



FX850AP

Runway Approach
High intensity
lighting solutions

Compliant to Latest International Standards*

- ▶ ICAO Annex 14. Vol 1
- ▶ FAA AC 150/5345-46[†]
- ▶ FAA Engineering Brief No.67
- ▶ TP312
- ▶ MOS139
- ▶ IEC 61827
- ▶ EASA
- ▶ Stannag 3316 (NATO)

Applications

CAT II/III all weather operation airfield ground
lighting (agl) systems.

* As applicable to the application, compliance with other civil aviation and
military regulations confirmed on request

[†] Electrical/Mechanical/Environmental characteristics only

Electrical Performance

Main Beam Aperture		Colour	Typical Power Consumption - Watts (VA) @ 6.6A				
Horiz(°)	Vert(°)		Per Beam Watts nominal	Fitting* Watts (VA)	PF	Tx Primary** Watts (VA)	PF
-10 to +10	0 to 11	WHT/BLK	57/-	57 (58)	0.99	68 (68)	0.99

Fixture Operational Current Range: 2.8 to 6.7A RMS

* as measured at the input leads of the fixture.

** as measured across the primary winding of an appropriately sized isolation transformer with a total fixture and transformer secondary length not exceeding ~ 1.85m (72").

*** electrical characteristics measured with 45 watt transformer; fitting can operate from transformers up to 210 watts.

Note: Isolating transformer shall be suitably sized to accommodate specific secondary and other applicable losses.

Photometry

Specification

Runway Approach ICAO Fig. A2-1

Colour White

Max/Min Intensity ratio <3.0

Main ellipse average intensity 20000cds

Main ellipse minimum intensity 10000cds

Second ellipse minimum intensity 2000cds

Third ellipse minimum intensity 1000cds

Typical Measured Values

Colour White

Max/Min Intensity ratio 4.4

Main ellipse average intensity 20827cds

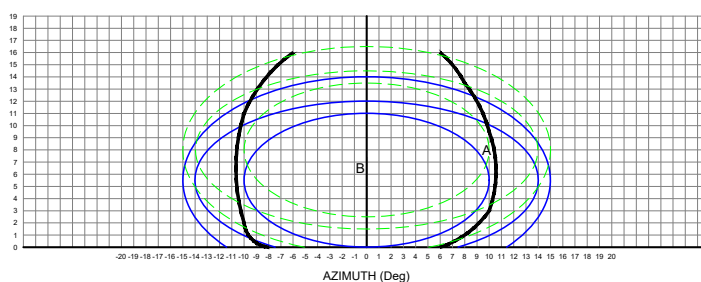
Main ellipse maximum intensity 34041cds

Main ellipse minimum intensity 7632cds

Second ellipse minimum intensity 3261cds

Third ellipse minimum intensity 1632cds

Intensity Chart - Runway Approach Luminaire - White



Features

Low energy consumption compared with the tungsten halogen equivalent.

Greatly reduced maintenance: calculated MTBF of 75,000 hours at 6.6A.

Operates on the full range of 2.8A to 6.6A on either 3 or 5 step IGBT, ferroresonant or thyristor CCRs that are designed in compliance with IEC or FAA requirements.

Fully dimmable lights, replicating the response curve of traditional halogen lights.

Full compatibility with existing airfield lighting series circuits. Installation on same mounting device as most conventional lights, for a straightforward replacement.

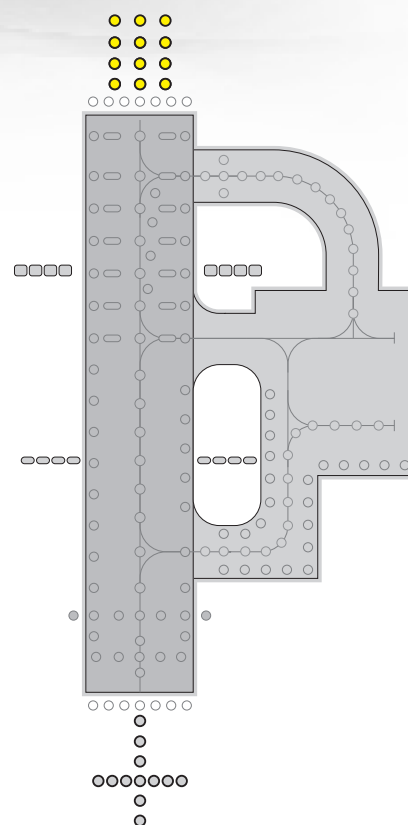
Monitoring function of the individual light arrays for open circuit, short circuit, and over temperature. The LED light automatically disconnects from the secondary side of the isolation transformer, resulting in an open circuit condition.

Low operating temperature, ensuring longer component life.

FAA style 3, ICAO style 4 fixture with a 6.0 mm profile above gradient

L-823 connectors

Integral surge protection



Environmental Conditions

► Ambient Temperature -55 °C to +55°C (-67 °F to +131°F)

► Storage Temperature -55°C to +70°C (-67 °F to +158°F)

► Atmospheric Altitude up to 10,000 feet (3000m)

► Relative Humidity 0-100% (sealed unit)

Standards	
EMC protection	Immunity IEC 61000-4 Emission IEC 61000-2
Ingress protection class dust/liquids	IP68 (IEC69598-1)
Vibration resistance	IEC60068-2-6

FX850AP

LED Inset runway approach
High intensity lighting solutions



Ordering Codes: (FX) 850AP12 1 0 W N 4 1

Application
FX850AP (L) Approach

Beam Type
A Side
1 = Straight
.....
B Side
0 = Not applicable

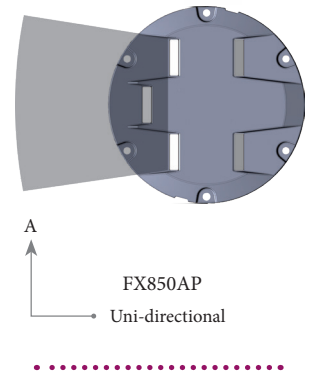
Colour
A Side
W = White
.....
B Side
N = Not applicable

Specification
Refer to front cover

Connections
1 = 1 x Bi-pin plug

Additional optional features may be
available upon request

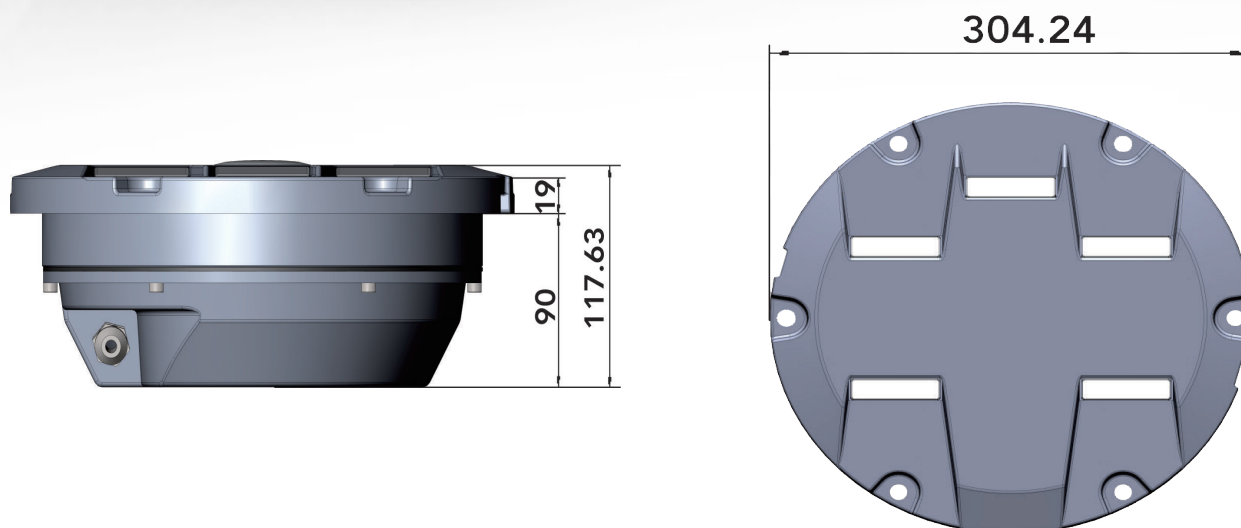
Beam Options



FX850AP

LED Inset runway approach
High intensity lighting solutions

Dimensions



Packaging

- ▶ Net weight 8.9Kg
- ▶ Gross weight 9.5 (boxed)
- ▶ Box 220mm (L) x 220mm (W) x 225mm (H)

weights and dimentions are nominal



Head Office:
atg airports ltd
Lowton Business Park | Newton Road
Lowton St. Mary's | Warrington
WA3 2AP | United Kingdom

atg airports reserve the right to change technical data and details at any point in time. Errors may have occurred



☎ UK: +44 (0) 1942 68 5555 | USA: +1 (239) 985-9406

🌐 www.atgairports.com ✉ enquiries@atgairports.com ✉ sales-usa@atgairports.com

Rev 3 - 2023

FX850AP