

SMART **BOX**

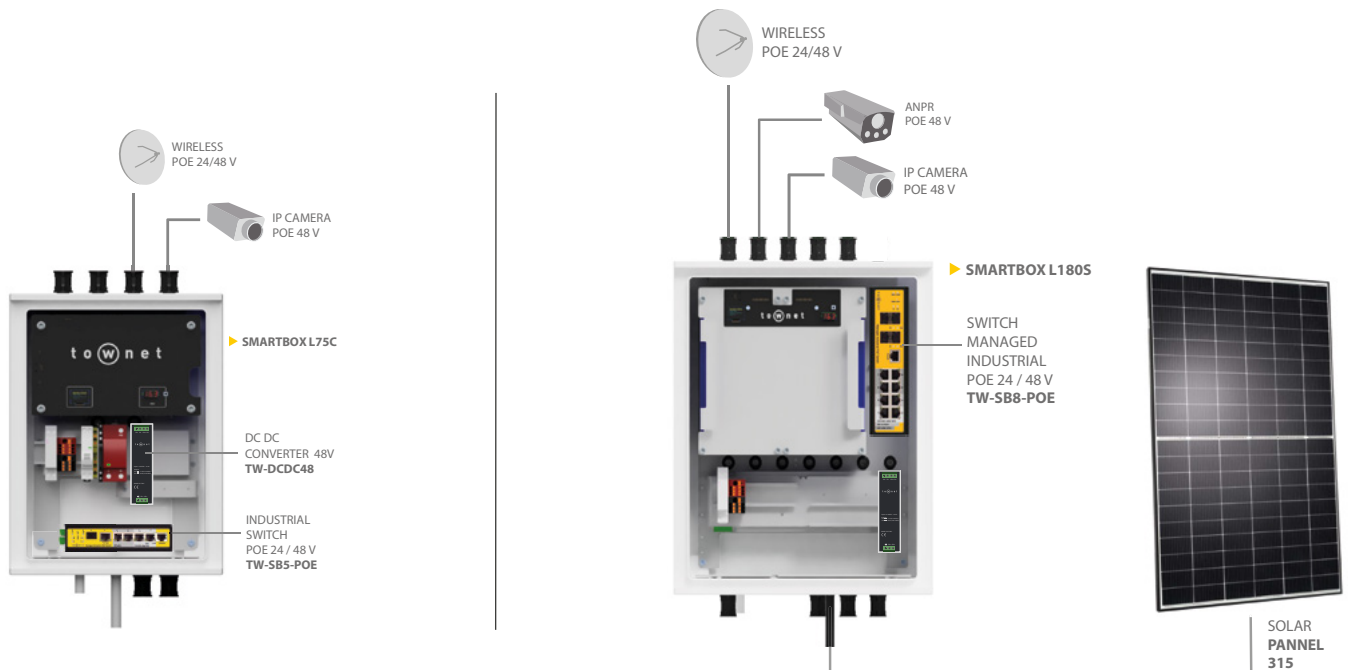


integrated solutions
to power supply and control
CCTV and WISP systems



t o  n e t[®]

Designed to be immediately operational, the SmartBoxes integrate perfectly with the TW-SB series managed POE switches which are capable of delivering 24 and 48V voltages at the same time.



LiFePO4 Batteries



With LiFePO4 lithium batteries, safety and efficiency at the highest possible level.

No deep discharge problems, or battery pack deterioration.

It is possible to carry out over 2000 deep discharge / charge cycles without worrying about the health of the batteries, and weight and volume reduction.

DATA MANAGER

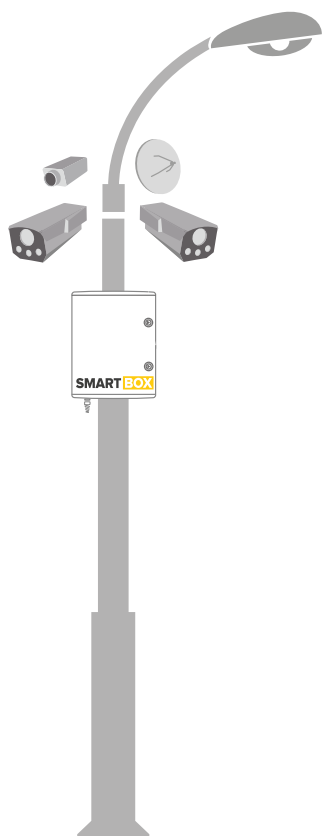
All parameters such as voltages (solar and battery), powers, charge / discharge currents are monitored through the programmable OLED display or via the MQTT cloud, or in the Townet DataManager platform.

Integration contacts are available with Townet PoE switches to decide which are the priority or expendable loads in case of low battery voltage.





The powerful charging power supply always guarantees total recharging of the battery pack in the shortest possible time. In any condition, the maximum charging time for a completely discharged battery never exceeds 6 hours.



Features

Codes	L75C	L75C XL	L180C
Main Power	AC100-240 Street Lamp Cycle		
Outdoor Box	Fiberglass IP68 (ventilation system IP54)		
LifePo4 Lithio Battery	864 Wh		1728 Wh
Battery Voltage	14V		28V
Total recharge	Fast Charge 15A/220Wh 4h		Fast Charge 10,7A/310Wh 5,5h
DOD cycles 80%	2000		
IP68 RJ45 Connectors	4	5	
Integrated Display	programmable & instant volts control		
Switch magnetermic	YES		
Surge arrestor	SPD type 2 (20kA)		
Battery protection fuse	20A extra-fast		
Door Opening alarm	YES		
Door Lock	YES		
Power presence check	YES		
Consent / Low battery contact	YES		
Internal temperature control	YES		
Automatic ventilation system	YES		
Dimensions mm (H x W x D)	425 x 325 x 180	434 x 504 x 210	
Box Weight Kg (included Mounting Kit)	17,4 (20,9)	19,8 (23,9)	22,5 (26,6)
Mounting kit for pole installation	YES		
External environmental sensor	optional CO2, PM 1-2.5-4-10, Temperature, Humidity, Pressure		
Remote control and alarms	Datamanager cloud software Included		

Compatible Codes

Switch Manged POE 5P+1SFP (24+48V)	TW-SB5-POE		
Switch Manged POE 8P+4SFP (24+48V)	--	TW-SB8-POE	
DCDC Converter 48V	TW-DCDC48		TW-DCDC48-B
DCDC Converter 12V	TW-DCDC12		TW-DCDC12-B
CO2 Sensor	TW-MHZ16		
PM 1-2.5-4-10 Sensor	TW-SPS30		
Temperature / Humidity / Pressure sensor	TW-BMEZ80		
Router LTE / 4G + HS	TW-SB-AP-LTE		

External sensors available:



Carbon dioxide



Particulate metter



Atmosphere Pressure



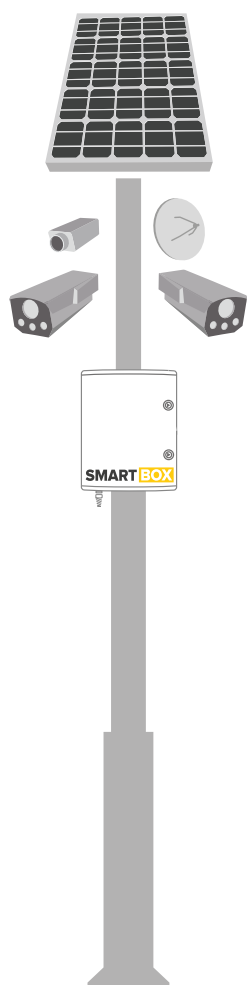
Temperature



Humidity



The innovative buck / boost switching is high efficiency solar charge controller (minimum 96%) , capable of operating with any type of solar panels regardless of the battery voltage. The charge profile is optimized for LiFePO4 batteries, guaranteeing maximum efficiency and safety. It has a modern MPPT (maximum power point tracking) algorithm to achieve maximum efficiencies even with partial or low insolation.



Features

Codes	L75S	L180S
Main Power	Solar Panels	
Outdoor Box	Fiberglass IP68 (ventilation system IP54)	
MC4 panel connectors	2	4
LifePo4 Lithio Battery	864 Wh	1728 Wh
Battery Voltage	14V	28V
Max Charge Current	15A	
Charging algorithm	MPPT BUCK / BOOST	
Max Power PV panels	600Wp (54-72 cells)	
Nominal voltage PV panels	36V (max 54V open circuit)	
DOD cycles 80%	2000	
IP68 RJ45 Connectors	4	5
Integrated Display	programmable & instant volts control	
Battery protection fuse	20A extra-fast	
Door Opening alarm	YES	
Door Lock	YES	
Consent / Low battery contact	YES	
Internal temperature control	YES	
Automatic ventilation system	YES	
Dimensions mm (H x W x D)	425 x 325 x 180	434 x 504 x 210
Box Weight Kg (included Mounting Kit)	17,1 (20,6)	22,2 (26,3)
Mounting kit for pole installation	YES	
External environmental sensor	optional CO2, PM 1-2.5-4-10, Temperature, Humidity, Pressure	
Remote control and alarms	Datamanager cloud software Included	

Compatible Codes

Solar Panel 350W	SOLAR350 (1740 x 1030 x 32) (19,9 Kg)	
Solar Panel 315W	SOLAR315 (1685 x 1000 x 32) (18,7 Kg)	
Switch Manged POE 5P+1SFP (24+48V)	TW-SB5-POE	
Switch Manged POE 8P+4SFP (24+48V)	--	TW-SB8-POE
DCDC Converter 48V	TW-DCDC48	TW-DCDC48-B
DCDC Converter 12V	TW-DCDC12	TW-DCDC12-B
CO2 Sensor	TW-MHZ16	
PM 1-2.5-4-10 Sensor	TW-SPS30	
Temperature / Humidity / Pressure sensor	TW-BMEZ80	
Router LTE / 4G + HS	TW-SB-AP-LTE	

Total Wh	10	15	17	23	29
Solar Panel	150W	200W	250W	300W	350W
their yield may vary as a function of numerous environmental variables					