

JOINT STRIKE FIGHTER HELMET-MOUNTED DISPLAY SYSTEM

BEST-IN-CLASS, DAY OR NIGHT

World's most advanced helmet-mounted display system

In the fast paced fighter environment, every second counts. Pilots need the best available information to make decisions in an instant. Collins Aerospace F-35 Joint Strike Fighter (JSF) helmet-mounted display system (HMDS) provides the most capable situational awareness with intuitive access to tactical, flight and sensor information. While fully integrating three advanced technologies – head-up display, helmet-mounted display and visor-projected night vision – the JSF HMDS provides best-in-class capabilities for the fighter cockpit.

A proven high-performance helmet with over 317,000 flight hours of operation and over 1,500 helmets delivered, the JSF HMDS has helped boost the pilot safety and tactical capabilities for years. With an uninterrupted display of flight information and sensor data, the pilot experiences extreme spatial orientation, superior weapons targeting and tactical superiority – day or night.

OLED PRODUCTION

With the desire to continually improve operations, organic light emitting diode (OLED) upgrades are currently rolling out on Gen III HMDs for pilots in very dark environmental conditions landing on aircraft carriers. The OLED integration will improve visual acuity, solving the JSF HMDS “green glow” during night time operations. OLED HMDs will be in full production in 2022.

KEY FEATURES AND BENEFITS

- Binocular display
- Enhanced situational awareness
- Integrated digital night vision
- Lightweight custom fit with an optimized center of gravity to maximize comfort and reduce pilot fatigue
- Provides weapons targeting by looking at and designating targets
- Integrated with the distributed aperture system (DAS) for look-through aircraft ability

<https://prd-sc101-cdn.rtx.com/-/media/ca/product-assets/marketing/f35/jsf-f35-datasheet.pdf>



WHERE WE ARE HEADING

In ever changing combat zones, pilot and mission needs are dynamic. Emerging technologies provide new ways to meet developing challenges and decrease pilot workload. The JSF HMDS is primed to incorporate the latest innovations and bring new key benefits to pilots, allowing for more rapid response time in distinguishing targets and seamless day to night transitions with a single visor solution.

Upcoming features include:

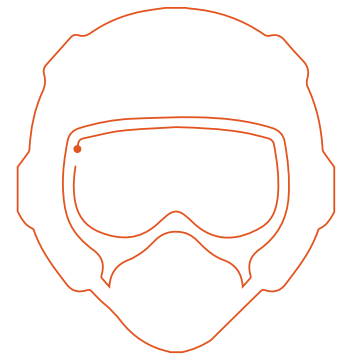
- Color display
- Improved night vision capabilities
- Reduced HMD weight
- Photochromic visor

The F-35 Gen III HMDS is provided by Collins Elbit Vision Systems, LLC, a joint venture between Collins Aerospace and Elbit Systems Ltd. of Israel, through its U.S. subsidiary Elbit Systems of America, of Fort Worth, Texas.

SYSTEM SPECIFICATIONS

- Field of view: 40H x 30V degree; with 100% overlap
- Accuracy: <2 mr rms
- Active noise reduction (ANR)
- Compatible with eyeglasses and laser eye protection (LEP) devices
- Ejection capability to 550 KEAS
- Video recording
- Custom helmet liner for precise fit and comfort
- Supports multiple video inputs
- Multiple interpupillary distance (IPD) settings
- In full-rate production with current contract

1,500+
HMDs delivered



317,000+
Flight hours



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