



Intelligent Lighting Solutions



Specifier Series | PowerBay



PowerBay | Specifier Series

PowerBay delivers unparalleled power and performance

Originally designed for Air New Zealand, PowerBay is capable of maintaining light levels up to 700lux from heights of up to 28m.

PowerBay offers a fully scalable, high power solution that compliments the ShortBay range with exchangeable parts for long term, extended maintenance schedules.



* Zero LED failures (subject to ambient temperature and switch cycles)

HE Power Performance Options

PowerBay scales to deliver the performance you need based on four sizes, with up to 12 individual LED arrays at up to 270~540W and 38~78,000lm. This provides lighting designers with the ability to set specific luminaire in specific locations whilst maintaining the same aesthetic and common components for long term maintenance.

PB6-HE 270W 37,800Im	PB8-HE 360W 50,400Im	PB10-HE 440W 61,600Im	PB12-HE 540W 75,6001m	
-				
1				
-				
1				
1				
1				
		_	_	
-				
17				_



Built to survive harsh conditions

PowerBay is capable of operating across a broad range of ambient conditions. With additional structural links between components for safe operation in seismically active areas, it is at home on the ski field or desert road.

A protective coating to the PCB and LED arrays, fully potted drivers and sealed quick fit connectors provide IP67 protection for sensitive electronic components exposed to harsh or challenging environments.

IK10

HIGH



COATING



SUITABLE



SUITABLE





цv STABLE POLYMER



Custom Built

Each PowerBay is custom built to your specifications from a range of common components.

If you require a custom mount or bracket*, talk to our engineering team. We will provide the support you need and documentation in support of local calculations, performance and durability.

3

- 1. Dual or single Power Driver
- 2. Enclosure and connection options
- 3. Painted or stainless construction
- 4. Range of mount or custom options
- 5. IP rated ZB/DALI sensors

1

2

(5)

PowerBay Extreme



PowerBay Extreme delivers ultimate performance and durability at increased ambient temperatures. With custom build options to support the most challenging commercial or military applications.

- TPX Chemical resistance Polyester lenses
- Full IK10 impact resistance with increased dampening
- Stainless steelconstruction
- Diamond coat anodised heatsinks
- Ultra High Density PCB
- IP66 Forced Fan Cooling
- Increased Ambient Threshold
- Dual D4i DALI Drivers

Luminaire Performance Up To:

81,000lm ~ 150 lm/W*

Ambient Temperature Range:





* Special Conditions Apply. Additional fees may apply for custom design features or mounts, subject to project scale and scope.

It's true. Size matters.

It's unreasonable to think that a small format light source can deliver a glare free experience and frankly, it can't.

Reducing component count and concentrating power into a small area delivers a low price, but at a cost.

The PowerBay and ShortBay Series use large surface, high count LED arrays to deliver a low thermalgain, extending product life. Large arrays, higher LED counts, primary lens and adaptive optics deliver a safer work place, devoid of glare, optimising the transition of power into light.

Illustrations indicate size of light emitting surfaces to scale between: UFO vs SB5-R (Left) Phillips Green Perform Elite vs PB12-R (Right)



Adaptive optics

PowerBay features rotationalarrays, with optional reflectors packs, that snap between heatsinks. Providing additional flexibility during installation to optimise uniformity.





Reflectors to Centre Outer Bars Rotated 45°



Non Rotated



Entated Arrays





Unsurpassed uniformity on vertical and horizontasurfaces

PowerBay's adaptive optics, eliminate pooling and shadowing on floors or at the top of high stack warehousing. It delivers unsurpassed levels of uniformity on both horizontal and verticalsurfaces.

PowerBay eliminates pooling or vignetting to provide high levels of visual acuity around complex machinery or to the faces of high stack storage.

-	_	-			-	-		-	_	-
								 1 1 1		1 1 1
								1 1 1		1 1 1
-	-	-	_	-	-	_	-	 _	-	_

The combination of adaptive optics and reflectors deliver exceptionally uniform results even on vertical surfaces.



Many LED high bay present light with significant drop off between fixtures and a dark background.



Everything looks better in colour!

Power to deliver Ra95 at engineering lux levels

Everything looks better in colour and our standard range of Ra85 Chipsets deliver retailgrade performance with R9 \geq 20 across all standard colours from 2,700k-6,000k.

Upgrade to Ra95 and experience the ultimate in colour rendering to satisfy the most exacting quality controller or HDTV sports producer.







Elimination of blue spectrum (≤500nm)

Ambrite[™] is a new LED chipset from Isollux that effectively eliminates blue spectrum below 500nm. Ambrite[™] chipsets deliver up to 129lm/W, outperforming products that rely on filters or optics to control blue peak emissions.

Ambrite is perfect for photosensitive manufacturing, pharmaceuticals, brewing and exterior applications where insects present a significant commercialisk, such as loading bays.

To order, simply specify AMB in place of Ra/CCT.



Luminaire Performance Up To:

69, 990lm ~ 129 lm/W*

Ambient Temperature Range:

-30°C / +50°C*



Solid construction with excellent thermaldissipation

With up to 384 individual LEDs per bar operating at just 46% maximum drive current, ShortBay guarantees superb efficiency and maximum service life. Each bar consists of a single PCB bonded directly to an aluminium heatsink. Optimising transfer of thermalload with a maintained Tijust 25°C above ambient. A laser cut and machine folded rigid steelframe provides a structuralbase for the fullproduct range and is the gear tray onto which the power assembly is mounted.

Space between the heatsink and driver plate reduces thermalload, with free air convection to cool components and optional forced air for a maintained ambient Tj.

LEDs are sensitive to chemicals such as bromides at just 1.5 PPM. The PowerBay assembly is sealed with a chemical and moisture coating prior to assembly. A drain hole penetrates the base at each end of the heatsink to prevent build up of moisture in areas with dripping water or heavy condensation. Food safe lenticular lenses provide IP64 protection to each light bar, with a smooth outer surface that minimises build up of dust and grime. Each light bar terminates at the end plate with a rubber mount to cushion against vibration, fixed to the heatsink by a 304SS M4 machine screw. Corrosion resistant seismic mounts locking heat sink to gear tray at two positions via 304SS M4.

At the end of life each light¹ bar is 85% recyclable by weight and can be replaced simply and easily to the main chassis and frame.

Air flows freely around the naturally vented heatsinks, allowing the product to operate in high temperature environments.

> Continuous PCB eliminates common corrosion issues typical of linear LED fixtures, improving reliability and endurance.







INFRA RED UPLINK



Reliable mesh network without internet connection

The optionalOS-NET ZigBee controlsystem delivers unparalleled control luminaire without the need for complex programming or data management. Simply program via a point and push infra-red remote.

Select individualights or program entire groups instantly. Update or change groups at any time and set specific approach actions. The system includes: 'follow me'; daylight harvesting; occupancy; vacancy and automatically adjusts to daylight savings. No ongoing fees, no wireless updates, no complex programming or mapping required.

Simple stand alone efficient lighting controls to maximise your energy savings and extend product life.



Wireless wall switches provide practicalover-ride

Your facility may only require low lux levels for most of the day with casual traffic and none when empty. Occasionally, however, you need maximum power for a short burst of activity.

The OS-NET wireless walswitch provides a simple over-ride command to raise lux levels to max before dimming to off when the area is vacated after a set time.

Easy to install o any mains supply, no direct connection to the luminaire circuit required or batteries to forget. It provides an invaluable link between the luminaire you choose to control, and the operator on the ground.

All programmed from the simple infra-red hand held remote control, light or switch group and ungroup, simple easy and intuitive.

Multiple lenses and dual sensor control optimise detection

Behind the lens dualdoppler and IR sensors eliminate false detections. A range of hot swappable lenses fine tune the parameters and sensitivity to suit wide or narrow areas and aisles with blanking plates to prevent detection in areas where walkways are close to the wall.







Maintain and save

Maintenance makes sense, financially, ecologically and practically. Our team can explain the true cost of short term thinking and help your business reduce costs and achieve a sustainable future, with regular maintenance of your fitting.

- s Reduces total cost of ownership maximising ROI and NPV
- Reduces land fill, manufacturing and supply related carbon footprint by up to 400%
- S Delivers a longer practical performance life (L90 >100,000 Hrs* L70 > 200,000 Hrs)
- Supports planned and unscheduled maintenance to the maximum life of the fitting
- § Minimizes downtime with easily maintained and replaceable parts
- § Ensures continuity of fixtures on site
- s Components easily dismantled at end of life for recycling



* HE Chipset L90 Lifetime calculated using 9,000hr independent LM80 photometry report, citing zero failures, using the Energy Star TM-21 protocol. Calculations are based on ambient temperatures of 25°C. With regular maintenance to keep heatsinks and vents clear from blockages. Assumes driver replacement as routine maintenance event at driver replacement at 60,000Hrs. Power tray replacement at schedule to suit customers lux requirements estimated ≥ 100,000 Hrs

PowerBay HE Chipset Product Codes

L90-100,000Hrs 140Im/W

PRODUCT	PERFORMA	NCE	AMB	IENT	DRIVER	INRUSH	MAX PSU	WARRANTY	
Model Number *	Output Power	Efficiency	Min	Max°	Function	Amps	Type C Breaker	24/7 @ max (Ta)	
PowerBay 6									
PB6-HE-XYY-270W-ND -(R)	37,800lm 270W	140lm/W	-40°C	50°C	Non Dim	65A / 130A	6 @ 230 Vac	5 YRS	
PB6-HE-XYY-270W-DM -(R)	37,800lm 270W	140lm/W	-40°C	50°C	0-10V	65A / 130A	6 @ 230 Vac	5 YRS	
PB6-HE-XYY-270W-ZB -(R)	37,800lm 270W	140lm/W	-40°C	50°C	0-10V	65A / 130A	6 @ 230 Vac	5 YRS	
PB6-HE-XYY-270W-DA -(R)	37,800lm 270W	140lm/W	-40°C	50°C	DALI	65A / 130A	6 @ 230 Vac	5 YRS	
PowerBay 8									
PB8-HE-XYY-270W-ND -(R)	50,400lm 360W	140lm/W	-40°C	50°C	Non Dim	65A / 130A	6 @ 230 Vac	5 YRS	
PB8-HE-XYY-270W-DM -(R)	50,400lm 360W	140lm/W	-40°C	50°C	0-10V	65A / 130A	6 @ 230 Vac	5 YRS	
PB8-HE-XYY-270W-ZB -(R)	50,400lm 360W	140lm/W	-40°C	50°C	0-10V	65A / 130A	6 @ 230 Vac	5 YRS	
PB8-HE-XYY-270W-DA -(R)	50,400lm 360W	140lm/W	-40°C	50°C	DALI	65A / 130A	6 @ 230 Vac	5 YRS	
PowerBay 10									
PB10-HE-XYY-270W-ND -(R)	61,600lm 440W	140lm/W	-40°C	50°C	Non Dim	65A / 130A	6 @ 230 Vac	5 YRS	
PB10-HE-XYY-270W-DM -(R)	61,600lm 440W	140lm/W	-40°C	50°C	0-10V	65A / 130A	6 @ 230 Vac	5 YRS	
PB10-HE-XYY-270W-ZB -(R)	61,600lm 440W	140lm/W	-40°C	50°C	0-10V	65A / 130A	6 @ 230 Vac	5 YRS	
PB10-HE-XYY-270W-DA -(R)	61,600lm 440W	140lm/W	-40°C	50°C	DALI	65A / 130A	6 @ 230 Vac	5 YRS	
PowerBay 12									
PB12-HE-XYY-270W-ND -(R)	75,600lm 540W	140lm/W	-40°C	50°C	Non Dim	65A / 130A	6 @ 230 Vac	5 YRS	
PB12-HE-XYY-270W-DM -(R)	75,600lm 540W	140lm/W	-40°C	50°C	0-10V	65A / 130A	6 @ 230 Vac	5 YRS	
PB12-HE-XYY-270W-ZB -(R)	75,600lm 540W	140lm/W	-40°C	50°C	0-10V	65A / 130A	6 @ 230 Vac	5 YRS	
PB12-HE-XYY-270W-DA -(R)	75,600lm 540W	140lm/W	-40°C	50°C	DALI	65A / 130A	6 @ 230 Vac	5 YRS	

(X) Correlated Colour Temperature options include: 4000°K (4) | 5000°K (5) | 6000°K (6)

(YY) Ra (CRI) Options include Ra85 , Ra95. Example: 5,000k Ra85, XYY = 585

Driver Function: ND Non dimming (Vo to reduce output) |DM 1-10V Dimming |ZB 1-10V Dimming (Excludes sensor) | DA DALI

- (R) When reflectors* are required, add -R to end of standard code (blank when not required)

Ambrite[™] can be specified by replacing the (XYY) options with: AMB



°High radiant temperatures or unexpected heat sources can potentially damage or significantly impair the performance of the luminaire. Please contact Isollux prior to installation if further information is required.

17.

IP64

PowerBay HP Chipset Product Codes

L90-100,000Hrs 150lm/W

PRODUCT	PERFORMANCE		AMBIENT		DRIVER	INRUSH	MAX PSU	WARRANTY	
Model Number *	Output Powe	r Efficiency	Min	Max°	Function	Amps	Type C Breaker	24/7 @ max (Ta)	
PowerBay 6			,						
PB6-HP-XYY-270W-ND -(R)	40,500lm 270W	150lm/W	-40°C	60°C	Non Dim	65A / 130A	6 @ 230 Vac	5 YRS	
PB6-HP-XYY-270W-DM -(R)	40,500lm 270W	150lm/W	-40°C	60°C	0-10V	65A / 130A	6 @ 230 Vac	5 YRS	
PB6-HP-XYY-270W-ZB -(R)	40,500lm 270W	150lm/W	-40°C	60°C	0-10V	65A / 130A	6 @ 230 Vac	5 YRS	
PB6-HP-XYY-270W-DA -(R)	40,500lm 270W	150lm/W	-40°C	60°C	DALI	65A / 130A	6 @ 230 Vac	5 YRS	
PowerBay 8									
PB8-HP-XYY-270W-ND -(R)	54,000lm 360W	150lm/W	-40°C	60°C	Non Dim	65A / 130A	6 @ 230 Vac	5 YRS	
PB8-HP-XYY-270W-DM -(R)	54,000lm 360W	150lm/W	-40°C	60°C	0-10V	65A / 130A	6 @ 230 Vac	5 YRS	
PB8-HP-XYY-270W-ZB -(R)	54,000lm 360W	150lm/W	-40°C	60°C	0-10V	65A / 130A	6 @ 230 Vac	5 YRS	
PB8-HP-XYY-270W-DA -(R)	54,000lm 360W	150lm/W	-40°C	60°C	DALI	65A / 130A	6 @ 230 Vac	5 YRS	
PowerBay 10									
PB10-HP-XYY-270W-ND -(R)	66,000lm 440W	150lm/W	-40°C	60°C	Non Dim	65A / 130A	6 @ 230 Vac	5 YRS	
PB10-HP-XYY-270W-DM-(R)	66,000lm 440W	150lm/W	-40°C	60°C	0-10V	65A / 130A	6 @ 230 Vac	5 YRS	
PB10-HP-XYY-270W-ZB -(R)	66,000lm 440W	150lm/W	-40°C	60°C	0-10V	65A / 130A	6 @ 230 Vac	5 YRS	
PB10-HP-XYY-270W-DA -(R)	66,000lm 440W	150lm/W	-40°C	60°C	DALI	65A / 130A	6 @ 230 Vac	5 YRS	
PowerBay 12									
PB12-HP-XYY-270W-ND -(R)	81,000lm 540W	150lm/W	-40°C	60°C	Non Dim	65A / 130A	6 @ 230 Vac	5 YRS	
PB12-HP-XYY-270W-DM-(R)	81,000lm 540W	150lm/W	-40°C	60°C	0-10V	65A / 130A	6 @ 230 Vac	5 YRS	
PB12-HP-XYY-270W-ZB -(R)	81,000lm 540W	150lm/W	-40°C	60°C	0-10V	65A / 130A	6 @ 230 Vac	5 YRS	
PB12-HP-XYY-270W-DA -(R)	81,000lm 540W	150lm/W	-40°C	60°C	DALI	65A / 130A	6 @ 230 Vac	5 YRS	

(X) Correlated Colour Temperature options include 4000°K (4) | 5000°K (5) | 6000°K (6)

(YY) Ra (CRI) Options include Ra85 , Ra95. Example: 5,000k Ra85, XYY = 585

Driver Function: ND Non dimming (Vo to reduce output) |DM 1-10V Dimming |ZB 1-10V Dimming (Excludes sensor) | DA DALI

- (R) When reflectors* are required, add -R to end of standard code (blank when not required)

Ambrite[™] can be specified by replacing th(&YY) options with: AMB

*Alternative Mounting Kits are available



°High radiant temperatures or unexpected heat sources can potentially damage or significantly impair the performance of the luminaire. Please contact Isollux prior to installation if further information is required. **IP64**





PB8 Suspension Mount



PBI0 Suspension Mount



PBI2 Suspension Mount







Contact: Erwin Eeckhaut

Mobile: + 32 53 710 942 Telephone: + 32 475 733 528 E.mail: info@nextgenerationled.be

RegionalAuthourised Global Partners can be found in the following locations

Sydney - Australia | Fresno - USA | Hong Kong - China | Jaingxi- China