MS-110 MULTISPECTRAL AIRBORNE RECONNAISSANCE SYSTEM

THE NEXT GENERATION OF AIRBORNE RECONNAISSANCE

Improve your intelligence advantage

The Collins Aerospace MS-110 represents the next generation of the widely deployed DB-110 dual band airborne reconnaissance system, providing wide-area, long-range imagery coverage – day or night.

Our MS-110 system provides improved intelligence advantages over legacy systems by offering:

• Combat survivability due to long-range/stand-off capability – significantly longer than targeting pod coverage
• A shortened kill chain enabled by on-demand data link and rapid target classification
• Multispectral imaging in multiple visual and IR bands
• Common ground coverage of all bands
• Improved area coverage at long stand-off ranges
• Improved image quality (NIIRS)
• Imagery exploitation software designed to rapidly leverage the unique features of MS-110 imagery
• Shortened sensor-to-shooter timelines through rapid exploitation of multispectral imagery via high-speed, near-real-time data link capability

MS-110 integrates seamlessly into the existing DB-110 system CONOPS and architecture, employing common ground support equipment.

The sensor is compatible with carriage on advanced fighters (US F-16, F-15 and F/A-18), as well as on the Gripen and other fast jet platforms, C-130s, MPA class aircraft, ISR business jets and MALE UAVs, such as MQ-9. The MS-110’s architecture is also designed to support edge processing for multi-domain operations.
The multispectral advantage

The MS-110 Airborne Reconnaissance System is an important advancement over the third-generation DB-110, providing new multi-spectral detection capabilities, improved image quality, and increased coverage in a SWaP configuration that is compatible with fast jets, ISR aircraft and UAVs, such as the MQ-9 Reaper.

Multispectral imagery is defined as sensor data collected simultaneously from three or more spectral regions or bands. The same scene is imaged in all the spectral bands, with each spectral image assigned a display color and overlaid to form a multi-spectral composite image.

The MS-110 enables the end-user to see “true color” and to also discriminate between subtle features of a target that a traditional grayscale image cannot. Most important, by combining select three bands into certain composite views, analysts gain unique knowledge of individual scenes enabling important military-related analytical applications.

As part of an end-to-end ISR system, the Collins Aerospace SCI-Toolset suite of imagery exploitation software tools is specially configured to gain maximum benefit from the MS-110’s unique capabilities.

The simultaneous multi-band imagery collection provided by the MS-110 is a battlefield discriminator that can facilitate enhanced target discrimination and change detection while defeating enemy camouflage, concealment & deception (CC&D), and providing detailed maritime/littoral surveillance.
Specifications subject to change without notice.