ORDERING INFORMATION:

P/N:

TF-GS-CAM-MIL

APPLICATIONS:

- Rotorcraft
- General Aviation
- Law Enforcement
- Fire Authority
- EMS
- AutomotiveApplications
- Marine Applications
- Locomotive
- Pipe & Power LineInspections
- Military & Defense
- Flight School
- SAR

Contact: www.Techfury.com Sales@techfury.com

TF-GS-CAM-MIL



FEATURES:

- Military Grade 7075-T6 Aluminum Housing
- Global Shutter
- Single Mil-Spec Output Connector for video/data & power
- Full High Definition 3G-SDI / HD-SDI Resolutions up to 1920x1080p60
- Sony 1/2.3" 2MP CMOS Imaging Sensor
- Dual Simultaneous Outputs of 3G-SDI/HD-SDI and Analog/CVBS
- Anti-Vibration mechanism (internal)
- Digital Image Stabilization
- RS485 Control
- Miniature Size of 75mm x 40mm x 40mm
- Multiple C/CS Mount Lens Options.
 Fixed or Varifocal (3.7mm Standard)
- Auto Day/Night Setting
- Operating Temperature: -30° to +65° Celsius
- Weight: 149g

The TF-GS-CAM(-MIL) is the smallest Military Grade **GLOBAL SHUTTER** 3G-SDI/HD-SDI camera available on the market. Milled out of a solid piece of 7075-T6 aluminum, the TF-GS-CAM(-MIL) is rugged enough to be installed and operated in any Military or commercial application. While measuring at only 75mm x 40mm x 40mm the TF-GS-CAM(-MIL) can be installed in tight areas using the robust mounting bracket included with the camera. With dual simultaneous outputs, the TF-GS-CAM(-MIL) can be used with multiple devices at the same time where the 3G-SDI/HD-SDI output can connect to a DVR and the analog output can be used to view the live feed on a Garmin G500 or similar monitor.

The TF-GS-CAM(-MIL) features a SONY 1/2.3" 2 Mega Pixel CMOS Imaging Sensor which outputs a 2MP image in high definition. The TF-GS-CAM(-MIL) can be coupled with any C/CS mount lens (fixed or varifocal) which can provide specific field of views ranging from extremely narrow to ultra-wide. The global shutter helps preserve the image quality when capturing fast moving objects with minimal image distortion, image blur and shutter noise. The auto day & night feature is helpful when capturing images in low light areas, where the TF-GS-CAM(-MIL) will automatically switch to a monochrome image if there is not enough light reaching the imaging sensor.



Technical Specifications

ORDERING INFORMATION:

P/N:

TF-GS-CAM-MIL

APPLICATIONS:

- Rotorcraft
- General Aviation
- Law Enforcement
- Fire Authority
- EMS
- AutomotiveApplications
- Marine Applications
- Locomotive
- Pipe & Power LineInspections
- Military & Defense
- Flight School
- SAR

CAMERA IMAGING	
Image Sensor	SONY 1/2.3" 2 Mega Pixel CMOS Imaging Sensor
Shutter Type	GLOBAL SHUTTER
Image Control	Digital Image Stabilization
Scanning System	16:9 Progressive Scan
Effective Pixels	1936(H) x 1226 (V) : 2.37 Mega Pixels
Total Pixels	1936(H) x 1216 (V) : 2.35 Mega Pixels
Min. Illumination	0.007LUX AT f2.6, 30IRE
Lens Type	C/CS Mount (Manual) (Changeable)
Electronic Shutter Speed	NTSC : 1/30 ~ 1/30,000 sec., PAL : 1/25 ~ 1/25,600 secs.
VIDEO OUTPUT	
Video Output 1	3G-SDI / HD-SDI (MAX 1080@60p/50p) / EX-SDI 3.0
Video Output 2	
	CVBS (NTSC / PAL)
Video Output Resolutions	3G-SDI / HD-SDI / EX-SDI: 1080p60/50/30/25, 1080i60/50 CVBS (NTSC/PAL): 720p60/50/30/25
Video Standards	NTSC/PAL (User Select)
DATA CONTROL	
Serial Data	RS485 Serial Data (Protocol Document Included)

Contact: www.Techfury.com Sales@techfury.com



ORDERING INFORMATION:

P/N:

TF-GS-CAM-MIL

APPLICATIONS:

- Rotorcraft
- General Aviation
- Law Enforcement
- Fire Authority
- EMS
- AutomotiveApplications
- Marine Applications
- Locomotive
- Pipe & Power LineInspections
- Military & Defense
- Flight School
- SAR

Contact: www.Techfury.com Sales@techfury.com

OSD OPTIONS	
On Screen Display (OSD)	Built-in Joystick on programming cable*
Exposure	Brightness = 0 - 20 units selectable
	AGC = 0 - 20 units selectable
	Shutter Mode = Auto / Flicker less / Manual
	Shutter Speed
	=1/30(25),60(50),120(100),250(200),500(400),
	1K(800),2K(1.6K),4K(3.2K),8K(6.4K),15K(12.8K),30K(25.6K)
	Sens Up = x2, x4, x8, x16, x32
Milita Dalama	AGC = 0 - 20 units
White Balance	AUTO / AWT / Push Lock / Manual
Backlight Compensation	WDR / BLC / HSC / Off
DNR	High / Middle / Low / OFF
Day & Night	Auto / Color / B&W / External / IR (Smart IR)
Sharpness	0 - 10 units selectable
Color Level	0 - 20 units selectable
Mirror and Flip Picture	ON / OFF
Lens Shading	ON / OFF
Gamma	0.45/ 0.55/ 0.65/ 0.75
Dynamic Zoom	x1.0 - x16.0
ACE	High / Middle / Low / OFF
Defog	Auto / Manual (OFF / Low / Middle / High)
Language	English, Chinese, Japanese, Korean
Special	Privacy / Motion / DIS (Digital Image Stabilization)
CAM ID	0 - 255
Protocol	PELCO-D / D-LOGIC
Baud Rate	2400/4800/9600/19200/38400/57600/115200
System	SDI Out / SDI Format / FREQ. / CVBS Out / Language / Cam Title
POWER	
Power Input	DC12V ± 10%, MAX 150mA



ORDERING INFORMATION:

P/N:

TF-GS-CAM-MIL

APPLICATIONS:

- Rotorcraft
- General Aviation
- Law Enforcement
- Fire Authority
- EMS
- Automotive
 Applications
- Marine Applications
- Locomotive
- Pipe & Power LineInspections
- Military & Defense
- Flight School
- SAR

Contact: www.Techfury.com Sales@techfury.com

PHYSICAL &	
ENVIRONMENT	
Operating Temperature	-30° C to +65° C (-22° F to +149°F)
Storage Temperature	-40° C to +70° C (-40° F to +158° F)
Humidity	Less than 80% Realtive
Housing	
nousing	Military Grade 7075-T6 Aluminum Housing - IP67 rated TF-GS-CAM-MIL
	1 x MIL-SPEC I/O Connector - Rear Panel
	Glenair P/N 801-010-02NF8-13PA
	·
INPUT / OUTPUT	(MATING = Glenair P/N 807-008-26NF8-13SA)
Connector(s)	TF-GS-CAM
	1 x BNC (HD-SDI Output)
	1 x BNC (CVBS Output)
	• • •
	1 x LEMO 8-pin (Power / Programming / RS485)
Programming Cable	CAMERA END:
	TF-GS-CAM-MIL
	1 x Glenair P/N 807-008-26NF8-13SA
	TF-GS-CAM
	1 x LEMO 8 Pin
	DDOCD ANALYSIC FAID.
	PROGRAMMING END:
	1 x BNC Female - 3G-SDI / HD-SDI / EX-SDI Output 1 x BNC Female - CVBS
	1 x OSD Controller - Built-in on cable
	1 x Power Input (2.1x5.5 Barrel Style) & RS485 Control
	Connector (Mil-Spec connectors upgrade available)
Dimension	75mm x 40mm x 40mm (2.95in x 1.57in x 1.57in)
Weight	149g / 5.26oz / 0.33lbs
Mounting (Included)	1 x 51mm x 21mm x 6.35mm Mounting Plate
	- 2 x 1/4x20 Threaded Mounting Points
LENS OPTIONS	
Lens Options	C/CS MOUNT LENS OPTIONS FOR FIXED OR VARIFOCAL
(Please call before	FOV AVAILABLE - PLEASE CONTACT YOUR SALES
ordering)	REPRESENTATIVE FOR ALL AVAILABLE OPTIONS

