

# SP-102S SOLAR TAXIWAY EDGE LIGHT

# **LOW INTENSITY**









#### Compliance:

Safety & Reliability

Environmental Conditions

ICAO Annex 14 Vol. I (8th. Edition, July 2018) EASA CS-ADR-DSN FAA AC



- Self-contained solar light
- · 300 hrs of autonomy
- 11 cd light output

## APPLICATION

Low intensity, self contained solar light, designed for temporary usage at airports located in regions without access to electricity and with high photovoltaic potential.

Five levels of protection against system failure
 Secondary power supply: backup battery
 Real-time monitoring via ALCMS

(Airfield Lighting Control and Monitoring System)

#### **TECHNICAL SPECIFICATIONS**

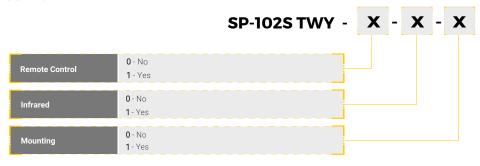
Optics			
	11 cd light output (tested by accredited laboratory)		
	Omnidirectional		
	LED lifespan: 100.000 hrs		
	Maximum power consumption: 0,6W		
	NVG-compatible, Infrared LEDs (optional)		
	Color: blue		
	User-replaceable		
Battery			
	Built-in battery		
	Autonomy: 300 hrs (minimum intensity)		
	Total capacity: 108W (9Ah/12V)		
	Deep-cycle VRLA, 12V/9Ah (available worldwide)		
	Lifespan: 1.200 cycles (designed for 4-5 years)		
	User-replaceable, air transportable		
Solar Power Sup	ply		
	• 5W built-in solar panel		
	Polycrystalline type		
	Lifespan: 15 years		
	MPPT-Temp / Built-in inverter 12-36V/2A		
Control & Monitoring			
	Wireless mesh type network		
	Operating frequency: 868 MHz		
	Operating range: up to 1.5 km, relayed (each light is a repeater)		
	Operating Modes:     Steady / Flashing / Dusk till dawn		
	Visible / Infrared (optional) / Visible + Infrared (optional)		
	Activation options:		
	Via UR-101 Handheld Controller		
	Via ALCMS Computer Interface (requires UR-201)		
	Via UR-201 Control & Monitoring Unit		
Casing & Compo			
	Materials		
	Casing, Dome: polycarbonate, UV-resistant  Mounting: qalvanized steel (optional: marine grade stainless steel)		
	Frangible mounting: aluminum (tested by accredited laboratory)		
	Built in antenna (optional: external antenna)		
	Pressure stabilizing valve		
	Battery level indicator		
	Carrying handle		
	Casing lifespan: 15 years		
	Dimensions (LxWxH): 455 x 280 x 254 mm		
	W.: 1. 001		

Weight: 9,9 kg

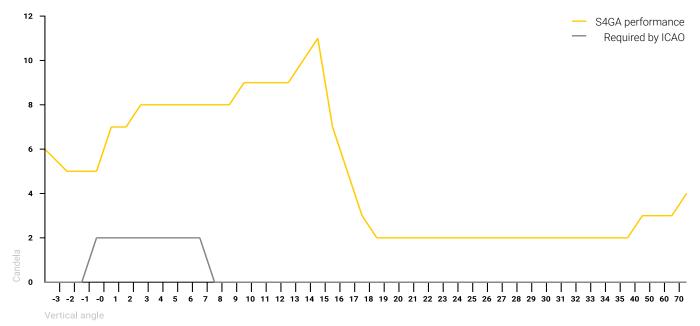
<ul> <li>Temperature range: -20 to 50 °C (-4 to 122 °F)</li> <li>Optional: -40 to 80 °C (-40 to 176 °F)</li> <li>Ingress protection: IP-65</li> <li>Jet Blast Resistance: 480 kph</li> </ul>				
Compliance				
Photometric & Chromaticity	ICAO, Annex 14th, Volume I, 8th Edition dated July 2018, clause 5.3.18.7 & clause 5.3.18.8, Appendix 1, Figure A1-1b			
Jet Blast Resistance	ICAO, Annex 14th, Volume I, 8th Edition dated July 2018, Doc 9157, Part 6, clause 3.2.2 & clause 4.9.1			
Jet blast resistance	FAA AC 150/5345-50B dated September 2007, clause 3.2.2			
	ICAO Doc 9157 AN901 Aerodrome Design Manual Part 6, 1st Edition dated 2006, clause 4.9			
Frangibility	ICAO, Annex 14th, Volume I, 8th Edition dated July 2018, clause 5.3.1.3			
	FAA AC 150-5345-46E clause 3.4.2.1			
	FAA AC 150/5220-23, clause 3.2			
Secondary Power Supply	ICAO, Annex 14th, Volume I, 8th Edition dated July 2018, clause 8.1.8 - 8.1.9 & clause 8.1.11			
	2014/53/EU RED Directive, clauses 3.1a, 3.1b, 3.2			
CE Declaration of Conformity	2011/65/EU ROHS Directive, clause 4.1			
Accredited Laboratory Testing				
Photometric & Chromaticity	Intertek Laboratory			
Jet Blast Resistance	Warsaw Institute of Aviation The Laboratory of Aerodynamics			
Frangibility	Laborex Research Laboratory			
Ingress Protection	EMAG Institute of Innovative Technologies			



#### ORDERING CODES

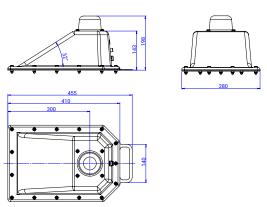


#### PHOTOMETRIC PERFORMANCE

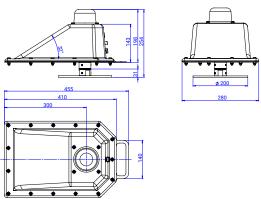


#### TECHNICAL DRAWING

#### Portable version (without mounting)



### Fixed version (with mounting)



#### SHIPPING DATA

Item	Dimensions of Package (LxWxH)	Gross Weight
SP-102S Lighting Unit	500 mm x 300 mm x 210 mm	10,5 kg
SP-102S Lighting Unit, NO battery	500 mm x 300 mm x 210 mm	7,9 kg