

Internal Aerospace Camera



AD Aerospace's FV-0477 is a covert HD-SDI video camera for general aerospace use. It is a 720p HD-SDI bullet camera externally controllable via RS485. There is no loadable software content in the Camera. However, the Camera Sensor includes firmware that interprets RS485 commands and configures Camera settings.

High-Definition Serial Digital Interface (HD-SDI) is one of a family of digital video interfaces, standardized as SMPTE292 by the Society of Motion Picture and Television Engineers. HD-SDI provides a nominal data rate of 1.485 Gbit/s. Although the HD-SDI interface is intended for 75Ω single ended coaxial transmission lines, the FV-0477 Camera converts the video signal to a differential balanced format for transmission over a 100Ω QuadraX cable.

The FV-0477 Camera, together with a FV-0877 HD Monitor, form the DirectVu Camera System (DVCS). The DVCS is used as a means to comply with CFR 25.785 requirements, designed to provide visibility of a minimum of 50% of passengers in premium class zone to seated cabin crew during Taxi, Take Off and Landing.

Specifications

Size	2.71" x 2.95" x 2.94"
Weight	272g (0.60lbs) Maximum
Sensor	Sony CMOS 1/3"; 2.1 MPixel Cropped to 720p
TV Standard	HD-SDI 60fps
Resolution	Colour: 720p 1280x720 (16:9 aspect ratio)
Sensitivity	Better than 0.1 Lux
Depth of Field	36" to ∞
Light Control	Shutter to 1/60,000 seconds
AGC	26 dB Max
S/N	Greater than 50dB, AGC off



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Specifications continued	
Video Output	HD-SDI 0.8V p-p nominal into 100 ohms Balanced line.
Gamma	0.45 nominal
Lens	Pinhole Lens 2.1mm
Control	Remote RS-485 Link from FV-0877 HD Monitor
Optical Characteristics	<p>The Camera has a Pinhole lens configuration. The effective focal length is 2.1mm.</p> <p>Horizontal Field of View: Approx. 76° Vertical Field of View: Approx. 40°</p>
Connector	There are two external electrical interfaces, J1 (HD-SDI Video Quadrax) and J2 (Power and RS485).
Power	Maximum power requirement: 3.1W
Current	Maximum current draw: 110mA @ 28V dc
Power Factor	Powered from 28V DC
Operational Temperature Range	-15°C to +55°C.