

Passenger Cabin Surveillance Solutions

Terrorist threats and air rage incidents aboard commercial airlines present a high level of risk to the safety of passengers and aircrew. AD Aerospace can provide sophisticated video security systems used for the prevention of air rage and terrorist crimes, by increasing the information available to pilots and crew. System is also compliant with the new Russian mandate (decree 1604) published on the 5th of October 2020, as it allows monitoring of the cockpit and passenger cabin, supports motion capture and provides 30 days data storage.

The system consists of a series of overt CCTV cameras, to be located in the passenger cabin, FWD & AFT Galley areas; providing complete coverage of the passenger area. The system can either be connected to the aircraft Electronic Flight Bag, or streamed to any connected Ethernet device, allowing flight deck crew members to easily see what is happening in the cabin at any point of the flight.

System Specifications

- Internal airborne IP Monochrome Cameras with integrated IR illumination
- Recessed design, allows camera to be overtly mounted in the cabin without compromising the cabin aesthetic design.
- Light Control by auto shuttering means no moving parts
- Cameras powered directly from Video Storage Unit reducing installation costs and time
- Internal Recording Capacity on Solid States Drives to guarantee efficiency and reliability in a vibration environment, capable of 30 days data storage
- Small form factor Video Storage unit, with a maximum weight of only 1.5kg

Weight

Camera: 400g Maximum
Video Transmission/Storage Unit: 1500g Maximum

Camera Options

FV-0461: Internal Aerospace IP Monochrome Overt Camera, designed to be fitted flush within the aircraft ceiling trim, with incorporated IR Illumination.

FV-0462 Internal Aerospace IP Monochrome Dome Overt Camera, designed to be fitted within the aircraft ceiling trim, with incorporated IR Illumination. Camera comes complete with installation mounting, angling the camera at an ideal angle.

Both Cameras are High Definition Megapixel cameras, with a maximum resolution of 1080p. Cameras have a wide diagonal field of view of 98°, allowing the monitoring of larger areas, reducing the number of cameras required.

Video Storage Unit

FV-0591: Video Storage Unit, with direct Ethernet connection of 8/16 high resolution IP cameras.

Cameras are directly powered by the FV-0591, and no additional aircraft power supply or Ethernet connection is required to the cameras.



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Video Storage Unit Cont.

The data is stored on a solid-state drive, to provide better resilience to vibrations, while at the same time achieve high storage capacity on a media type which is also lightweight when compared to more traditional storage. The FV-05941 is capable of 30 days data storage, and also supports motion triggered recording extending its data storage capabilities even further.

The Video Storage Unit can record at a maximum resolution of 1080p with real-time frame rate for a high definition smooth video stream.

Perform conversion to H-264 of the input video streams to provide onward video transmission to Electronic Flight Bag or any other Ethernet backbone connected device.

The FV-0591 is one of the lightest and smallest Video Storage units within its range, with a Maximum weight of 1.5kg, and a footprint of only 320mm x 195 mm x 57mm.

System Architecture:

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