

# FX8520

Taxiway centreline  
Straight sections  
Offset beam  
High intensity  
lighting solutions

## Compliant to Latest International Standards\*

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

## Applications

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

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

<sup>†</sup> 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	1 to 8	GRN/GRN	2.03/2.03	14.99 (15.12)	0.992	23.85 (24.70)	0.967
-10 to +10	1 to 8	YEL/YEL	2.54/2.54	15.76 (15.88)	0.992	24.70 (25.50)	0.969
-10 to +10	1 to 8	GRN/YEL	2.03/2.54	15.33 (15.46)	0.992	24.34 (25.16)	0.967
-10 to +10	1 to 8	GRN/BLK	2.03/-	11.77 (11.82)	0.996	20.47 (21.24)	0.964
-10 to +10	1 to 8	YEL/BLK	2.54/-	11.63 (11.68)	0.996	20.45 (21.20)	0.963

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

##### Taxiway Centreline Straight (offset) ICAO Fig 2.12

Colour	Green
Max/Min Intensity Ratio	<3.0
Main rect. average intensity	200 cds
Main rect. minimum intensity	100 cds
Second rect. minimum intensity	20 cds

#### Typical Measured Values

Colour	Green
Max/Min Intensity Ratio	2.49
Main rect. average intensity	304 cds
Main rect. maximum intensity (A)	401 cds
Main rect. minimum intensity (B)	161 cds
Second rect. minimum intensity	115 cds

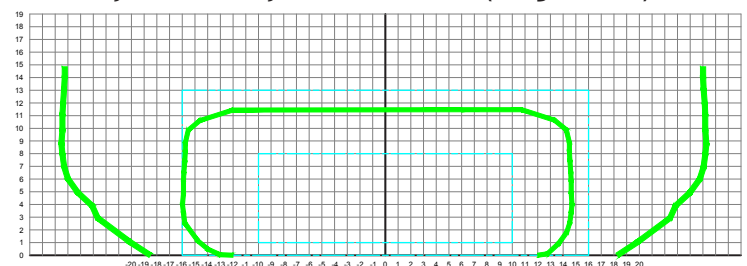
#### Specification

Colour	Yellow
Max/Min Intensity Ratio	<3.0
Main rect. average intensity	200 cds
Main rect. minimum intensity	100 cds
Second rect. minimum intensity	20 cds

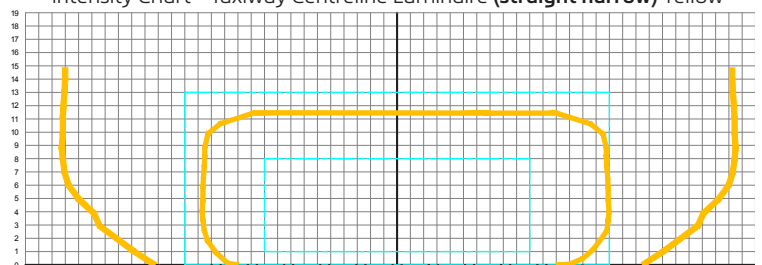
#### Typical Measured Values

Colour	Yellow
Max/Min Intensity Ratio	2.57
Main rect. average intensity	279 cds
Main rect. maximum intensity (A)	380 cds
Main rect. minimum intensity (B)	147 cds
Second rect. minimum intensity	88 cds

Intensity Chart - Taxiway Centreline Luminaire (straight narrow) Green



Intensity Chart - Taxiway Centreline Luminaire (straight narrow) Yellow



# FX8520

LED Inset Taxiway centreline straight (offset)  
High intensity lighting solutions



## 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.

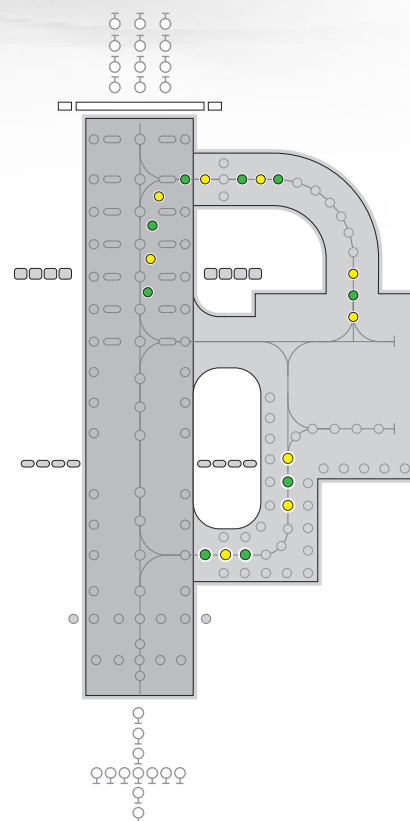
Monitoring function of the individual light arrays for open circuit, short circuit, and over temperature. The LED light automatically disconnects from the secondary side of the isolation transformer, resulting in an open circuit condition.

Low operating temperature, ensuring longer component life.

FAA style 3, ICAO style 4 fixture with a 4.0 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

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L-8520(L)

# FX8520

LED Inset Taxiway centreline straight (offset)  
High intensity lighting solutions



Ordering Codes:

FX 85208 4

## Application

L-8520(L) Taxiway Centreline  
Straight (narrow)

## Beam Type

### A Side

6 = Straight (Offset)  
0 = Blank

### B Side

6 = Straight (Offset)  
0 = Blank

## Colour

### A Side

G = Green  
Y = Yellow  
C = Cyan/Green  
N = Not applicable

### B Side

G = Green  
Y = Yellow  
C = Cyan/Green  
N = Not applicable

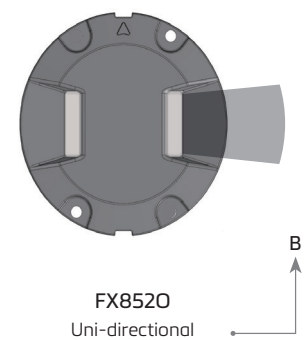
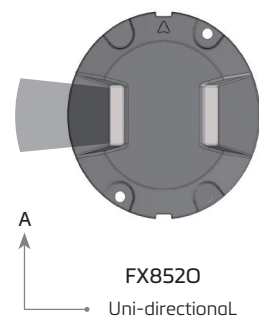
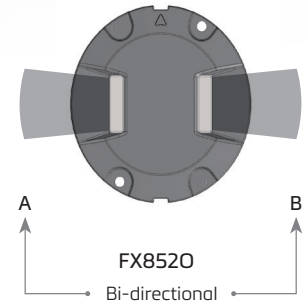
## Specification

Refer to front cover

## Connections

1 = 1 x Bi-pin plug  
2 = 2 x Bi-pin plug

## Beam Options



Additional optional features may be  
available upon request

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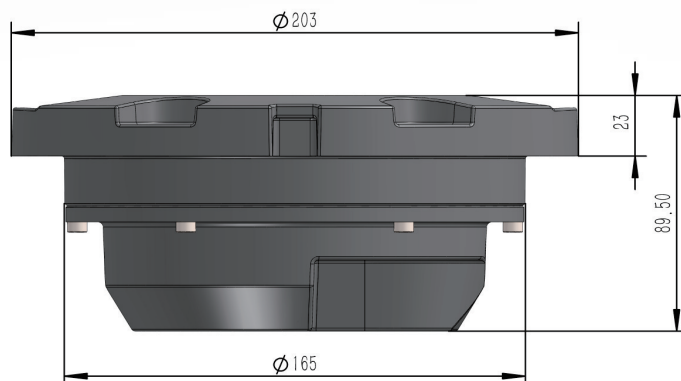
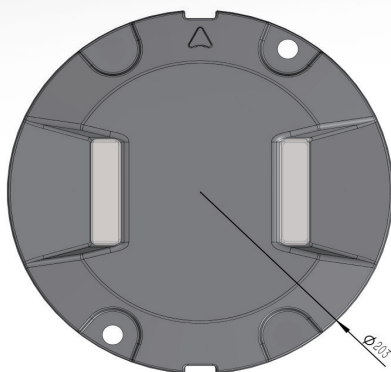
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High intensity lighting solutions

## Dimensions



## Packaging

- Net weight 2.5Kg
- Gross weight 2.9 (boxed)
- Box 220mm (L) x 220mm (W) x 225mm (H)

weights and dimensions are nominal



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



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