THORN

HiPak Pro LED



Robust, low maintenance, energy saving Industrial LED High Bay

- New IP ratings (IP43 and IP66) offer greater application flexibility
- Ideal alternative to 250W/400W solutions up to 45% more energy efficient
- Dedicated individual LED optics for precise light control for racking and open areas
- Integral PIR sensor and DALI dimmable to maximise energy savings
- Dedicated body profile and on board thermal management system ensures LED performance and lifetime
- Long life LEDs (50,000 hours) reduces maintenance lamp changing costs and allows instant light
- A quick fix bracket kit offers the flexibility to join two luminaires together for double the light output (28,000lm)
- Ta 50°C available upon request

Applications

- High level mounting locationsLogistic centres
- Industrial
- Difficult or costly areas for maintenance
- Exhibition Centre
- Cold storage

Luminaire Information

- Life time 50,000 Hours @L70 Ta 35°C
- IP43/20: 14,000lm 150W (93 Llm/W)
- IP66: 13,500lm 150W (90 Llm/W)
- Colour Temperature 4000K
- CRI 70



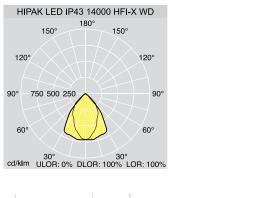


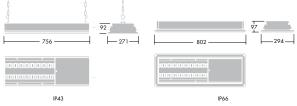


Optional sensor control

IP66 version

Overview





Standards EN 60598 650°C 850°C IK07 IK08



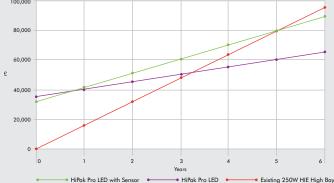
IP43 and IP66 versions - IK08 and 850°C IP20 with Sensor - IK07 and 650°C

Ta+35 E3 IP20 IP43 IP66 CE

Energy efficiency: Warehouse 50m x 75m x 10m

Figure 1. Course of overall costs of solution over lifetime





A warehouse project based on replacing 100 high bay 250W luminaires with either 100 HiPak Pro LED or HiPak Pro LED with sensor, lit to 300 lux over a 10 year period. Operating over a two shift pattern, 16 hour a day, six days a week (4992 hours per year). Sensor option assumes a 40% area occupancy

Ordering Guide

Supplied complete with LEDs. Mounting kits to be ordered separately.

Description	Weight (Kg)	SAP Code
Luminaire with rack optic		
HIPAK LED IP66 13500 HF ML RK L740	13.9	96241929
HIPAK LED IP66 13500 HF ML E3 RK L740	14.3	96241930
HIPAK LED IP66 13500 HFI-X ML RK L740	13.9	96241493
HIPAK LED IP66 13500 HFI-X ML E3 RK L740	14.3	96241494
HIPAK LED IP43 14000 HFI-X RK L740	8.8	96241485
HIPAK LED IP43 14000 HFI-X E3 RK L740	9.2	96241486
HIPAK LED IP20 14000 HFSX RK L740	9.3	96241487
HIPAK LED IP20 14000 HFSX E3 RK L740	9.7	96241488
Luminaire with wide optic		
HIPAK LED IP66 13500 HF ML WD L740	13.9	96241931
HIPAK LED IP66 13500 HF ML E3 WD L740	14.3	96241932
HIPAK LED IP66 13500 HFI-X ML WD L740	13.9	96241495
HIPAK LED IP66 13500 HFI-X ML E3 WD L740	14.3	96241496
HIPAK LED IP43 14000 HFI-X WD L740	8.8	96241489
HIPAK LED IP43 14000 HFI-X E3 WD L740	9.2	96241490
HIPAK LED IP20 14000 HFSX WD L740	9.3	96241491
HIPAK LED IP20 14000 HFSX E3 WD L740	9.7	96241492
Mounting kits		
HIPAK LED BRA	0.4	96241497
HIPAK PRO KIT FIX/CH	0.2	96241507
HIPAK PRO KIT FIX MCA	0.2	96241515
Accessories		
HIPAK PRO KIT FIX BRA JOINT*	0.9	96241508
	0.7	/0241000
*Mounting kits are also required to be ordered HFI-X Dali dimming only		
HFSX High frequency dimming with sensor,		
A/D Wile selector		

Wide reflector WD RK Rack reflector BRA Trunking bracket, CH Chain suspension MCA Catenary suspension BRA JOINT Joining bracket HF On/off

ML Mains cable

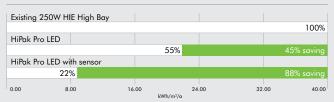
NB: Emergency versions suitable for maximum ambient temperature up to 30°C

Figure 2. Investment costs vs. running costs of solution (absolute)

Existing 250V	W HIE High Bay				
					100%
HiPak Pro LEI	D				
20.5%				57.5%	22%
HiPak Pro LEI	D with sensor				
22.4%		29.3%			48.3% saving
0,00	40,000	80,000 £)	120,000	160,000

total running cost over lifetime

Figure 3. LENI (kWh/m²a)



Materials/Finish

Housing: anodised aluminium extrusion with steel end caps (IP20/43) or die cast aluminium end caps (IP66) powder painted (close to RAL 9006).

Reflector: high grade MIRO 5 aluminium with plastic front cover

IP66 cover: polycarbonate cover with gasket in a powder coated steel frame

Installation/Mounting

All mounting kits to be ordered separately and clip (tool free) onto the back of the body. For chain suspension use kit 96241507, trunking mounting via 20mm holes use kit 96241497, catenary suspension use kit 96241515. To mechanically join two luminaires together both a mounting kit (options from above) and accessory 96241508 needs to be ordered. IP20/43 versions: 2.5mm² piano key terminal block is accessed via a sliding gear tray cover offering two 20mm cable entries. Integral sensor versions offer movement detection as well as daylight control and can be mounted up to 16m heights. Hand held programmer (sap code 96102983) can be used from the floor to customise sensor settings. Emergency versions suitable for maximum ambient temperature up to 30°C. IP66 versions: come supplied with a pre-fitted 2m mains cable (grey), not suitable for looping in and out.

Specification

To specify state:

A LED high bay luminaire made from extruded anodised aluminium, choice of open area or rack optic, electronic gear - dimming, sensor or emergency options, LEDs supplied offering 13,500/14,000 lumen output, 4000K, 50,000 hours, up to 93 Llm/W, sliding gear tray cover for quick terminal block access/pre-fitted mains lead. On board thermal management regulation system monitors LED performance to ensure lifetime and reliability. As Thorn HiPak Pro IP20/43/66.

