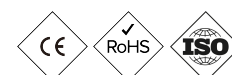
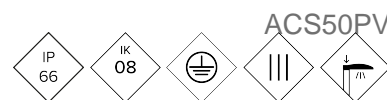




Streetlight

STARK SOLAR



Autonomous Light Point powered by 100% renewable solar energy. A sustainable solution that doesn't require a grid connection, making installation much easier. Featuring a minimalist design, all its features are integrated into a single cylindrical volume made of extruded aluminum, seamlessly integrating into any public space lighting project. Extremely robust and durable, it incorporates a BENITO LED module at its end, with a power range from 20W to 50W, allowing it to meet any lighting requirement.

MAIN FEATURES:

A completely autonomous solution that does not require a connection to the electrical grid.
Extruded aluminum body with cast iron fasteners. All-in-One concept.
Corrosion-resistant powder coating finish
Ability to incorporate control nodes.
Light Point with integrated photovoltaic panel and LiFePO4 battery.

APPLICATIONS:

Residential Streets (Zones 30)
Pedestrian Zones
Commercial and Tourist Streets
Squares
Green Areas; Parks and Gardens

SPECIFICATIONS :

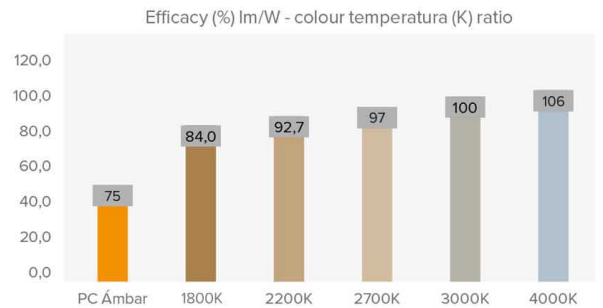
Housing material:	Extruded aluminum tube with a cylindrical section.
Diffuser (optic system enclosure):	4mm polycarbonate. Filters UV rays.
Fixing elements:	18/8 Stainless Steel - AISI 304
Housing:	Built from a single piece with a register for the BENITO Module
Sealing gaskets:	Silicone (extrusion)
IP rating (luminaire):	IP66
IP rating (optic system):	IP66
IK rating (impact resistance):	IK08
LEDs thermal dissipation:	High-efficiency heat sink. Passive convection heat dissipation and ensuring thermal contact of the LED modules through high-conductivity thermal transfer material.
Anti-condensation valve:	Pressure compensation valve that ensures the evacuation of moisture, preventing condensation, maintaining the IP rating of the module.
Paint and finishes:	Polyester powder coating, electrostatically sprayed and oven-sublimated. Corrosion resistant.
Colour:	RAL 7016
Mounting:	Fixing using bolts
Tilt range:	Non-adjustable luminaire
Maintenance:	Replaceable modules: LEDs, Drivers.
Recommended mounting height:	5 m
Driver:	MPPT charge controller. Different timed levels. Optional hybrid with mains connection.
Flow Reduction:	Adjustable driver 0-10V, programmable in 5 levels and with DALI 2 option. With Wireless, AOC, MTP, DTL features.
Ready4IOT - Connectivity:	LiFePo4. 538 Wh / 12.8 Vdc / 42 Ah. Protección BMS.
Surge protection device (SPD):	Type 2, 10-20kV and 20kA transient surge protector. Series connection with thermofuse disconnecter for a more effective protection at the end of its service life
DarkSky Approved	

INSTALLATION:



TECHNICAL DATA:

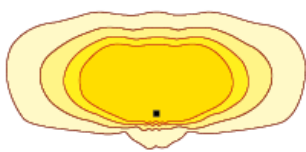
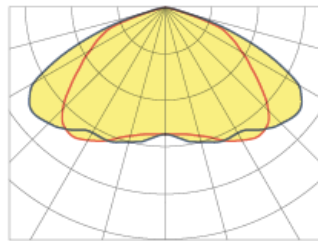
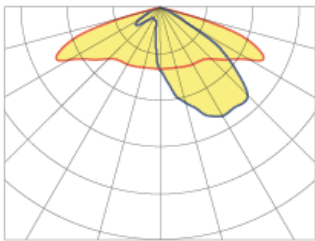
	REF.	Nº LEDs	Power W	I Driver mA	Real luminous flux (T) =85°C		Initial luminous flux (T) =25°C	
					Flux lm	Efficacy lm/W	Flux lm	Efficacy lm/W
Stark Solar	ACS50PV	25	50	-	6000	120	6840	137



PHOTOMETRY:

Asymmetric Extensive (AE)

Symmetric Square (S4)



*Show 4 recommended lighting distributions. Refer to the 18 typologies.

LEDs MODULE:

LEDs module:	BENITO 96 LEDs. See Color Temperatures, CRI and Light Distributions
Replaceable module:	YEAH
LED:	3030
Number of LEDs:	96
PCBs format:	Circular
LED nominal efficacy:	172
Colour temperature:	3000K
Colour rendering index CRI:	>70 (optional >80)
Average LED useful time L90B10:	L90B10 >100,000 hours

OPTIC SPECIFICATIONS:

Optic system:	PMMA lenses
Light distributions:	2 light distribution curves
Upward light output ratio ULOR:	0%
Downward light output ratio DLOR:	100%
Glare index:	Between D5 and D6 (depending on the light distribution)
Luminous intensity category:	Between G*4 and G*6 (depending on the light distribution)
Luminous flux CIE n°3:	>95%
Photobiological safety:	RG0 (risk-free)
Initial luminous flux Tj=25°C (up to):	lm 6840
Initial luminaire efficacy Tj=25°C (up to):	lm/W 137
Real luminous flux Tj=85°C (UNE EN 13032-4) (up to):	lm 6000
Real luminaire efficacy Tj=85°C (UNE EN 13032-4) (up to):	lm/W 120

ELECTRIC SPECIFICATIONS:

Nominal maximum power (LEDs):	W	45
Maximum power consumed (luminaire):	W	50
Power range:	W	20 - 50W
Maximum current of LED:	mA	<500 (<50% I _{max})
Power supply protection classes IEC:		Class III
Surge protection device (SPD):		LiFePo4. 538 Wh / 12.8 Vdc / 42 Ah. Protección BMS.
Common and differential mode protection (SPD) Udc:	kV	10 and optional NTC
Max current (8/20) (SPD):	kA	20
Thermal phase disconnection (SPD):		Yes
Input voltage:	Vac	220-240
Input voltage (max rate):	Vac	198-264
Input frequency:	Hz	47-63
Starting current:	A	<65
Duration of the starting voltage peak:	ms	<0,3
Driver efficacy:		>90%
Power factor 100% consumption:		>0,98
Power factor 50% consumption:		>0,95
Total harmonic distortion (THD):		<10
Power consumption on standby mode:	W	<0.4
Energy class:		C (According to EU Regulation 2019/2015 EPREL) - A++ IPEA>1.15

OPERATING CONDITIONS:

Average LED useful time L90B10:	hours	>100.000
Average driver useful life to Tp <70°C:	hours	100.000
Average luminaire useful life L90B10 (TM-21):	hours	
Ambient temperature (Ta):	°C	From -35°C to +50°C
Aerodynamic resistance (CxS):	m2	
Vibration test (15Hz 3 axis):		
Wind load test:		
Guarantee:	Years	5 years (extensible up to 10 years)

PACKAGING DIMENSIONS:

Net weight	kg	31
Gross weight	kg	34
Luminaire dimensions (LxWxH)	mm	4000x168 (diámetro)
Packaging dimensions (LxWxH)	mm	
Pieces per box		
Quantity per container 20ft		
Quantity per container 40ft		

CERTIFICATES:

Security certificates:	EMC certificates:	Other certifications:
EN 40 / EN 62031 / EN 62493 / EN 62471 / IEC 62778 / EN 61247-2-13	EN 55015 / EN 61547 / EN 61000-3-2 / EN 61000-3-3 / IEC 62262 / EN 13032-4 / EN 62717 / EN 6272-1 / EN 61347-2-13 / EN 61347-1 / EN 62384	6272-2-1 / EN 61643-11