Fifty Sky Shades - October 2016



VISION SYSTEMS UNVEILS ITS ACTI-VISION WINDOW FOR THE FIRST TIME IN THE USA

News / Business aviation, Events / Festivals



As a world leader in solar protection systems and a competitive challenger in IFEC offering bespoke solutions to the aeronautic market, Vision Systems will present high-end motorized shades, Electronically Dimmable Windows (EDWs) and a wireless IFE system dedicated to business aviation. The exhibited products also include Vision Systems' latest innovation, Acti-Vision Window, a new concept of EDW integrating an interactive transparent display.

Vision Systems' tailor-made motorized shades for one or two windows feature smooth or pleated fabrics, single or dual screens, light weight, acoustic insulation and a fine fit and finish. These long-life products comprise advanced motorization with brake, manual unlocking and anti-jamming devices and the integrated electronics allow easy installation and maintenance. Another particularity of these solutions is the synchronization of the shades, which reach the bottom all at the same time or by zone. Moreover, they are ready for the eventual integration of a dimmable window.

Vision Systems' electronically dimmable solutions enable passengers to tune the tint of their window from clear to dark in order to regulate daylight, glare and heat entering in, while preserving the view. They enhance visual, thermal and acoustic comfort for a greater wellness atmosphere.

Vision Systems' EDWs are unique on the market today and provide many advantages over other systems. Based on SPD technology (Suspended Particle Device), these EDWs allow infinite variable shading from fully clear to an extremely dark state (over 99.9% light blockage) and instant response time.

They contribute to a reduction of air conditioning consumption and automatically switch to their darkest possible state when unpowered, maximizing heat rejection and keeping the interior cooler, with a reduction of inside temperature up to 10°C/18°F. These solutions block more than 99.9% of harmful UV light, 99.9% of IR with an additional integrated anti-IR film, and their fabrication involves noise barriers to keep the interior quieter.

Vision Systems' EDWs offer many other benefits. They deliver a weight reduction of about 30% compared with motorized shades, and do not add weight in comparison to a window with a manual shade. Furthermore, they have no moving parts as the electronics are fully integrated, reducing maintenance costs and downtime.

They can be incorporated into flat or curved surfaces (2D, 3D), use plastic, glass or composite glass, and provide an unprecedented optical quality. All these solutions can come as a whole to replace the entire window. The installation is often limited to a simple mechanical operation, which is very advantageous for the aftermarket.

Vision Systems' dimmable solution range also includes privacy and partition solutions. Besides, all these solutions can interface with any Cabin Management System.

Originally intended for passengers to improve their flying experience, these systems have expanded to now being considered for the cockpits. A self-powered dimmable sun visor completes the range of blinds and sun visors presented at the show.

Vision Systems will also exhibit its cutting-edge wireless IFE system dedicated to business jets, offering simultaneous Wi-Fi connection for broadcast and HD-quality AVOD on PEDs including "DRM approved" streaming and daily press. Various VIP options come and enhance the passenger experience. The connectivity option provides internet access, email, video conferencing, and personal smartphone usage over VoIP (through Satcom 1 receiver). It gives the passengers the possibility to stay connected all the way from the office to the arrival terminal. Other options include cabin management, interactive moving map, or a switch on the tablet from the IFE media center to a Blu-Ray player connected to the box. Different configurations are possible with personal or company tablets. For each customer, Vision Systems develops a customized user-friendly interface and content. Software upgrade and audio & video content are rapidly downloadable by USB or on ground 3G/4G connection.

Vision Systems' solution is scalable and flexible as well as being easy to install, to retrofit and to maintain.

Acti-Vision Window, the new concept of EDW integrating transparent display, combines a dimmable system with a transparent video display offering interactive moving map and travel services, all together integrated in the aircraft window. The window can be controlled by the passenger through a transparent touchscreen incorporated into the glazing. The dimmable system is based on SPD-technology and the interactive display uses a transparent, flexible and thin color video screen. The benefit for the passengers is to be able to regulate the light and heat, to interact with the moving map and to get more services, directly on the window. Vision Systems relies on its expertise in complete solutions of Electronically Dimmable Windows and IFE systems to offer a cutting edge interactive aircraft window that meets tomorrow's challenges in terms of passenger experience.

Some of Vision Systems' customer references in aeronautics include: Dassault, Epic, Airbus Helicopters, RUAG, HondaJet, BCA, Sabena Technics, ATR, SuperJet International, La Compagnie, Embraer, Boeing...