SP-401P PORTABLE FATO LIGHT

FINAL APPROACH AND TAKE-OFF AREA

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

FEATURES

- 180 hrs of autonomy
- Remote activation
- Convertible to solar helipad light
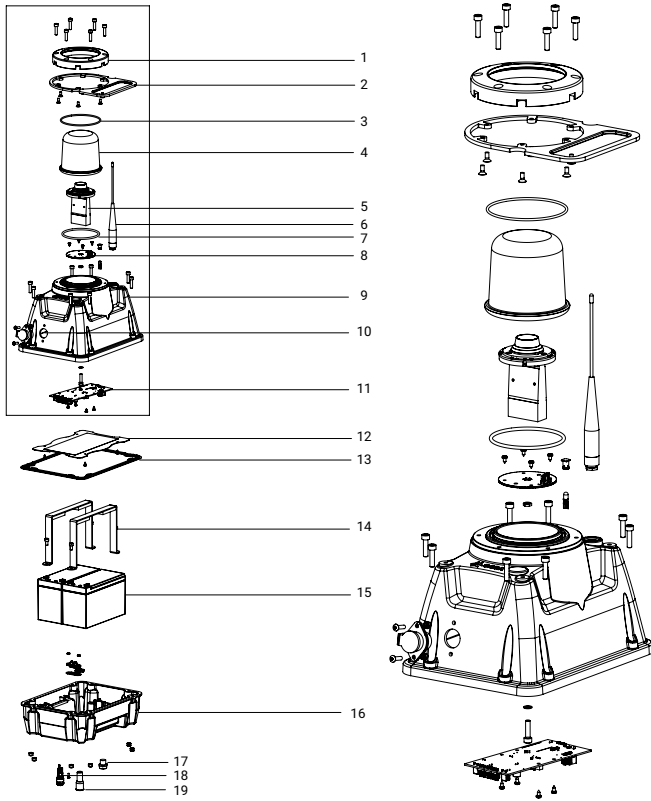
APPLICATION

Mobile helipad light designed to quickly illuminate temporary helipad in accordance with ICAO:

- Temporary helipads
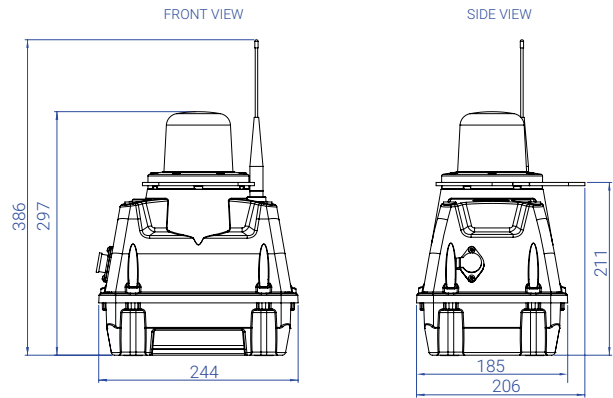- Emergency helipads
- Temporary landing zone areas

TECHNICAL SPECIFICATIONS

Optics

- 110 cd light output (peak) (tested by accredited laboratory)
- Omnidirectional type
- LED lifespan: 100.000 hrs
- Maximum power consumption: 3,9W
- NVG-compatible, Infrared LEDs (optional)
- Color: white, yellow
- User-replaceable

Battery

Standard battery	• 2x built-in batteries, user-replaceable, air transportable
	• Autonomy: 180 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: 100 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
	• polycarbonate, stainless steel (optional)
	• Detachable antenna
	• Pressure stabilizing valve, transportation fuse
	• Battery level indicator
	• Transport circuit breake
	• Casing lifespan: 15 years
	• Optional: frangiblemounting (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
- Real-time monitoring via ALCMS (Airfield Lighting Control and Monitoring System)
- Emergency ON/OFF button

Environmental Conditions

- Temperature range: -20 to 50 ºC (-4 to 122 ºF)
- Optional: -40 to 80 ºC (-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 II, 7th Edition dated July 2016
Jet Blast Resistance	ICAO Annex 14th, Volume II, 3rd Edition dated 1995, Doc 9261, clause 1.4.1.3
	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
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
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

FRONT VIEW

SIDE VIEW

386
297
244

211
185
206

SHIPPING DATA

Item	Dimensions of Package (LxWxH)	Gross Weight
SP-401 Lighting Unit	270 mm x 210 mm x 370 mm	8,6 kg
SP-401 Lighting Unit, NO batteries	270 mm x 210 mm x 370 mm	3,1 kg