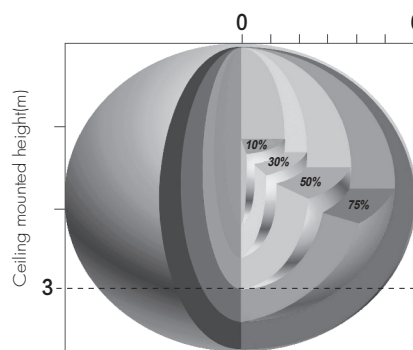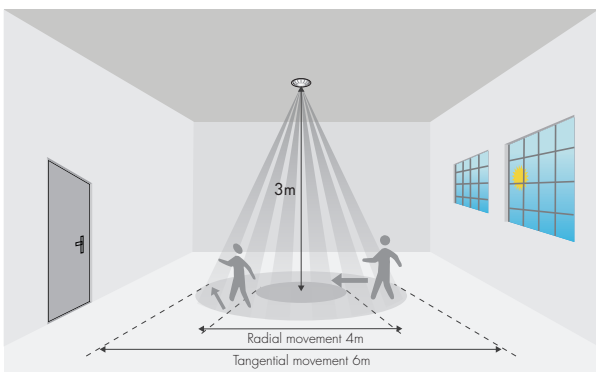
Installation hole 6.5mm

Bluetooth antenna

Gasket   Metallic Spacer   M6.5 Nut

12.7   9.5   31.2   48.7

HA01W   HA01B

Detection Pattern

SAM23

0   10

Ceiling mounted height (m)

10%
30%
50%
75%

15
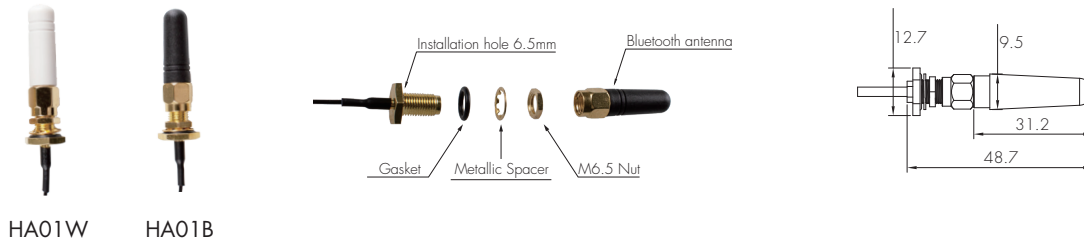
Ceiling mounted detection pattern (m)

SAM20 / SAM21 / SAM22

0   6

Ceiling mounted height(m)

10%
30%
50%
75%

3

Ceiling mounted detection pattern (m)

HIR05 & HIR05/FM & HIR05/E & HIR07

3m

Radial movement 4m
Tangential movement 6m

HIR12

3m   Up to 4m   Up to 8m   Up to 5m
5m   Up to 10m
12m   Up to 6m
15m   Up to 12m   Up to 6m
*for forklift   Up to 18m
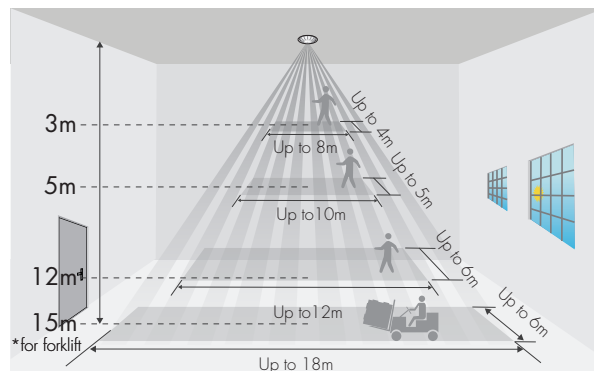
Dimming Interface Operation Notes

HIR11 (High-bay)

HIR11: High-bay lens detection pattern for **forklift** @ Ta = 20°C
(Recommended installation height **10m-15m**)

A: Tangential movement	B: Radial movement	Mount height	Tangential (A)	Radial (B)
		10m	max 380m² (∅ = 22m)	max 201m² (∅ = 16m)
		11m	max 452m² (∅ = 24m)	max 201m² (∅ = 16m)
h = max.15m	h = max.15m	12m	max 452m² (∅ = 24m)	max 201m² (∅ = 16m)
Tangential: max. 24m	Radial: max.16m	13m	max 452m² (∅ = 24m)	max 177m² (∅ = 15m)
		14m	max 452m² (∅ = 24m)	max 133m² (∅ = 13m)
insensitive — sensitive	insensitive — sensitive	15m	max 452m² (∅ = 24m)	max 113m² (∅ = 12m)

HIR11: High-bay lens detection pattern for **single person** @ Ta = 20°C
(Recommended installation height **2.5m-12m**)

A: Tangential movement	B: Radial movement	Mount height	Tangential (A)	Radial (B)
		2.5m	max 50m² (∅ = 8m)	max 7m² (∅ = 3m)
		6m	max 104m² (∅ = 11.5m)	max 7m² (∅ = 3m)
h = max.12m	h = max.12m	8m	max 154m² (∅ = 14m)	max 7m² (∅ = 3m)
Tangential: max. 20m	Radial: max. 3m	10m	max 227m² (∅ = 17m)	max 7m² (∅ = 3m)
		11m	max 269m² (∅ = 18.5m)	max 7m² (∅ = 3m)
insensitive — sensitive	insensitive — sensitive	12m	max 314m² (∅ = 20m)	max 7m² (∅ = 3m)

Switch-Dim

The provided Switch-Dim interface allows for a simple dimming method using commercially available non-latching (momentary) wall switches. Detailed Push switch configurations can be set on Koolmesh app.

Switch Function	Action	Descriptions	
Push switch	Short press (<1 second) * Short press has to be longer than 0.1s, or it will be invalid.	- Turn on/off - Turn on only - Turn off only	- Recall a scene - Exit manual mode - Do nothing
	Double push	- Turn on only - Turn off only - Recall a scene	- Exit manual mode - Do nothing
	Long press (≥1 second)	- Dimming - Colour tuning - Do nothing	
Simulate sensor	/	- Upgrade a normal on/off motion sensor to a Bluetooth controlled motion sensor	

Additional Information / Documents

1. For full explanation of Hytronik Photocell Advance™ technology, please kindly refer to
www.hytronik.com/download ->knowledge ->Introduction of Photocell Advance

2. To learn more about detailed product features/functions, please refer to
www.hytronik.com/download ->knowledge ->Introduction of App Scenes and Product Functions

3. Regarding precautions for Bluetooth product installation and operation, please kindly refer to
www.hytronik.com/download ->knowledge ->Bluetooth Products - Precautions for Product Installation and Operation

4. Regarding precautions for microwave sensor installation and operation, please kindly refer to
www.hytronik.com/download ->knowledge ->Microwave Sensors - Precautions for Product Installation and Operation

5. Regarding precautions for PIR Sensors installation and operation, please kindly refer to
www.hytronik.com/download ->knowledge ->PIR Sensors - Precautions for Product Installation and Operation

6. Data sheet is subject to change without notice. Please always refer to the most recent release on
www.hytronik.com/products/bluetooth technology ->Bluetooth Sensors

7. Regarding Hytronik standard guarantee policy, please refer to
www.hytronik.com/download ->knowledge ->Hytronik Standard Guarantee Policy