SP-401P PORTABLE OBSTRUCTION LIGHT

TYPE A LOW INTENSITY

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

FEATURES

- 280 hrs of autonomy
- Remote activation
- Convertible to solar obstruction light

APPLICATION

Mobile obstruction aviation light; designed for usage as obstacle light at airports and helipads:

- ICAO low intensity obstacle lights type A
- Portable obstruction lighting
- Temporary barricade lights, caution lights
- Hazard marking

TECHNICAL SPECIFICATIONS

Optics
• 37 cd light output (tested by accredited laboratory)
• Omnidirectional type
• LED lifespan: 100.000 hrs
• Maximum power consumption: 1,8W
• NVG-compatible, Infrared LEDs (optional)
• Color: red
• User-replaceable

Battery	
Standard battery	• 2x built-in batteries, user-replaceable, air transportable • 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)
Cyclon battery (Arctic Pack)	• 1x built-in battery, user-replaceable, air transportable • Autonomy: 155 hrs (minimum intensity) • Total capacity: 120W (10Ah/12V) • Lifespan: 300 cycles (designed for 10-15 years)

Charging
• Via OCT-401 Charger (charging time: 8 hrs)
• Contactless charging in a Trailer (charging time: 8 hrs)
• Optional: solar power supply

Remote Activation & Control
• 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)
Remote activation: • Via UR-101 Handheld Controller • Via UR-201 Control & Monitoring Unit GSM activation (Cell Phone) VHF activation (Air-band Radio) • Via ALCMS Computer Interface (requires UR-201)

Casing & Components	
Materials	• Dome: glass, UV-resistan • Casing: Lexan polycarbonate, UV-stabilized, color: aviation yellow • Carrying handle:polycarbonate, stainless steel (optional)
	• Detachable antenna • Pressure stabilizing valve, transportation fuse • Battery level indicator • Transport circuit breake • Casing lifespan: 15 years • Optional: frangible mounting (tested by accredited laboratory) • Dimensions (LxWxH): 244 mm x 185 mm x 297 mm • Weight: 7 kg

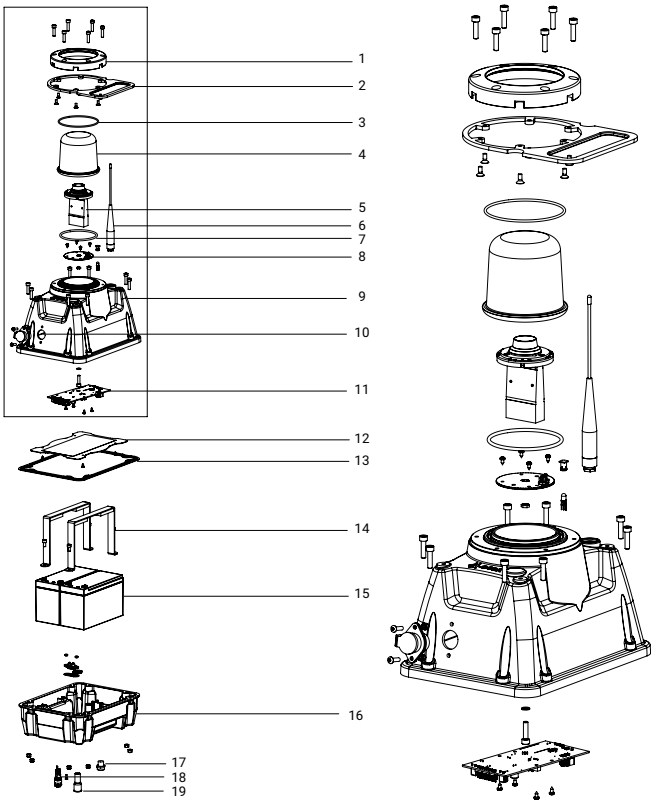
Safety & Reliability
• Five levels of protection against system failure
• Secondary power supply: backup battery
• Failure auto reporting via SMS (requires UR-201 Unit)
• Emergency ON/OFF button

Environmental Conditions
• 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)
• Impact Resistance: IK-10 (tested by accredited laboratory)
• Jet blast resistance: 240 kph (tested by accredited laboratory)

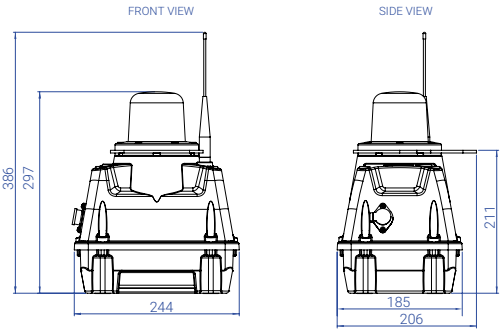
Compliance	
Photometric & Chromaticity	ICAO, Annex 14th, Volume I, 7th Edition dated July 2016, Table 6-2 & Appendix 1, Figure A1-1b
Jet Blast Resistance	ICAO, Annex 14th, Volume I, 8th Edition dated July 2018. Doc 9157, Part 6, clause 3.2.2 & clause 4.9.1.
	FAA AC 150/5345-50B dated September 2007, 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/UE RED Directive, clauses 3.1a, 3.1b, 3.2
	2011/65/UE 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
Impact Resistance	Laborex Research Laboratory
Electromagnetic Compatibility	Military Institute of Armament Technology

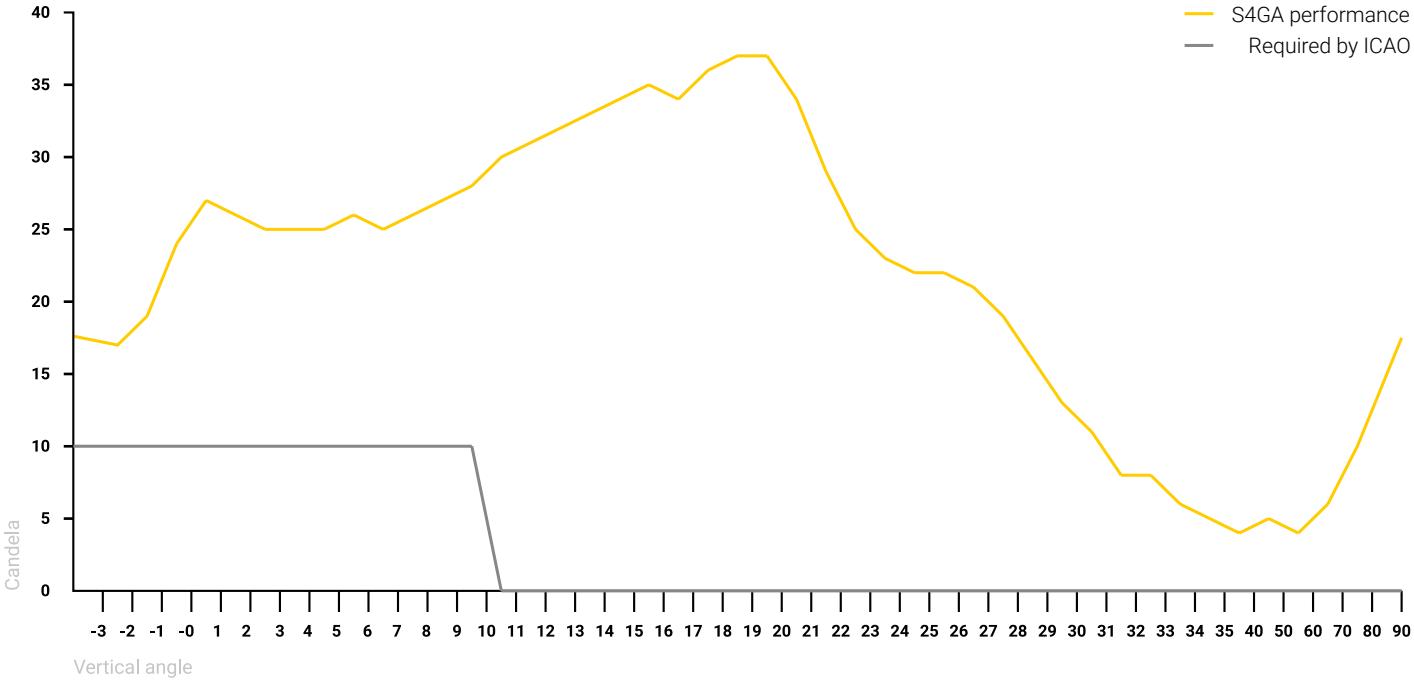
TECHNICAL DRAWING



1.	Adapter for glass dome
2.	Carrying handle
3.	O-ring for the glass dome
4.	Glass dome
5.	LED optics
6.	Radio antenna for wireless control & monitoring
7.	O-ring under the glass dome
8.	PCB board
9.	Casing upper part
10.	Charging port
11.	Main micro-computer with integrated radio transceiver
12.	Protective plate
13.	Rubber gasket
14.	Battery holder
15.	2x batteries built-in, VRLA type 12V/9Ah
16.	Casing bottom part
17.	Pressure stabilizing valve
18.	Emergency ON/OFF button
19.	Transportation fuse



PHOTOMETRIC PERFORMANCE



Item	Dimensions of Package (LxWxH)	Gross Weight
SP-401 Lighting Unit	270 mm x 210 mm x 370 mm	8,2 kg
SP-401 Lighting Unit, NO batteries	270 mm x 210 mm x 370 mm	3 kg