

LED-lighting system offers low-cost cabin interior upgrading

Introduction

The cabin interior of your aircraft is one of the first passenger impressions. A modern, clean and bright interior stimulates a feeling of well-being and adds to the overall comfort and satisfaction of your customers. Fokker Services offers several modifications to enhance the quality of the passenger cabin. One of these modifications is a complete innovative LED-lighting system, which replaces the traditional tube luminescent (TL) passenger cabin light system. The result is low-cost cabin interior upgrading.

This lighting solution is available for Fokker aircraft and other types of aircraft.

Your needs

The availability of LED-lighting techniques creates new possibilities for avoiding day-to-day concerns about the performance of the passenger cabin lighting system. Frequent replacement of failed or discoloured lighting elements, or broken mounting units leading to high maintenance costs, will become problems of the past. The LED-lighting system introduces a reliable, high-performance system that lasts for many years. Based on industry standards, the investment costs for the introduction of the LED-lighting system has a payback period of one year.

Introduction of the LED-lighting system is simple, since it mostly uses the same 115VAC power connections as the current TL-lighting system. Moreover, the LED-lighting system is connected to the existing cabin crew-lighting control panel requiring no alterations to its functions or layout. Your cabin crew do not require any introduction or training to operate the new LED-lighting system because this is identical to that of the traditional TL-system.

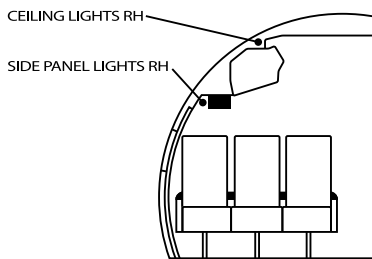
Your benefits

The benefits of the innovative LED-lighting system compared to the traditional TL-lighting system, are as follows:

- Enhanced passenger appeal at a low cost. Bright, uniform light output throughout the passenger cabin.
- No "black-spots" on the cabin ceiling and sidewall thanks to the back-to-back installation of LED-lighting elements.
- Several color temperatures are available to suit the cabin interior design (e.g. warm white, universal white, cool white).
- Fade-in/out dimming function available by switching between dim and bright.
- High system reliability for 50,000 operating hours. This is at least 10 to 15 times longer than the present TL-lighting system.
- Fewer system components. The LED-lighting system consists of integral lighting elements with lengths up to 48 inches. No additional ballast or power supplies.
- Less weight. On average the following weight reductions can be achieved per aircraft:

- Fokker 50	-13kg (-29lbs)
- Fokker 70	-8kg (-18lbs)
- Fokker 100	-28kg (-62lbs)
- In excess of 20% reduction in electrical power consumption, resulting in less fuel burn and CO2 emissions and reduced heat generation.
- Reduced maintenance and replacement costs.





Product description

The passenger cabin LED-lighting system consists of four rows of LED-lighting elements; two rows, left and right hand, in the ceiling (cove) and two rows, left and right hand, in the side panel. The aircraft modification package will be available based on an EASA approved Fokker Services modification bulletin, this includes the installation procedure and modification kit. Fokker Services offers this modification for Fokker 50/60 (SBF50-33-039), Fokker 70/100 (SBF100-33-024) as well as other aircraft types such as B737, E-jets, CRJ, etc.

Approvals:	EASA approved under DOA 21J.059
Type Certificates:	EASA.A.036 (Fokker 50) & EASA.a.037 (Fokker 70/100)
Environmental Approvals:	RTCA DO160E environmental conditions and test procedures for airborne equipment
Flammability:	Conforms FAR/CS 25.853(a) & 25.869(a)(4) Appendix F, part 1
Operation:	Operationally unchanged from current TL-lighting system
Installation:	Clip mounted integral LED-lighting elements
System reliability:	MTBF 50,000 operating hours
Cleaning:	Cleaning with a soft, dry cloth recommended
Power:	115 VAC, 400 Hz
Dimming:	Step fade-in/out dimming
Color temperature:	Options available: <ul style="list-style-type: none"> - Warm white (3.500K) - Universal white (4.200K) - Cool white (5.000K)
Layout & Dimensions:	Strip mounted LED's in aluminium housing, translucent lens and clip mounts
	Height 19.8 mm
	Width 22.9 mm
	Length 406.4 mm (16 inch) to 1219.2 mm (48 inch)

Fokker Services B.V.
P.O. Box 1357
2130 EL Hoofddorp
The Netherlands
Tel. +31 (0)88 628 00 00

Fokker Services Inc.
5169 Southridge Parkway
Suite 100
Atlanta, GA 30349
U.S.A.
Tel. +1 770 991 43 73
Fax +1 770 991 43 60

Fokker Services Asia Pte. Ltd
1800 West Camp Rd.
Seletar AeroSpace Park
Singapore 797521

Contact

For more information contact Fokker Services or visit www.fokkerservices.com

Technical Services – Account Support Manager
E-Mail technicalservices@fokker.com

Websites
www.fokkerservices.com
www.flyfokker.com
www.myfokkerfleet.com