



SP-401 SOLAR RUNWAY THRESHOLD END LIGHT



		<p>Compliance: ICAO Annex 14 Vol. I (7th. Edition, July 2016)</p>
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FEATURES

- Operates 365 days on solar energy
- 5-level protection against system failure
- 280 hrs of autonomy

APPLICATION

Bidirectional optics; designed for permanent usage at airports located in regions without access to electricity and with high photovoltaic potential.

TECHNICAL SPECIFICATIONS

Optics	
<ul style="list-style-type: none"> • 320 (red) / 450 (green) cd light output (tested by accredited laboratory) • Bidirectional, unidirectional type • LED lifespan: 100.000 hrs • Maximum power consumption: 1,8W • NVG-compatible (optional) • Color: red / green, red, green • User-replaceable 	
Battery	
<ul style="list-style-type: none"> • 2 x built-in batteries • Autonomy: 280 hrs (minimum intensity) • Total capacity: 216W (2x9Ah/12V) • Deep-cycle VRLA, 12V/9Ah (available worldwide) • Lifespan: 1.200 cycles (designed for 4-5 years) • User-replaceable, air transportable 	
Solar Power Supply	
<ul style="list-style-type: none"> • 20W solar panel, separately installed • Poly- or monocrystalline type • Lifespan: 15 years • MPPT-Temp / Built-in inverter 12-36V/2A 	
Control & Monitoring	
<ul style="list-style-type: none"> • Wireless mesh type network • Operating frequency: 868 MHz (optional 2.4GHz or 433 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 ALCMS Computer Interface (requires UR-201) Via UR-201 Control & Monitoring Unit Via UR-101 Handheld Controller 	
Casing & Components	
<ul style="list-style-type: none"> • Materials Dome: glass, UV-resistant Casing: Lexan polycarbonate, UV-stabilized Mounting: galvanized steel (optional: marine grade stainless steel) Frangible mounting: aluminum (tested by accredited laboratory) • Detachable antenna • Pressure stabilizing valve • Battery level indicator • Carrying handle (optional) • Casing lifespan: 15 years • Dimensions (LxWxH): 549 mm x 450 mm x 431 mm • Weight: 12,4 kg 	
Safety & Reliability	
<ul style="list-style-type: none"> • Five levels of protection against system failure • Secondary power supply: backup battery • Real-time monitoring via ALCMS (Airfield Lighting Control and Monitoring System) • Emergency ON/OFF button 	
Environmental Conditions	
<ul style="list-style-type: none"> • Temperature range: -20 to 50 °C (-4 to 122 °F) Optional: -40 to 80 °C (-40 to 176 °F) • Ingress protection: IP-67 (tested by accredited laboratory) • Jet Blast Resistance: 240 kph (tested by accredited laboratory) 	
Compliance	
Photometric & Chromaticity	ICAO, Annex 14th, Volume I, 7th Edition dated July 2016, clause 5.3.10.9 (green direction), clause 5.3.11.4 (red direction), 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. FAA AC 150/5345-50B dated September 2007, clause 3.2.2
Frangibility	ICAO Doc 9157 AN901 Aerodrome Design Manual Part 6, 1st Edition dated 2006, clause 4.9 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, 7th Edition dated July 2016, clause 8.1.8-8.1.9 & clause 8.1.11
CE Declaration of Conformity	2014/53/EU RED Directive, clauses 3.1a, 3.1b, 3.2 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
Electromagnetic Compatibility	Military Institute of Armament Technology

