



SP-401 SOLAR OBSTRUCTION LIGHT

TYPE A LOW INTENSITY



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|  |  | 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
- 280 hrs of autonomy

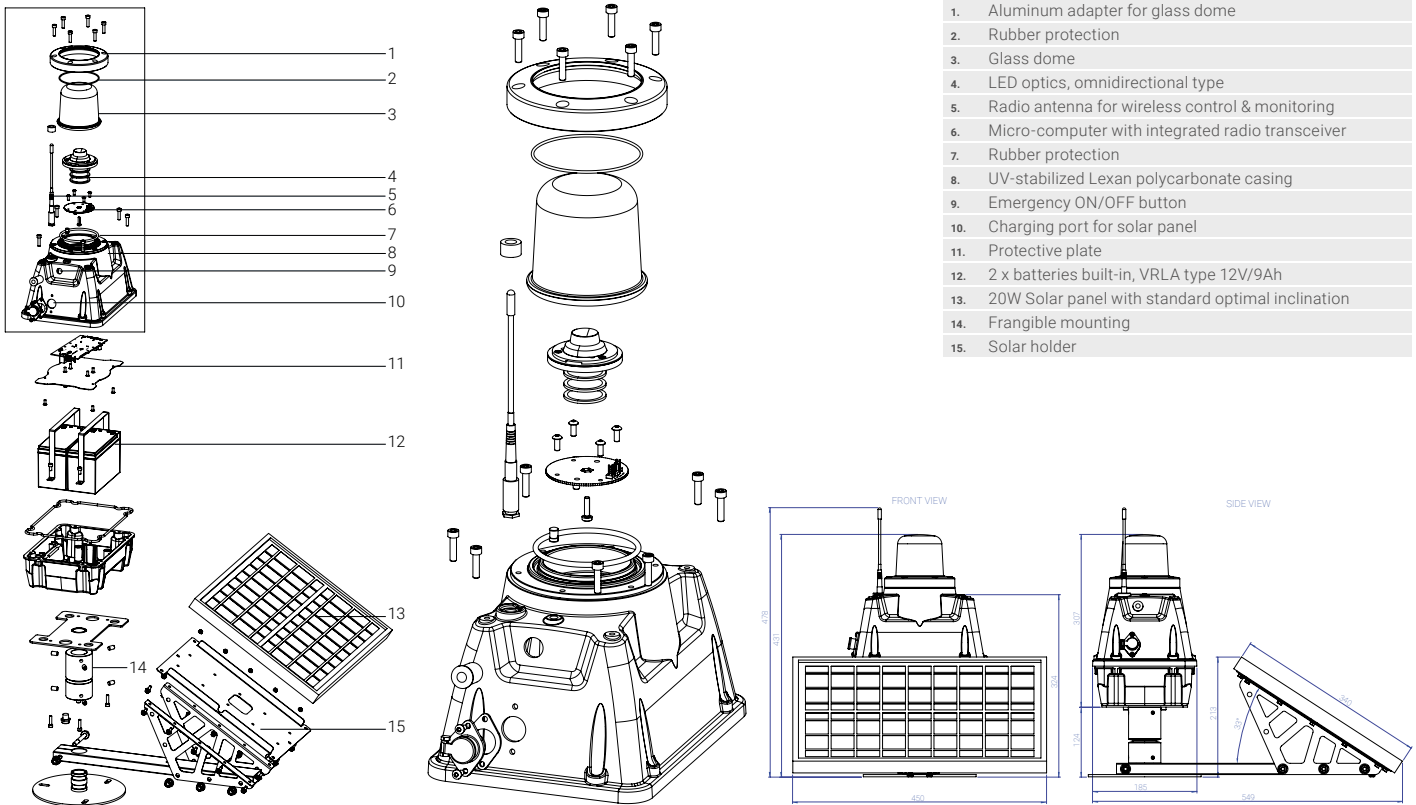
APPLICATION

Low intensity obstruction aviation light; designed for permanent usage as obstacle light in airports or helipads located in regions without access to electricity and with high photovoltaic potential.

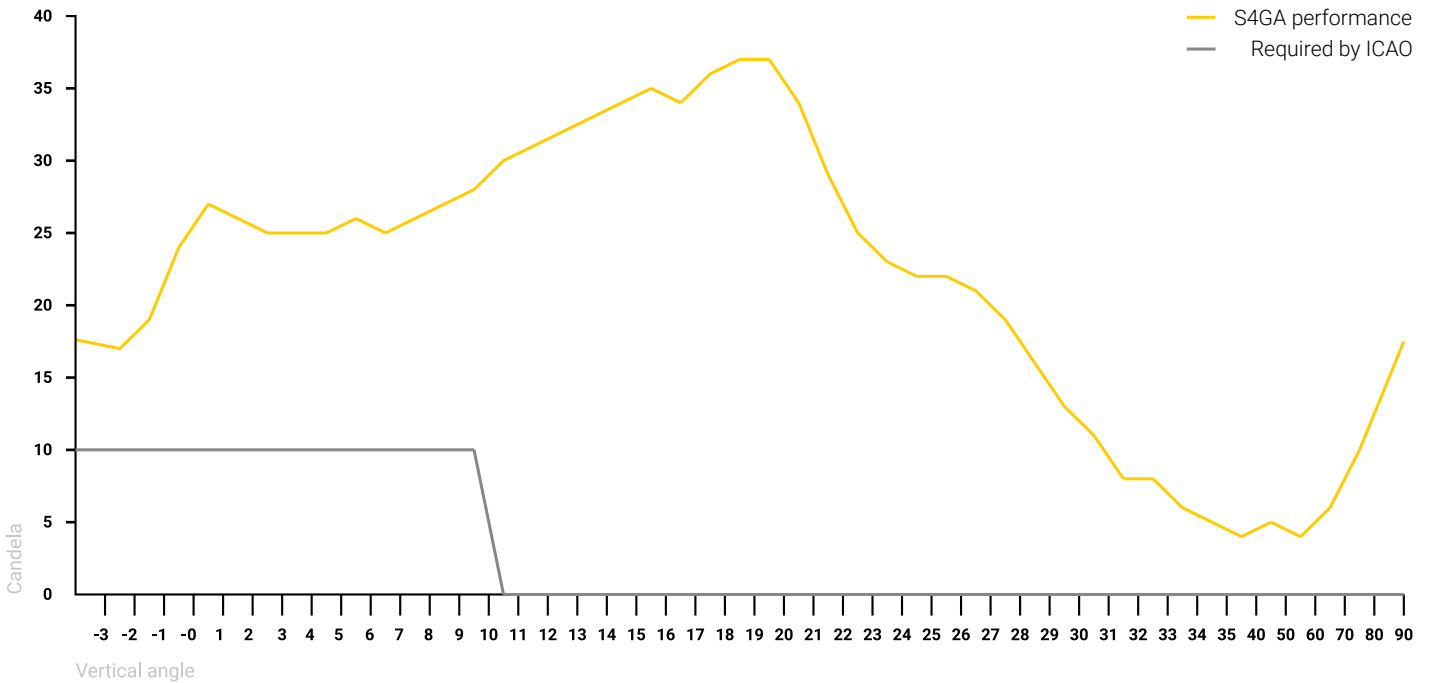
TECHNICAL SPECIFICATIONS

| | | | | | |
|--|---|---|--|------------------------------|---|
| Optics | | Safety & Reliability | | | |
| <ul style="list-style-type: none"> • 37 cd light output (tested by accredited laboratory) • Omnidirectional type • LED lifespan: 100.000 hrs • Maximum power consumption: 1,8W • NVG-compatible (optional) • Color: red • User-replaceable | | <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 | | Environmental Conditions | | | |
| <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 | | <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 | | Compliance | | | |
| <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 | | <table border="1"> <tr> <td data-bbox="810 1317 1098 1379">Photometric & Chromaticity</td> <td data-bbox="1098 1317 1495 1379">ICAO, Annex 14th, Volume I, 7th Edition dated July 2016, table 6-2, Appendix 1, Figure A1-1b</td> </tr> </table> | | Photometric & Chromaticity | ICAO, Annex 14th, Volume I, 7th Edition dated July 2016, table 6-2, Appendix 1, Figure A1-1b |
| Photometric & Chromaticity | ICAO, Annex 14th, Volume I, 7th Edition dated July 2016, table 6-2, Appendix 1, Figure A1-1b | | | | |
| Control & Monitoring | | <table border="1"> <tr> <td data-bbox="810 1379 1098 1442">Jet Blast Resistance</td> <td data-bbox="1098 1379 1495 1442">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 |
| 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 | | | | |
| <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 | | <table border="1"> <tr> <td data-bbox="810 1442 1098 1505">Frangibility</td> <td data-bbox="1098 1442 1495 1505">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</td> </tr> </table> | | 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 |
| 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 | | | | |
| Casing & Components | | <table border="1"> <tr> <td data-bbox="810 1505 1098 1568">Secondary Power Supply</td> <td data-bbox="1098 1505 1495 1568">ICAO, Annex 14th, Volume I, 7th Edition dated July 2016, clause 8.1.8-8.1.9 & clause 8.1.11</td> </tr> </table> | | Secondary Power Supply | ICAO, Annex 14th, Volume I, 7th Edition dated July 2016, clause 8.1.8-8.1.9 & clause 8.1.11 |
| Secondary Power Supply | ICAO, Annex 14th, Volume I, 7th Edition dated July 2016, clause 8.1.8-8.1.9 & clause 8.1.11 | | | | |
| <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 1568 1098 1630">CE Declaration of Conformity</td> <td data-bbox="1098 1568 1495 1630">2014/53/EU RED Directive, clauses 3.1a, 3.1b, 3.2 2011/65/EU ROHS Directive, clause 4.1</td> </tr> </table> | | CE Declaration of Conformity | 2014/53/EU RED Directive, clauses 3.1a, 3.1b, 3.2 2011/65/EU ROHS Directive, clause 4.1 |
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| 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 | | | |

TECHNICAL DRAWING



PHOTOMETRIC 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 |