

F-35 Gen III Helmet Mounted Display System



The world's most advanced biocular helmet-mounted display system brings unprecedented capability to the world's most advanced tactical aircraft.

Pilots flying missions in the F-35 Lightning II and other multi-role tactical aircraft now can have unmatched visual capability. The F-35 Gen III Helmet Mounted Display System (HMDS) provides a next-generation user interface that integrates the pilot more tightly than ever into the aircraft's avionics, with more than 10,000 flight hours of operational use.

The system gives F-35 pilots unsurpassed situational awareness by displaying critical flight information and sensor video throughout the entire mission. The HMDS serves as the virtual head-up display, enabling the F-35 to become the first tactical fighter in 50 years without a traditional head-up display.

By fully integrating three advanced technologies – head-up display, helmet-mounted display and visor-projected night vision – the F-35 Gen III HMDS provides revolutionary capability to the fighter cockpit.

Key benefits

- Provides enhanced situational awareness
- Integrated, virtual head-up display on the helmet visor for critical flight and mission information with a smooth transition to HMD symbology
- Night vision capability built into the helmet
- Lightweight helmet with optimal center of gravity for maximum comfort and reduced pilot fatigue
- Provides weapons targeting by looking at and designating targets, and target verification when receiving steering cues from onboard sensors or via datalink

Key features

- Biocular, 30-by-40-degree wide-field-of-view with 100 percent overlap
- Virtual head-up display
- Look-through-aircraft capability via DAS imagery
- High accuracy tracking with auto-boresighting
- Active noise reduction (ANR)
- Digital night vision sensor
- Ejection capability to 550 KEAS
- Lightweight and well balanced helmet
- Custom helmet liner for precise fit and comfort
- Multiple interpupillary distance (IPD) settings
- Video recording
- Picture in picture
- Compatible with eyeglasses and laser eye protection (LEP) devices

High performance, day or night

The F-35 Gen III HMDS offers a fully integrated day and night solution through advanced, next-generation features. Pilots in aircraft equipped with the system can look at a target to aim their weapons while maintaining spatial orientation of their surroundings and continually monitoring critical flight information.

For night missions, the HMDS projects the night vision scene directly onto the visor, eliminating the need for separate night-vision goggles.

The HMDS provides a lightweight helmet, with optimized center of gravity and maximum comfort for reduced pilot fatigue.

Everything about F-35 Gen III HMDS is designed to enhance the fighter pilot's precision, efficiency and safety.

SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE.



The F-35 Gen III HMDS is provided by Rockwell Collins ESA Vision Systems, LLC, a joint venture between Elbit Systems Ltd. of Israel, through its U.S. subsidiary Elbit Systems of America, of Fort Worth, Texas, and Rockwell Collins. The joint venture was established to pursue fixed-wing helmet mounted display opportunities worldwide.

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