



SP-401 PORTABLE RUNWAY THRESHOLD END LIGHT



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

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

APPLICATION

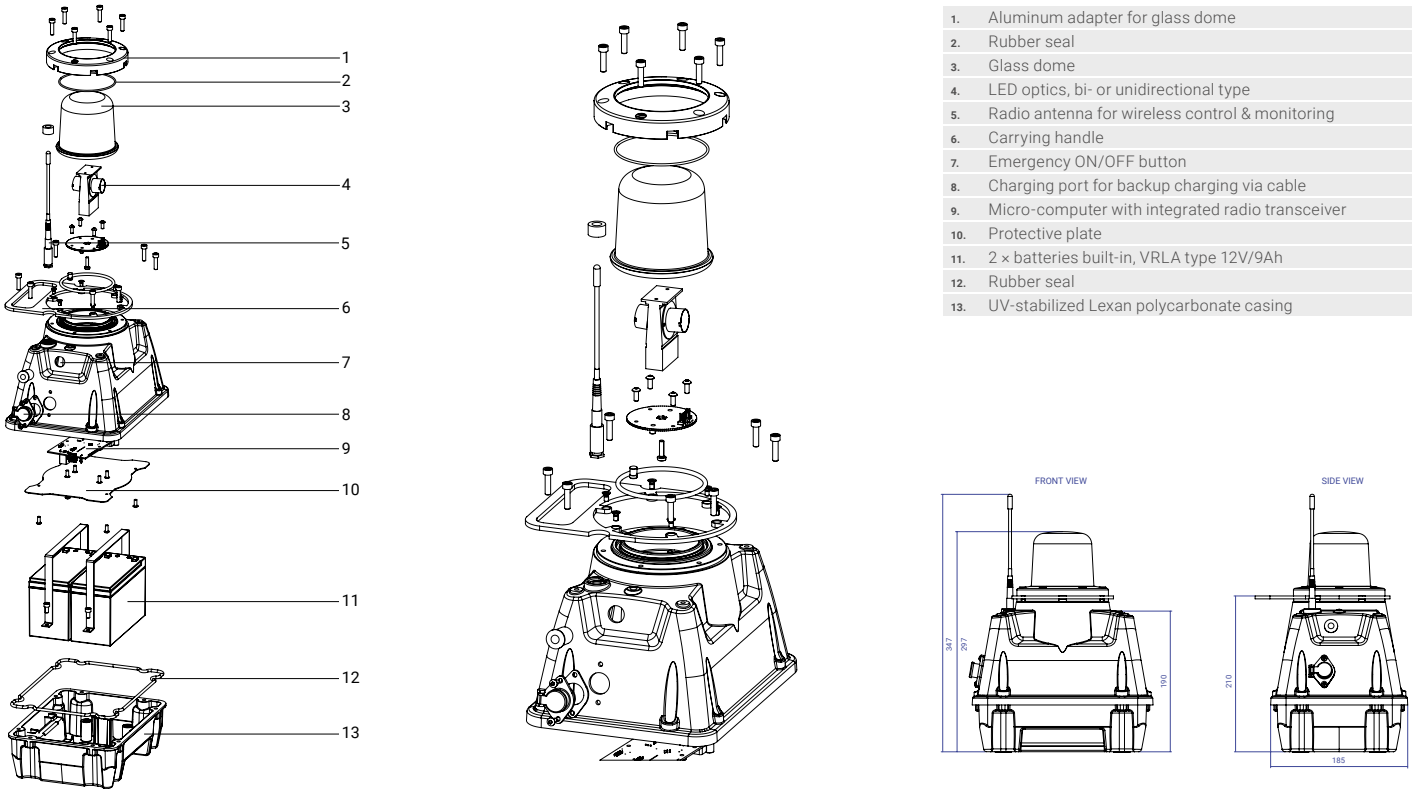
Mobile airfield light designed to quickly illuminate temporary airfield in accordance with ICAO:

- Displaced thresholds
- Temporary runways
- Remote airfields
- Backup airport lighting
- Emergency landing airstrips

TECHNICAL SPECIFICATIONS

Optics		Safety & Reliability			
<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 		<ul style="list-style-type: none"> • 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 			
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) 			
Charging		Compliance			
<ul style="list-style-type: none"> • Via OCT-401 Charger (charging time: 8 hrs) • Contactless charging in a Trailer (charging time: 8 hrs) • Optional: solar power supply 		<table border="1"> <tr> <td data-bbox="810 1272 1098 1370">Photometric & Chromaticity</td> <td data-bbox="1098 1272 1495 1370">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</td> </tr> </table>		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
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Remote Activation & Control		<table border="1"> <tr> <td data-bbox="810 1370 1098 1487">Jet Blast Resistance</td> <td data-bbox="1098 1370 1495 1487">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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<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) <p>Operating Modes:</p> <ul style="list-style-type: none"> • Steady / Flashing / Dusk till dawn • Visible / Infrared (optional) / Visible + Infrared (optional) <p>Remote activation:</p> <ul style="list-style-type: none"> • 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) 		<table border="1"> <tr> <td data-bbox="810 1487 1098 1684">Frangibility</td> <td data-bbox="1098 1487 1495 1684">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
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Casing & Components		<table border="1"> <tr> <td data-bbox="810 1684 1098 1774">Secondary Power Supply</td> <td data-bbox="1098 1684 1495 1774">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
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<ul style="list-style-type: none"> • Materials Dome: glass, UV-resistant Casing: Lexan polycarbonate, UV-stabilized Carrying handle: stainless steel • Detachable antenna • Pressure stabilizing valve • Battery level indicator • Transport circuit breaker • Casing lifespan: 15 years • Optional: frangible mounting (tested by accredited laboratory) • Dimensions (LxWxH): 244 mm x 185 mm x 297 mm • Weight: 7 kg 		<table border="1"> <tr> <td data-bbox="810 1774 1098 1854">CE Declaration of Conformity</td> <td data-bbox="1098 1774 1495 1854">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



1. Aluminum adapter for glass dome
2. Rubber seal
3. Glass dome
4. LED optics, bi- or unidirectional type
5. Radio antenna for wireless control & monitoring
6. Carrying handle
7. Emergency ON/OFF button
8. Charging port for backup charging via cable
9. Micro-computer with integrated radio transceiver
10. Protective plate
11. 2 x batteries built-in, VRLA type 12V/9Ah
12. Rubber seal
13. UV-stabilized Lexan polycarbonate casing

PHOTOMETRIC PERFORMANCE

Red																	SP-401 RUNWAY END																								
																	TEST AREA	REQUIRED	RESULTS																						
12°	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	AREA 1 (BLUE PART)	MIN. 20 CD AVERAGE MIN. 50 CD	MIN. 149,79 CD AVG. 328,16 CD MAX. 447 CD																					
11,5°	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-																									
11°	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	AREA 2 (YELLOW PART)	MIN. 10 CD	MIN. 76,98 CD																						
10,5°	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-																									
10°	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	AREA 3 (PINK PART)	MIN. 5 CD	MIN. 35,06 CD																						
9,5°	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-																									
9°	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-																									
8,5°	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-																									
8°	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-																									
7,5°	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-																									
7°	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-																									
6,5°	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-																									
6°	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-																									
5,5°	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-																									
5°	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-																									
4,5°	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-																									
4°	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-																									
3,5°	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-																									
3°	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-																									
2,5°	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-																									
2°	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-																									
1,5°	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-																									
1°	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-																									
0,5°	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-																									
0°	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-																									
V/H	10	9,5	-9	-8,5	-8	-7,5	-7	-6,5	-6	-5,5	-5	-4,5	-4	-3,5	-3	-2,5	-2	-1,5	-1	-0,5	0	0,5	1	1,5	2	2,5	3	3,5	4	4,5	5	5,5	6	6,5	7	7,5	8	8,5	9	9,5	10

Green																	SP-401 RUNWAY THRESHOLD																								
																	TEST AREA	REQUIRED	RESULTS																						
12°	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	AREA 1 (BLUE PART)	MIN. 20 CD AVERAGE MIN. 50 CD	MIN. 180,09 CD AVG. 467,67 CD MAX. 639 CD																					
11,5°	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-																									
11°	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	AREA 2 (YELLOW PART)	MIN. 10 CD	MIN. 102,97 CD																						
10,5°	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-																									
10°	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	AREA 3 (PINK PART)	MIN. 5 CD	MIN. 67,30 CD																						
9,5°	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-																									
9°	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-																									
8,5°	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-																									
8°	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-																									
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3°	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-																									
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V/H	10	9,5	-9	-8,5	-8	-7,5	-7	-6,5	-6	-5,5	-5	-4,5	-4	-3,5	-3	-2,5	-2	-1,5	-1	-0,5	0	0,5	1	1,5	2	2,5	3	3,5	4	4,5	5	5,5	6	6,5	7	7,5	8	8,5	9	9,5	10

SHIPPING DATA

Item	Dimensions of Package (LxWxH)	Gross Weight
SP-401 Lighting Unit	350 mm x 250 mm x 210 mm	8,2 kg
SP-401 Lighting Unit, NO batteries	350 mm x 250 mm x 210 mm	3 kg