

# Street lighting

PV solution for road applications



SSL-Li

# SSL-Li



## Descrizione prodotto

Lampione ad alimentazione fotovoltaica per illuminazione di strade o parcheggi con lampada a LED ad alta efficienza e batteria al litio (LiFePO<sub>4</sub>) di nuova generazione grazie alla quale il lampione SSL-Li presenta un design compatto e gradevole, bassi costi di manutenzione, massima funzionalità, efficienza e affidabilità.

Disponibile in diverse taglie di: potenza lampada, batteria e modulo FV per adattarsi a installazioni in tutto il mondo.

[eng]

## Product description

Photovoltaic powered streetlamp for street or parking lighting with high efficiency LED luminaire and new generation lithium battery (LiFePO<sub>4</sub>) thanks to which the SSL-Li streetlamp has a compact and pleasant design, low maintenance costs, maximum functionality, efficiency and reliability.

Available in different sizes of: luminaire power, battery and PV module to adapt to installations all over the world.

[fra]

## Description du produit

Lampadaire photovoltaïque pour l'éclairage des rues ou des parkings avec lampe à LED à haute efficacité et batterie au lithium de nouvelle génération (LiFePO<sub>4</sub>) grâce à laquelle le lampadaire SSL-Li a un design compact et agréable, de faibles coûts d'entretien, une fonctionnalité maximale, efficacité et fiabilité. Disponible en différentes tailles de: puissance de la lampe, batterie et module PV pour s'adapter aux installations du monde entier.



PV tilt 50°

SSL-Li 50



PV tilt 25°

SSL-Li 25

## Caratteristiche prodotto



LiFePO<sub>4</sub> 12 VDC battery, longlife and high performance



High efficiency LED lamps

[eng]

## Product features



MPPT technology charge controller



Flux reduction self management to prevent low battery level

[fra]

## Caractéristiques du produit



Bluetooth control & monitoring



Compact design all-in-one power box

## Lampade disponibili

[eng] Available lamps

[fra] Lampes disponibles



W-Light 24N-42N  
LED lamp



W-Light 60N-84N  
LED lamp

Pag. 46

(Maggiori informazioni - More info - Plus d'informations)

## Batterie disponibili

[eng] Available batteries

[fra] Batteries disponibles



60Ah - LiFePO<sub>4</sub>  
Battery capacity



100Ah - LiFePO<sub>4</sub>  
Battery capacity

## Monitoraggio e Controllo

Il lampione SSL-Li monta il regolatore di carica Western CO. SPB-LS BT con controllo remoto Bluetooth® integrato. Attraverso applicazione su smartphone o PC, è possibile visualizzare il funzionamento dell'intero lampione, in particolare permette di:

- misurare la corrente / tensione del modulo FV, della batteria e della lampada;
- settare i parametri di accensione della lampada;
- visualizzare i dati del logger.

Questo sistema facilita l'installazione e il controllo del lampione garantendo un'efficace ed efficiente manutenzione.

A richiesta può essere fornito il lampione con il regolatore SPB-LS GSM con modem 2G per controllo e monitoraggio a distanza.

[eng]

## Monitoring and control

The SSL-Li streetlamp has a Western CO. SPB-LS BT charge controller with integrated Bluetooth® remote control. Through application on smartphone or PC, it is possible to view the operation of the entire streetlamp, in particular it allows you to:

- measure the current / voltage of the PV module, the battery and the luminaire;
- set the luminaire ignition parameters;
- view the logger data.

This system facilitates the installation and control of the streetlamp, ensuring effective and efficient maintenance. On request, the streetlamp can be supplied with the SPB-LS GSM controller with 2G modem for remote control and monitoring.

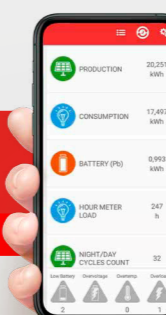
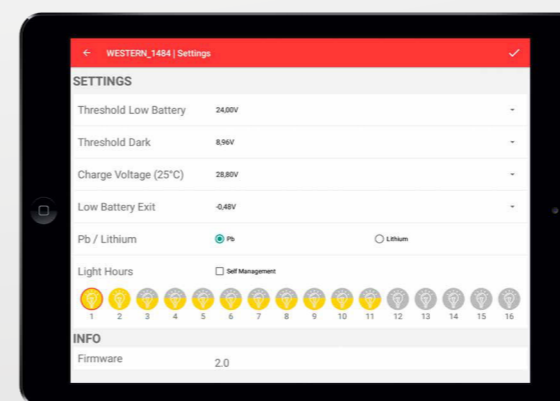
[fra]

## Surveillance et contrôle

Le lampadaire SSL-Li possède un contrôleur de charge Western CO. SPB-LS BT avec commande à distance Bluetooth® intégrée. Grâce à une application sur smartphone ou ordinateur, il est possible de visualiser le fonctionnement de l'ensemble du lampadaire, en particulier il vous permet de:

- mesurer le courant / la tension du module PV, de la batterie et de la lampe;
- définir les paramètres d'allumage de la lampe;
- afficher les données de l'enregistreur.

Ce système facilite l'installation et le contrôle du lampadaire, assurant une maintenance efficace et efficiente. Sur demande, le lampadaire peut être fourni avec le contrôleur GSM SPB-LS avec modem 2G pour le contrôle et la surveillance à distance.



## Bluetooth control included as standard

Also available with GSM version (more info pag. 54)

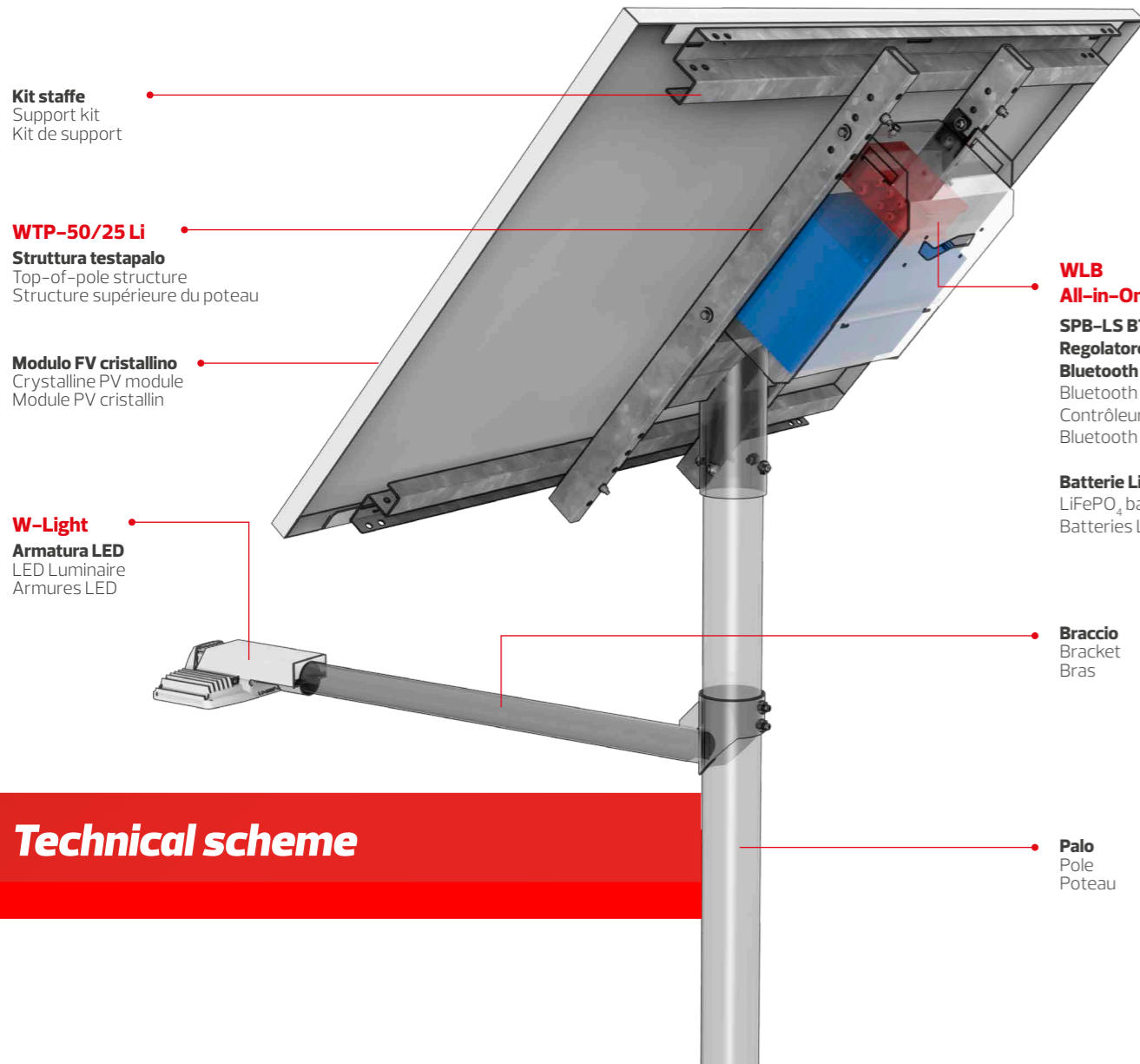
**Caratteristiche tecniche**

[eng] Technical characteristics

[fra] Caractéristiques techniques

<b>Pv module</b>	160W / 300W monocristalline PERC. Two versions available with tilt angle 50° or 25° for optimum installation at different latitudes.
<b>Battery</b>	LiFePO <sub>4</sub> >3500Cycles (80%DOD) 12V 60Ah / 12V 100Ah
<b>Charge controller *</b>	SPB-LS/BT <b>Bluetooth</b> connection by smartphone or PC. MPPT high efficiency (> 95%)
<b>Street lamp</b>	<b>W-Light</b> Western CO. Available models: 30W 3800lm / 36W 4360lm / 42W 5080lm / 60W 7620lm / 72W 8730lm / 84W 10160lm
<b>Color temperature – CRI</b>	4000K – CRI>70
<b>Optic</b>	Asymmetric for street and wide area lighting, suitable for <b>ME</b> class as <b>UNI 11248</b> and <b>UNI 13201-2</b> . PMMA material protected by flat glass.
<b>Light control</b>	Self-management flux reduction to maximize lamp operation during cloudy days.
<b>Mechanical parts</b>	Top of pole battery box steel made hot deep galvanized. Wind load resistance in accordance to <b>Eurocode 0-1-3</b> and production compliant to <b>EN1090-2</b> . Pole: 7m high above the ground, steel made and <b>hot deep galvanized</b> .

\*on demand may be supplied **SPB-LS/GSM** charge controller with **2G** modem with data monitoring through Western CO. web application (**WCloud**).

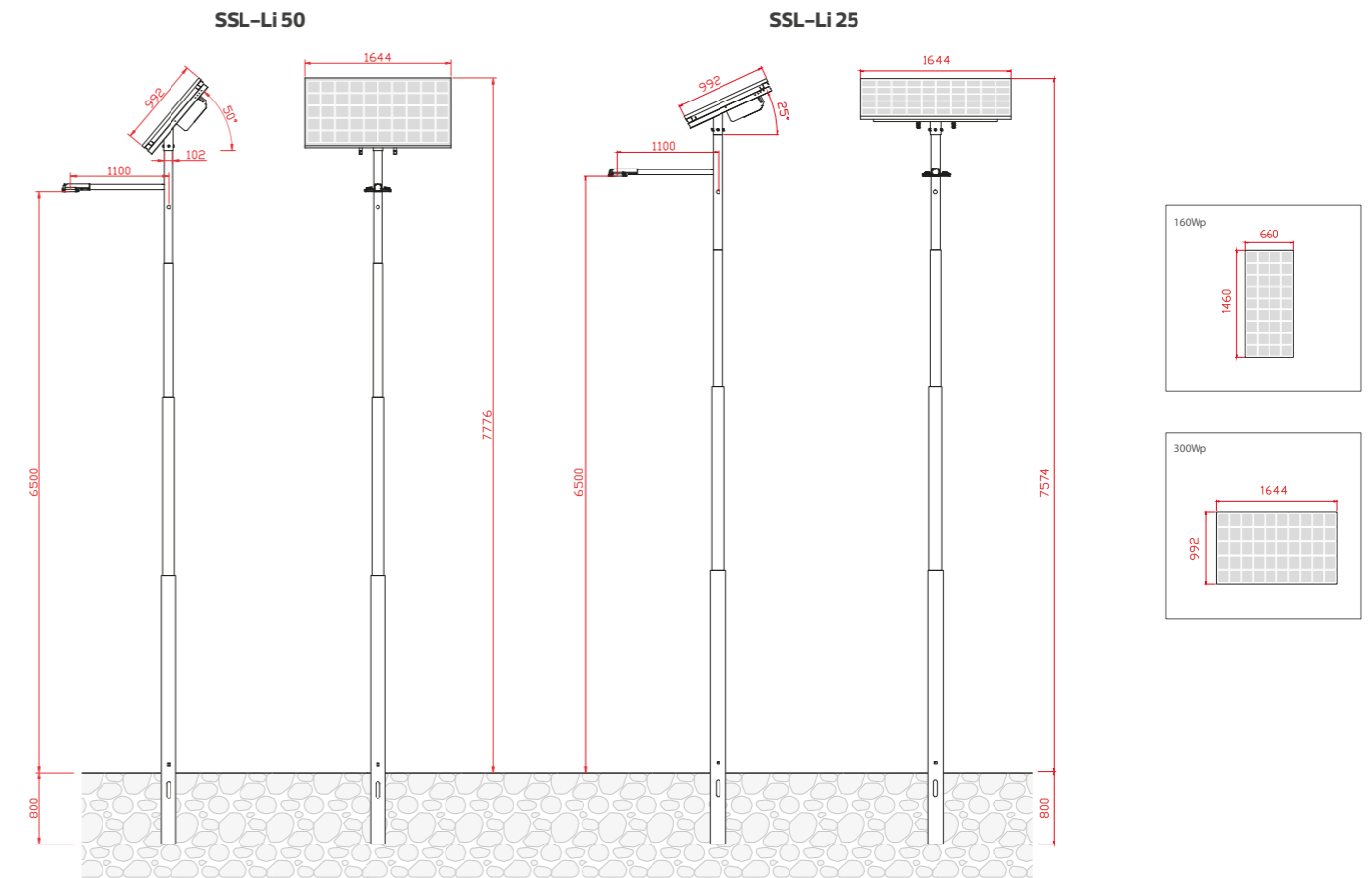


**Technical scheme**

**Dimensioni del prodotto**

[eng] Product dimensions

[fra] Dimensions du produit



**Realizzazioni**

[eng] Realizations

[fra] Réalisations



# SSL-Li - Configurazione Italia

Individua la zona di installazione.



ZONA 1

ZONA 2

ZONA 3

ZONA 4

ZONA 5

Usa il QRCode e configura il tuo lampione  
Use the QRCode and configure your streetlamp  
Utilisez le QRCode et configurez votre lampadaire



## Componi il codice

1 2 3 4  
SSL-Lixx/xx/SPB-xx/PVxxx/Lixx

MODELLO	LAMPADA LED INTELLIGENTE	BOX TESTAPALO WTP-Li	REGOLATORI DI CARICA		MODULO FV					CAPACITÀ BATTERIA LITIO
			SPB-LS BT	SPB-LS GSM	ZONA 1	ZONA 2	ZONA 3	ZONA 4	ZONA 5	
<b>NORD</b> (Val d'Aosta, Piemonte, Liguria, Lombardia, Trentino Alto Adige, Veneto, Friuli Venezia Giulia, Emilia Romagna)										
SSL-Li30-N	W-Light 30N	50	SPB-LS BT	SPB-LS GSM	-	-	300Wp	300Wp**	300Wp	1x60Ah 12V
SSL-Li36-N*	W-Light 36N	50	SPB-LS BT	SPB-LS GSM	-	-	300Wp	300Wp**	300Wp	1x60Ah 12V
<b>CENTRO</b> (Toscana, Marche, Umbria, Lazio, Abruzzo, Molise)										
SSL-Li30-C	W-Light 30N	50	SPB-LS BT	SPB-LS GSM	-	160Wp	160Wp**	300Wp	-	1x60Ah 12V
SSL-Li36-C	W-Light 36N		SPB-LS BT	SPB-LS GSM	-	160Wp	300Wp**	300Wp	-	1x60Ah 12V
SSL-Li42-C	W-Light 42N		SPB-LS BT	SPB-LS GSM	-	160Wp	300Wp**	-	-	1x100Ah 12V
<b>SUD</b> (Campania, Puglia, Basilicata, Calabria, Sardegna, Sicilia)										
SSL-Li30-S	W-Light 30N	50	SPB-LS BT	SPB-LS GSM	160Wp	160Wp**	300Wp	300Wp	-	1x60Ah 12V
SSL-Li36-S	W-Light 36N		SPB-LS BT	SPB-LS GSM	160Wp	160Wp**	300Wp	-	-	1x60Ah 12V
SSL-Li42-S	W-Light 42N		SPB-LS BT	SPB-LS GSM	160Wp	160Wp**	300Wp	-	-	1x100Ah 12V
SSL-Li60-S	W-Light 60N		SPB-LS BT	SPB-LS GSM	300Wp	300Wp**	-	-	-	1x100Ah 12V
SSL-Li72-S	W-Light 72N		SPB-LS BT	SPB-LS GSM	300Wp	300Wp**	-	-	-	1x100Ah 12V
SSL-Li84-S*	W-Light 84N		SPB-LS BT	SPB-LS GSM	300Wp	300Wp**	-	-	-	1x100Ah 12V

\*Consigliamo versione con riduzione di flusso al 50%

ESEMPIO DI INSTALLAZIONE A MILANO - SSL-Li30-N/50/SPB-LS BT/PV300/B1x60:

SSL-Li30-N	50	SPB-LS BT				300				1x60Ah 12V
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\*\* moduli FV consigliati - AUTONOMIA: 3gg consecutivi NO SUN | ACCENSIONE: 12ore/notte in modalità autogestione | INTERDISTANZA: 20÷25m

1 Seleziona la lampada LED.



NOME	NUMERO LED	POTENZA APPARECCHIO @ Tq=25°C [W]	CORRENTE LED [mA]	FLUSSO NOMINALE LED @ Tj=85°C [lm]	FLUSSO APPARECCHIO @ Tq=25°C [lm]	EFFICIENZA APPARECCHIO @ Tq=25°C [lm/W]	PESO [kg]	LATERALE/PIANTA SUPERFICIE [mm2]
W-Light 24N	12	23.0	650	3785	3090	134	6.0	0.02 / 0.10
W-Light 30N	12	29.7	820	4655	3805	128		
W-Light 36N	12	35.1	960	5338	4365	124		
W-Light 42N	12	42.5	1150	6210	5080	119	8.3	0.03 / 0.10
W-Light 60N	24	59.4	820	9310	7620	128		
W-Light 72N	24	70.0	960	10677	8734	125		
W-Light 84N	24	85.0	1150	12423	10160	119		

2 Seleziona il codice del regolatore di carica.



**SPB-LS BT**

Centralina IP66,  
15A e Voc 100V con algoritmo  
MPPT 12V/24V con modulo  
di controllo Bluetooth.



**SPB-LS GSM**

Centralina IP66,  
15A e Voc 100V con algoritmo  
MPPT 12V/24V con modulo  
di controllo remoto GSM.

3 Abbinare il modulo FV in base alla zona.



4 Abbinare la batteria corrispondente.



# SSL-Li - World configuration

Usa il QRCode e configura il tuo lampione  
Use the QRCode and configure your streetlamp  
Utilisez le QRCode et configurez votre lampadaire



Individua la zona di installazione.

[eng] Identify the installation area.

[fra] Identifier la zone d'installation.

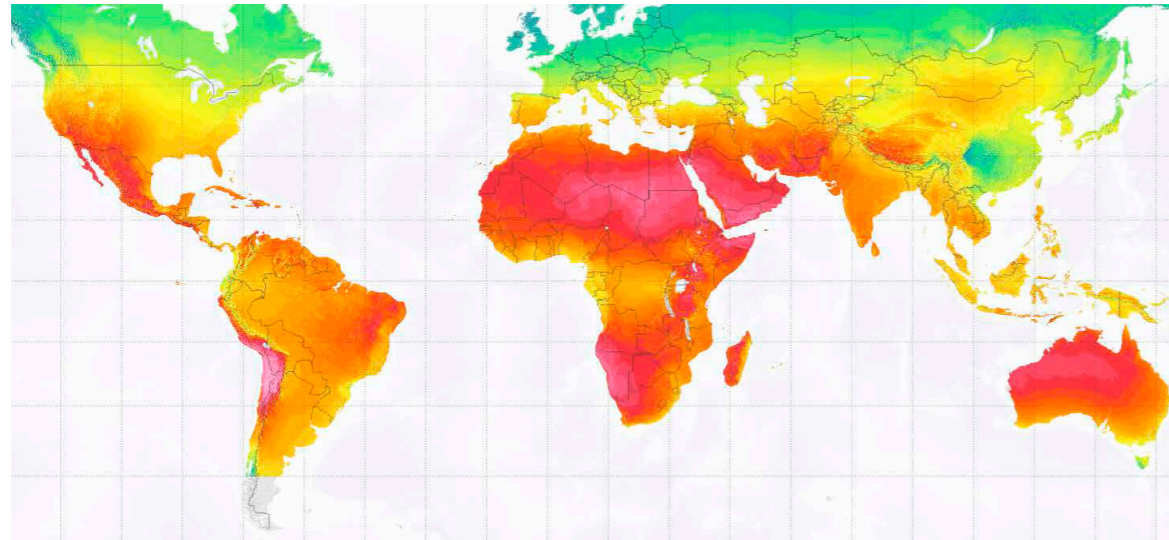
ZONE 1

ZONE 2

ZONE 3

ZONE 4

ZONE 5



## Componi il codice

[eng] Compose the code

[fra] Composer le code

1 2 3 4 5  
SSL-Lixx/xx/SPB-xx/PVxxx/Lixx

PV STREET LIGHT		TOP OF POLE WTP-Li	CHARGE CONTROLLER		PV MODULE					LITHIUM BATTERY CAPACITY	
MODEL	INTELLIGENT LED LAMP		SPB-LS BT	SPB-LS GSM	ZONE 1	ZONE 2	ZONE 3	ZONE 4	ZONE 5		
SSL-Li 24	W-Light 24N	25°/50°	SPB-LS BT	SPB-LS GSM	100Wp	100Wp	160Wp	160Wp	160Wp	1x60Ah-12V	
SSL-Li 30	W-Light 30N				100Wp	160Wp	160Wp	250+270Wp	250+270Wp	250+270Wp	1x60Ah-12V
SSL-Li 36	W-Light 36N				160Wp	160Wp	250+270Wp	250+270Wp	250+270Wp	250+270Wp	1x60Ah-12V
SSL-Li 42	W-Light 42N				160Wp	250+270Wp	250+270Wp	250+270Wp	-	-	1x100Ah-12V
SSL-Li 60	W-Light 60N		250+270Wp	250+270Wp	300Wp	-	-	-	1x100Ah-12V		
SSL-Li 72	W-Light 72N		250+270Wp	300Wp	-	-	-	-	1x100Ah-12V		
SSL-Li 84	W-Light 84N		250+270Wp	300Wp	-	-	-	-	1x100Ah-12V		

EXAMPLE OF INSTALLATION ROME - SSL-Li 30/50/SPB-LS BT/PV160/B1x60:

SSL-Li 30	50°	SPB-LS BT			160				1x60Ah-12V
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ALL STREET LIGHTS: 2 days no sun / 12 hours of self-management / pole spacing 20±25m

1 Seleziona la lampada LED.

[eng] Select the LED lamp.

[fra] Sélectionne la lampe LED.

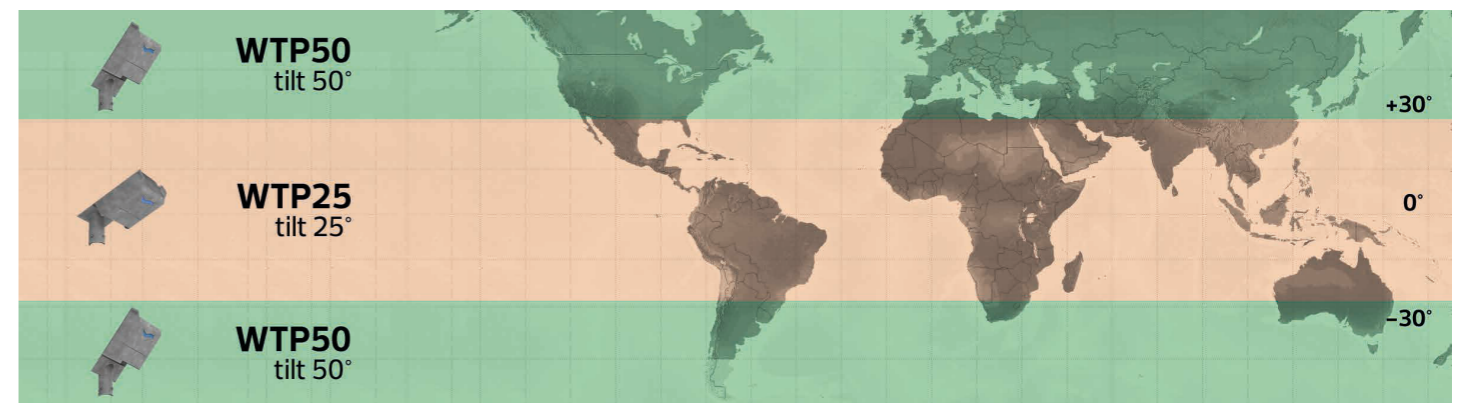


NAME	NUMBER OF LEDs	LUMINAIRE POWER @ Tq=25°C [W]**	LED CURRENT [mA]	NOMINAL LED FLUX @Tj=85°C [lm]*	LUMINAIRE FLUX @ Tq=25°C [lm]**	LUMINAIRE EFFICIENCY @ Tq=25°C [lm/W]**	WEIGHT [kg]	SIDE-TOP SURFACE [mm2]
W-Light 24N	12	23.0	330	3785	3090	134	6.0	0.03 / 0.10
W-Light 30N	12	29.7	400	4655	3805	128		
W-Light 36N	12	35.1	480	5338	4365	124		
W-Light 42N	12	42.5	550	6210	5080	119		
W-Light 60N	24	59.4	800	9310	7620	128	8.3	0.05 / 0.15
W-Light 72N	24	70.0	480	10677	8734	125		
W-Light 84N	24	85.0	550	12423	10160	119		

2 Individua l'inclinazione in base alla mappa.

[eng] Choose the tilt according to the map.

[fra] Repère l'inclinaison par carte.



3 Seleziona il codice del regolatore di carica.

[eng] Select the charge controller code.

[fra] Sélectionne le code du régulateur de charge.



**SPB - LS BT**  
15A charge controller for PV lighting, MPPT algorithm - Voc 100Vdc with 12/24V self-detect, IP66 with Bluetooth control.



**SPB - LS GSM**  
15A charge controller for PV lighting, MPPT algorithm - Voc 100Vdc with 12/24V self-detect, IP66 with GSM control.

4 Abbinare il modulo PV in base alla zona.

[eng] Match the PV module by zone.

[fra] Faites correspondre le module PV par zone.

5 Abbinare la batteria corrispondente.

[eng] Match the corresponding battery.

[fra] Faites correspondre la batterie correspondante.