InSight™ Display System with SkyLens™ Wearable HUD

‘Head-Up, Head-Down’ Flight Deck System

The Future of Commercial Aviation

Integrating the SkyLens Wearable Head-Up Display (HUD) with the InSight Display System offers the ultimate presentation of essential flight data, precisely when you need it most. Through the advanced, yet intuitive user interface, you can control flight deck avionics by a “look and select” menu system displayed via the wearable SkyLens HUD. Select an approach or runway while still maintaining your complete attention viewing out of the cockpit window for a full head-up experience.

Full Landing Procedures with No Natural Vision

As part of the NextGen roadmap, the InSight/SkyLens integration aligns with Federal Aviation Regulation (FAR) 91.176 released by the U.S. Federal Aviation Administration (FAA), enabling the operator to perform a full landing procedure with no natural vision, where the reported visibility is as low as 1000’. The integrated system offers unmatched capabilities, providing dispatch and landing approach priority as well as Low Visibility Landing regardless of the destination airport’s infrastructure. Once on the ground, SkyLens can assist and guide the aircraft to the gate in poor conditions.

Interactive SVS

Both SkyLens' and InSight’s Synthetic Vision Systems (SVS) provide the same data with flight plan displayed, allowing you to select the best aspect of display for each phase of flight. The integration brings an innovative operator’s gaze-control concept, the Interactive SVS function (I-SVS). Using the I-SVS, you can easily select entities on the conformal SkyLens SVS, sending it directly to InSight.

A cursor controlled by the SkyLens Line of Sight (LOS) and a single button on the yoke provide an innovative human-machine interface. It allows the selection of entities in the outside world, as if they were buttons in the flight deck.

Now you can keep your head-up, looking outside; even when setting the Flight Management System (FMS). For standard operation of selecting an airport, runway, and approach on the FMS, at least one operator is required to look toward the FMS Control Display Unit (CDU). With I-SVS, you can do this while looking at the airport outside; gaze-selection reduces operational tasks such as airports, runways, and approaches. In addition, safety is increased with high workload tasks such as deviating to a different runway due to high airport traffic.

Increased safety and operational effectiveness
Improved flight efficiency
Enhanced single pilot operation