

INVO SSLX Performance 40

The INVO SSLX PERFORMANCE maintains all of the same quality technology and components of the SSLX Pro Range, while offering a simpler design with the purpose of offering a more affordable solution without compromise on durability and performance.

LIGHTING

Nominal flux	7,840 Lumens
Nominal Power	40 Watts
Efficiency	196 Lumens / Watts
Chips LED	Philips Luxeon 30-30
LED Lifetime	Over 100,000 hours LM80
Optics & CCT	TIIS / T3-M / T-V 2300 to 6500K
Light Height	From 5-6 meters

BATTERY

Technology	Lithium Iron Phosphate LIFEP04
Capacity	627.2 Wh
Autonomy	Over 24 hours at full charge - 4 rainy days back up
Charging Time	5-6 hours
Lifespan	Over 5000 Cycles @ 50% DOD over 10 years lifetime
Working Temp	-10°C to 70°C (Optional -40°C to 70°C)

ENERGY

Solar Panel	135 Watts / 18V
Cells Type	Monocrystalline Panel Grade A 25 years
Certificates	IEC 61215 - IEC 61730 I and II - IEC 60904

ELECTRONIC

Controller	MPPT Smart Controller
Sensor	Microwave 360° Motion Sensor
Cabling	Waterproof Connector, Plug and Play
Protection	Battery Management System (BMS)

MECHANICAL

Pole Mounting	89mm - 76mm
Material	Aluminium and Stainless Steel

DIMENSIONS

Product	990 x 670 x 271
Carton Size	1060 x 730 x 245
Net Weight	14.1 kg
Gross Weight	20 kg
Qty / Ctn 20"/40"	118/244



Hiking Trails



Car Parks & Rest Areas



Main Roads



Secondary Roads

CERTIFICATIONS

IEC / TUV / EMC / LM-79- 08 and LM-80 test standards / IK8 / IP65 / CE / ULOR

*Procure Direct offers a 5 Year Limited Warranty for the SSLX Performance luminaire shall be free from defects in material and workmanship for up to five (5) years from date of shipment. This limited warranty covers all components when installed and operated according to PD instructions. Fixture suitable for ambient temperature from -10° to 50°. PV Panels: 20 year performance warranty. 3 year warranty on battery.

LUMINAIRE HOUSING & LEDS

7840 LUMENS - 2300 TO 6500 K

Extruded low-copper aluminium. **Protection class (IP65)**. We use a high quality Polyester Powder Coating from **AKZO NOBEL**. This powder coating provides an excellent salt and humidity resistance as well as ultra violet resistance for colour retention for this product.

Our Luminaire is equipped with **PHILIPS LUXEON HE PLUS** High efficiency chips offering **196 Lumens per Watt efficacy**.

Our luminaire also complies with the **DARK SKY** requirement for light pollution with an **Upward lighting of 0.31%**



IP65



LED	LED QTY (PCS)	LENS (PCS)	CRI
3030	72	35	> 80

DIFFERENT OPTICS*

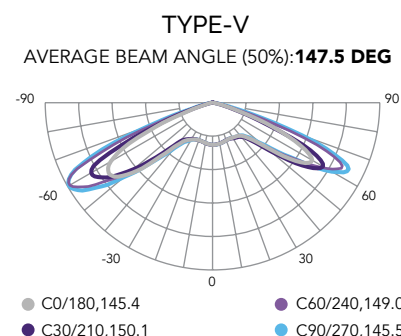
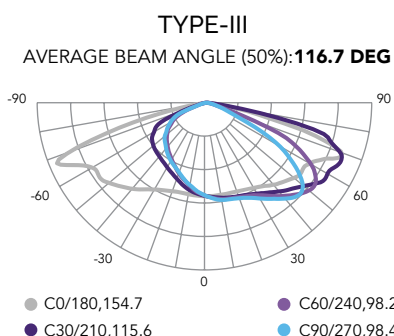
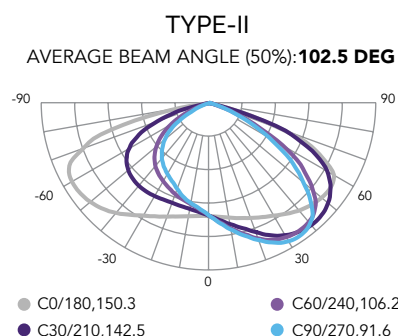
Our different optics will allow you to optimise the lighting results of your projects

SSLT-II

SSLX T-III

SSLX T-V

LIGHT DISTRIBUTION CURVES



INVO SSLX Performance 60

The INVO SSLX PERFORMANCE maintains all of the same quality technology and components of the SSLX Pro Range, while offering a simpler design with the purpose of offering a more affordable solution without compromise on durability and performance.



LIGHTING

Nominal flux	11,760 Lumens
Nominal Power	60 Watts
Efficiency	196 Lumens / Watts
Chips LED	Philips Luxeon 30-30
LED Lifetime	Over 100,000 hours LM80
Optics & CCT	TIIS / T3-M / T-V 2300 to 6500K
Light Height	From 6-7 meters

BATTERY

Technology	Lithium Iron Phosphate LIFEP04
Capacity	922 Wh
Autonomy	Over 24 hours at full charge - 4 rainy days back up
Charging Time	5-6 hours
Lifespan	Over 5000 Cycles @ 50% DOD over 10 years lifetime
Working Temp	-10°C to 70°C (Optional -40°C to 70°C)

ENERGY

Solar Panel	195 Watts / 18V
Cells Type	Monocrystalline Panel Grade A 25 years
Certificates	IEC 61215 - IEC 61730 I and II - IEC 60904

ELECTRONIC

Controller	MPPT Smart Controller
Sensor	Microwave 360° Motion Sensor
Cabling	Waterproof Connector, Plug and Play
Protection	Battery Management System (BMS)

MECHANICAL

Pole Mounting	89mm - 76mm
Material	Aluminium and Stainless Steel

DIMENSIONS

Product	1450 x 670 x 271
Carton Size	1510 x 730 x 245
Net Weight	21 kg
Gross Weight	26 kg
Qty / Ctn 20"/40"	88/180



Hiking Trails



Car Parks & Rest Areas



Main Roads



Secondary Roads

CERTIFICATIONS

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LUMINAIRE HOUSING & LEDS

11,760 LUMENS - 2300 TO 6500 K

Extruded low-copper aluminium. **Protection class (IP65)**. We use a high quality Polyester Powder Coating from **AKZO NOBEL**. This powder coating provides an excellent salt and humidity resistance as well as ultra violet resistance for colour retention for this product.

Our Luminaire is equipped with **PHILIPS LUXEON HE PLUS** High efficiency chips offering **196 Lumens per Watt efficacy**.

Our luminaire also complies with the **DARK SKY** requirement for light pollution with an **Upward lighting of 0.31%**



IP65

LED	LED QTY (PCS)	LENS (PCS)	CRI
3030	72	35	> 80



DIFFERENT OPTICS*

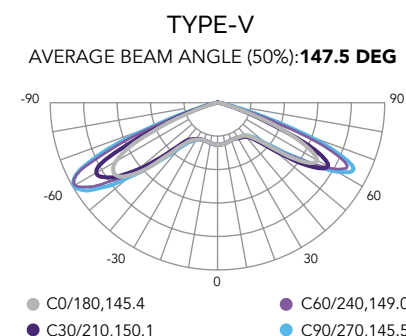
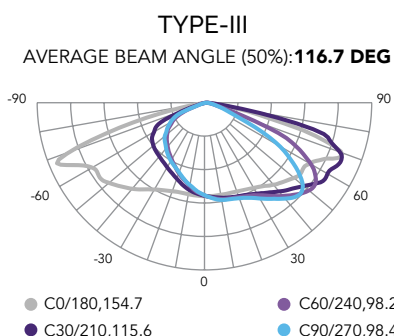
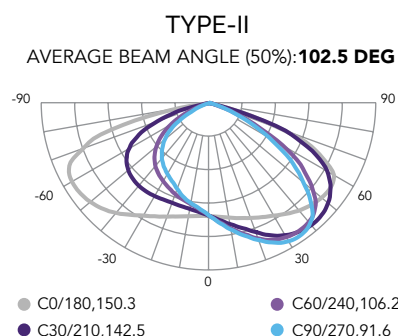
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SSLT-II

SSLX T-III

SSLX T-V

LIGHT DISTRIBUTION CURVES



INVO SSLX Performance 80

The INVO SSLX PERFORMANCE maintains all of the same quality technology and components of the SSLX Pro Range, while offering a simpler design with the purpose of offering a more affordable solution without compromise on durability and performance.

LIGHTING

Nominal flux	15,680 Lumens
Nominal Power	80 Watts
Efficiency	196 Lumens / Watts
Chips LED	Philips Luxeon 30-30
LED Lifetime	Over 100,000 hours LM80
Optics & CCT	TIIS / T3-M / T-V 2300 to 6500K
Light Height	From 7-8 meters

BATTERY

Technology	Lithium Iron Phosphate LIFEP04
Capacity	1152 Wh
Autonomy	Over 24 hours at full charge - 4 rainy days back up
Charging Time	5-6 hours
Lifespan	Over 5000 Cycles @ 50% DOD over 10 years lifetime
Working Temp	-10°C to 70°C (Optional -40°C to 70°C)

ENERGY

Solar Panel	195 Watts / 18V
Cells Type	Monocrystalline Panel Grade A 25 years
Certificates	IEC 61215 - IEC 61730 I and II - IEC 60904

ELECTRONIC

Controller	MPPT Smart Controller
Sensor	Microwave 360° Motion Sensor
Cabling	Waterproof Connector, Plug and Play
Protection	Battery Management System (BMS)

MECHANICAL

Pole Mounting	89mm - 76mm
Material	Aluminium and Stainless Steel

DIMENSIONS

Product	1450 x 670 x 271
Carton Size	1510 x 730 x 245
Net Weight	20.7 kg
Gross Weight	26 kg
Qty / Ctn 20"/40"	88/180



Hiking Trails



Car Parks & Rest Areas



Main Roads



Secondary Roads

CERTIFICATIONS

IEC / TUV / EMC / LM-79- 08 and LM-80 test standards / IK8 / IP65 / CE / ULOR

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LUMINAIRE HOUSING & LEDS

15,680 LUMENS - 2300 TO 6500 K

Extruded low-copper aluminium. **Protection class (IP65)**. We use a high quality Polyester Powder Coating from **AKZO NOBEL**. This powder coating provides an excellent salt and humidity resistance as well as ultra violet resistance for colour retention for this product.

Our Luminaire is equipped with **PHILIPS LUXEON HE PLUS** High efficiency chips offering **196 Lumens per Watt efficacy**.

Our luminaire also complies with the **DARK SKY** requirement for light pollution with an **Upward lighting of 0.31%**



IP65

LED	LED QTY (PCS)	LENS (PCS)	CRI
3030	72	35	> 80



DIFFERENT OPTICS*

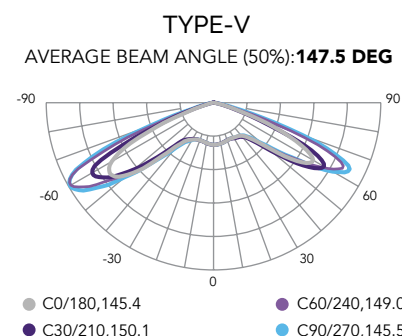
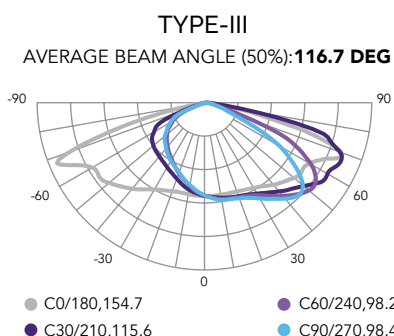
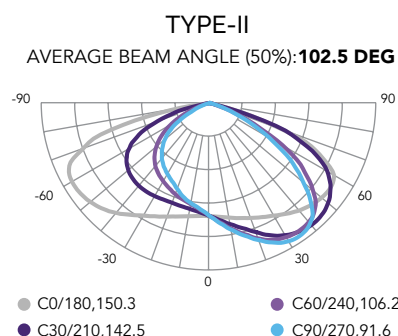
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SSLT-II

SSLX T-III

SSLX T-V

LIGHT DISTRIBUTION CURVES



BATTERY LIFEPO4

+ OVER 10 YEARS LIFETIME

The SSLX Performance Series is equipped with **Iron Phosphate Lithium LiFePo4** battery. This technology is proved to be **the best chemical technology for solar applications on the market.**

With a cycle life of over 5000 Cycles @ 50% DOD, **the battery enjoys a lifespan of over 10 years.**

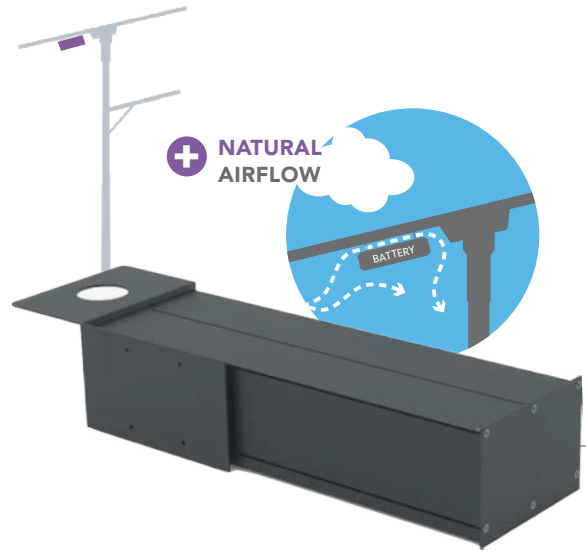


EXTREME TEMPERATURE -10 °C TO 70 °C (-40 °C OPTIONAL)

Most suppliers offer a standard Lithium LiFePo4 batteries with a working temperature range from -10°C TO 70 °C. However, upon request we can offer a new Special LIFEPO4 battery, with working range of -40 °C. to 70 °C.

EASY MAINTENANCE & ANTI-THEFT SCREWS

Easy and direct access to the battery casing for maintenance. The fixation are made with anti-theft screws, which request special tooling to unscrew.



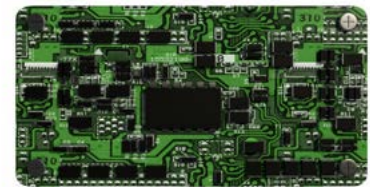
ALUMINUM WATERPROOF CASING & NATURAL AIRFLOW

High temperatures negatively affect the battery's lifespan. This is why our batteries are **encapsulated in an aluminium waterproof casing** for a perfect heat dissipation.

In addition to that, the casing enjoys a natural airflow which **keeps the battery to ambient temperature.**

BMS ELECTRONIC PROTECTION BATTERY MANAGEMENT SYSTEM

Our batteries are equipped with **electronic circuit boards for a higher protection**, ensuring battery function optimisation no matter what the situation.



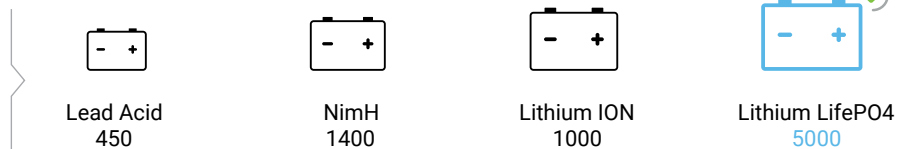
The BMS Protects against :

- OVER/UNDER CURRENT
- OVERLOAD
- OVER/UNDER VOLTAGE
- OVER/UNDER CHARGE
- TEMPERATURE MANAGEMENT

COMPARISONS OF DIFFERENT BATTERY TECHNOLOGIES

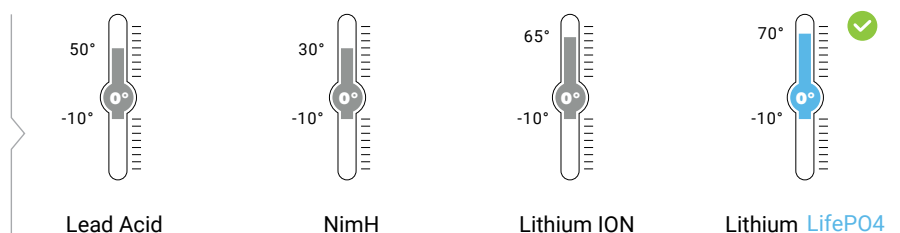
LIFETIME & CYCLES AT 50% DOD*

Comparison of different battery technologies



CHARGING TEMPERATURE RANGE WITHOUT CAPACITY LOSS

Minimum & maximum temperature range for optimal charging during the day



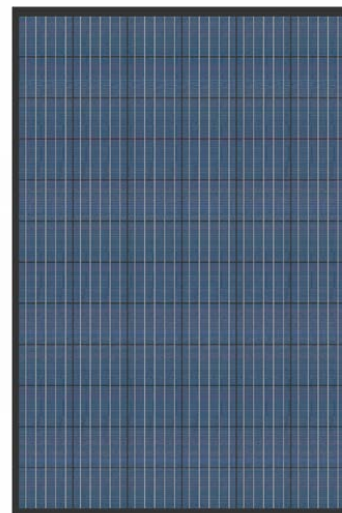
SOLAR PANEL

195 WATTS

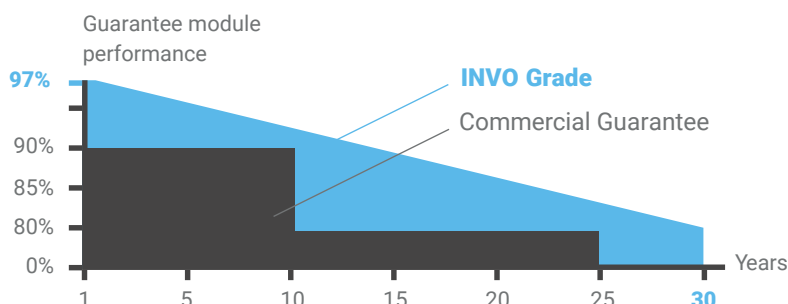
High efficiency mono-crystalline **Solar panels** with carefully selected **Grade A** Solar cells. Up to 20.4% efficiency, all protected by self-cleaning **tempered glass at 30 degrees** of inclination.

Its **anodized** aluminium alloy frame gives it a modern and elegant design as well as perfect resistance to corrosion. They are also equipped with fully **waterproof Plug and Play** connectors.

Solar Cells **GRADE A**



OUR PV PERFORMANCE GUARANTEE



CONTROLLER MPPT



WATERPROOF CONNECTORS "PLUG & PLAY"

All our components are assembled **seamless and easy to access**. In a search for performance and reliability, our products are equipped with **MPPT** technology controller offering the best charging **efficiency on the market up to 98%**.

FEATURES

Minimal stand-by power consumption

Current consumption ≤ 10mA

Intelligent battery management

- 3 phases of charging :
 - Charge MPPTT
 - Constant voltage
 - Floating voltage

Intelligent LED driver

Auto detecting of dusk and dawn for automatic operation, 7 lighting programs configuration.

Anti black-out

Load adjust according to battery capacity assuring all night long lighting in any weather conditions.

The controller also acts against:

- Overload
- Overcurrent
- Overtemperature
- Overvoltage / Overload
- Overdischarge

REMOTE CONTROL MONITORING

In order to facilitate all maintenance operations and above all to diagnose any possible problem, without having to intervene mechanically on the luminaire, **our luminaires are equipped with a wireless diagnostic system via remote control**



With a simple click it is possible to have real-time information such as:

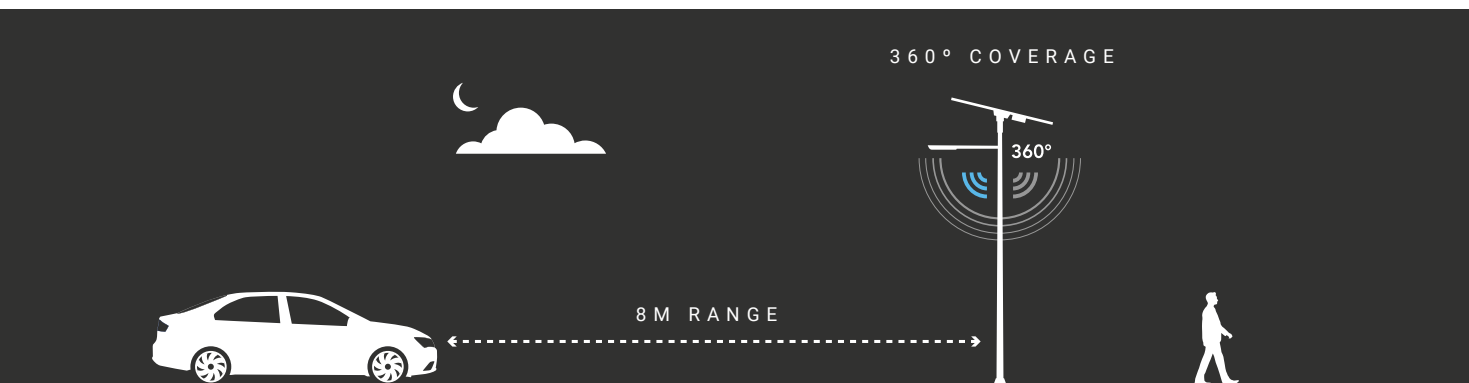
- Automatic diagnosis in case of malfunction
- State of charge and battery history
- Real-time load and solar panel energy production history
- Age of the product and installation
- Temperature and its history

MOTION SENSOR

MICROWAVE

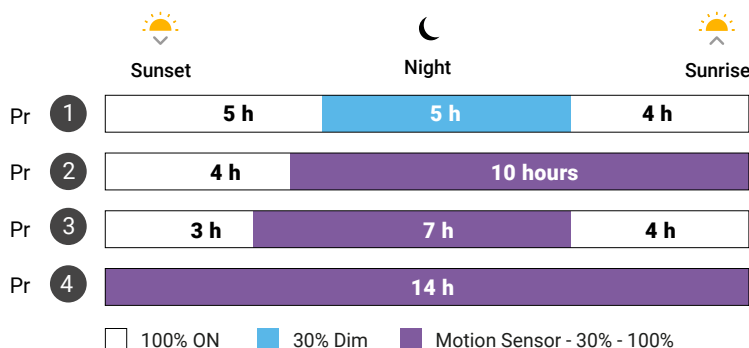
Our luminaires are equipped with microwave sensors that use the **Doppler effect** (like car radars) to detect nearby objects and measure the distance. The sensor emits a high frequency wave to reflect off of and analyse the objects in the vicinity. Since the microwaves **only detect specific objects**, detection reliability increases resulting in:

- Much better reliability compared to the Infrared sensor
- Up to **360°** Directivity



OPERATION MODE & LIGHTING SCHEDULE

In addition to automatic switching on and off, you have the possibility of choosing among **different modular operating modes** according to the needs of the project.



EASY INSTALLATION NO CABLING, NO TRENCHING

With a well designed bracket support, SSLX Performance is effortless and flexible to install. Free 360° rotation of the panel to always face the Sun.

INSERT, ORIENTATE & CHOOSE YOUR TILT.



For more information, or to book your **FREE** audit, call us on 01522 538212, email info@procuredirect.co.uk or visit us at www.procuredirect.co.uk