

HUD FC-4 CAMERA

For Fighters and Trainers



APPLICATIONS

- Training
- Mission restitution

AIRCRAFTS

- Boeing F-15
- Boeing F/A-18

INNOVATIONS & FEATURES

- Embedded image enhancement algorithms
- Robustness to direct sun exposure
- No mobile parts for best reliability
- CMOS sensor
- Very low impact for pilot's vision
- Designed for harsh environments

CMOS HUD Camera
**The High-end & Reliable Solution
in Head-up Display Cameras,
for Front-Combiner Location**

LANDSCAPE ACQUISITION PERFORMANCE

FOV SENSOR LINE OF SIGHT DYNAMIC RANGE	Field of View	Line of Sight Alignment	H,V Roll Error	IFOV
	22°(H) × 17°(V) Digitally adjustable	< 0.5 mrad	< 0.5 mrad	< 0.4 mrad
	Sensor	Mono/Color	Global Shutter Time Exposure	Light Dynamic Range
	CMOS QXGA Format	Color RGB	Automatic controlled on sensor AEC	0.05 to 10,000 fL

VIDEO OPTIMIZATION

WHITE BALANCE COLOR SATURATION GAMMA TIME RESPONSE CORRECTIONS	White Balance	Gamma Correction	Sharpness	Distorsion Correction
	Auto CEI D65 5600 K	0.45 – 0.7 – 1 & Blending mode	Manual or Automatic	N/A
	Color Saturation	Sensor Correction	AEG AGC Time Response	Non-uniformity Correction
	MCS – ACS	Blemish correction	< 1 s	N/A

INTERFACE

VIDEO COM POWER SYNCHRO EVENT MARK BIT	Control Interface	Power Supply	TV Standard	Event Mark
	RS485/422 GenlCam XML File	7-19 Vdc	NTSC/RS170 or SMPTE 292 – 30Hz	TTL 3.3V
	Connector	Power Consumption	External Synchro	BIT
	GLENAIR 287 – 495P2H26JFNBA	7W	EIA RS170 EIA RS170A	1 open collector

HOUSING

DIMENSION WEIGHT WINDOW	Size	Coating	Weight	Optical Window
	129 × 102 × 42 mm ³	Paint color – Black	< 550g	AR Sapphire

ENVIRONMENTAL / CONFORMITY

TEMPERATURE HUMIDITY SHOCKS VIBRATION EMI / EMC CE / IPC	Temperature	Humidity	Shocks	Vibrations
	[-40°C – +75°C] functional	100% MIL-E-5400	40g half sinus 11 ms	20g rms [100Hz – 1,000Hz]
	EMI MIL-STD-461F	EMI MIL-STD-461F	Grounding	Acceptability
	RE 102 – RS 103	CS 114 – CS 115 CS 116	< 2.5 mΩ	IPC-2221 Class3
	MTBF	Altitude	Sand and Dust	Salt Atmosphere
	> 20,000 H AIF 40°C MIL HDBK-217F N2	[-2,300f – +70,000f]	MIL-E-5400	MIL-E-5400

AIRCRAFT INSTALLATIONS

AIRCRAFT LOCATION	Boeing F-15	Boeing F/A-18
	FC: Front of HUD combiner	FC: Front of HUD combiner

PART NUMBER

P/N	S0074011343: NTSC/RS170 Video Output S0074014410: SDI Video Output Includes: Graphic Unit Interface (GUI)
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