



SP-401 SOLAR RTIL LIGHT

RUNWAY THRESHOLD IDENTIFICATION LIGHT



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

- Operates 365 days on solar energy
- 5-level protection against system failure
- 690 hrs of light autonomy
- 1.200 cd light output

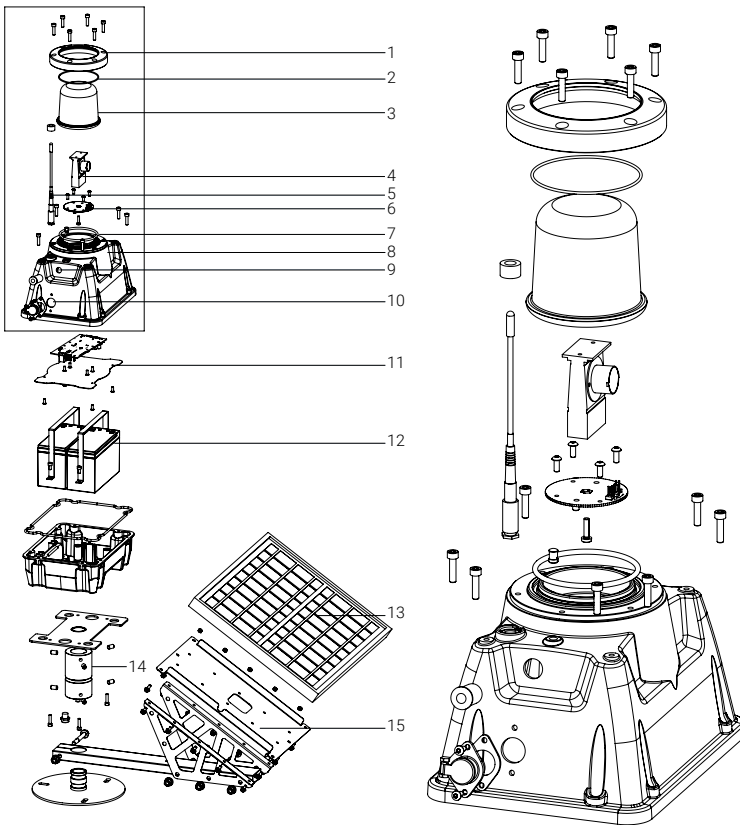
APPLICATION

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

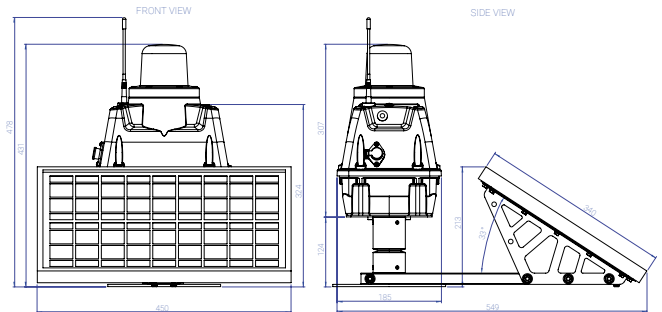
TECHNICAL SPECIFICATIONS

Optics <ul style="list-style-type: none"> • 1.200 cd light output (tested by accredited laboratory) • Unidirectional type • Vertical adjustment: 0 - 10° • Horizontal adjustment: 0 - 180° • LED lifespan: 100.000 hrs • Maximum power consumption: 3,9W • NVG-compatible (optional) • Color: white • User-replaceable 	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 										
Battery <ul style="list-style-type: none"> • 2 x built-in batteries • Autonomy: 690 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 	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) 										
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 	Compliance										
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: Flashing (94 FPM) / 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 	<table border="1"> <tr> <td data-bbox="810 1267 1098 1350">Photometric & Chromaticity</td> <td data-bbox="1098 1267 1497 1350">ICAO, Annex 14th, Volume I, 7th Edition dated July 2016, clause 5.3.8.3 & clause 5.3.8.4, Appendix 1, Figure A1-1b</td> </tr> </table>	Photometric & Chromaticity	ICAO, Annex 14th, Volume I, 7th Edition dated July 2016, clause 5.3.8.3 & clause 5.3.8.4, Appendix 1, Figure A1-1b								
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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 	<table border="1"> <tr> <td data-bbox="810 1350 1098 1462">Jet Blast Resistance</td> <td data-bbox="1098 1350 1497 1462">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</td> </tr> </table>	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								
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	Accredited Laboratory Testing <table border="1"> <tr> <td data-bbox="810 1832 1098 1910">Photometric & Chromaticity</td> <td data-bbox="1098 1832 1497 1910">Intertek Laboratory</td> </tr> <tr> <td data-bbox="810 1910 1098 1977">Jet Blast Resistance</td> <td data-bbox="1098 1910 1497 1977">Warsaw Institute of Aviation The Laboratory of Aerodynamics</td> </tr> <tr> <td data-bbox="810 1977 1098 2022">Frangibility</td> <td data-bbox="1098 1977 1497 2022">Laborex Research Laboratory</td> </tr> <tr> <td data-bbox="810 2022 1098 2067">Ingress Protection</td> <td data-bbox="1098 2022 1497 2067">EMAG Institute of Innovative Technologies</td> </tr> <tr> <td data-bbox="810 2067 1098 2098">Electromagnetic Compatibility</td> <td data-bbox="1098 2067 1497 2098">Military Institute of Armament Technology</td> </tr> </table>	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
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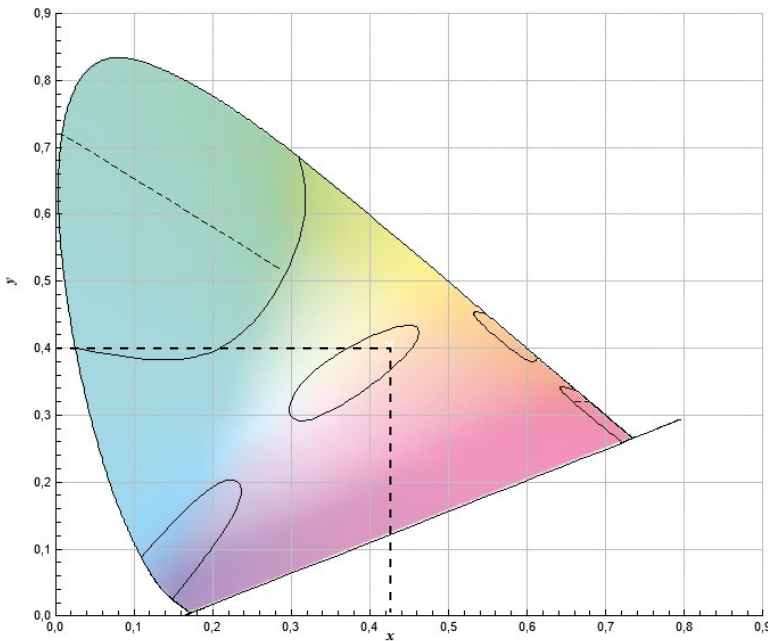
TECHNICAL DRAWING



- 1. Aluminum adapter for glass dome
- 2. Rubber protection
- 3. Glass dome
- 4. LED optics, unidirectional type
- 5. Radio antenna for wireless control & monitoring
- 6. Micro-computer with integrated radio transceiver
- 7. Rubber protection
- 8. UV-stabilized Lexan polycarbonate casing
- 9. Emergency ON/OFF button
- 10. Charging port for solar panel
- 11. Protective plate
- 12. 2 x batteries built-in, VRLA type 12V/9Ah
- 13. 20W Solar panel with standard optimal inclination
- 14. Frangible mounting
- 15. Solar holder



CHROMATICITY PERFORMANCE



SHIPPING DATA

Item	Dimensions of Package (LxWxH)	Gross Weight
SP-401 Lighting Unit	490 mm x 360 mm x 570 mm	14,8 kg
SP-401 Lighting Unit, NO BATTERIES	490 mm x 360 mm x 570 mm	9,6 kg