DEFENCE VISION SYSTEMS

EMCCD Frame Camera

Application

DVS are developing a series of Frame Cameras based around a range of sensor technologies for use in the smaller gimbal and include ICCD, SWIR, LWIR and SCMOS. The cameras are designed to provide a full 24 hour capability and work from full sunlight down to clear starlight.
All of these cameras include a fully integrated powered zoom lens providing magnifications form X6 to X12 as standard fitment. Other magnifications can be supplied to suit specific customer requirements.
These cameras with their integrated lens can be supplied for fitting into a gimbal or if required may be supplied mounted in a gimbal ready for integration onto an existing platform, such as a UAV etc.
The camera shown in the photograph is the first of this range of cameras and has an integrated X12 zoom lens and is designed to meet the normal defence application temperature range and other criteria.

General Data

Input Voltage:	12Vdc
Power:	10W
Mass:	600 gm

Environmental Data

Temperature Range	
Operating:	-30° C to +60° C
Storage:	-40° C to +70° C
Shock resistance:	Details on request
Vibration tolerance:	Details on request

Mechanical Dimensions

Height:	83 mm
Width:	91 mm (over GigE connector)
Length:	138 mm

Optical Data

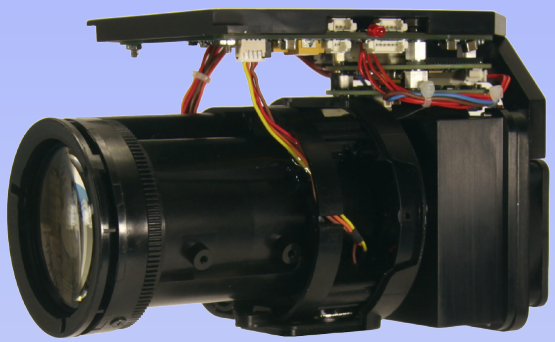
Lens:	12x powered zoom
FOV:	Wide: 43° x 33° Tele: 3.5° x 2.5°
CCD Type:	TI Colour EMCCD, frame, interline transfer *or* monochrome EMCCD, frame, interline transfer
CCD Format:	½ inch
Active Pixels:	658 (H) x 496 (V)
Image Readout:	Digital
Digital Interface:	GigE

Housing Options.

1. Frame camera only (as shown above).
2. May be supplied gimbal mounted — details on request.

DVS Cameras

* Designed and manufactured in the United Kingdom



Operational illumination range

FULL SUN to STARLIGHT.
Both monochrome and colour versions will provide a full 24 hour operation.
Colour version will provide colour images down to very low light levels. Cut filter may be automatically removed for greater sensitivity in conditions of low signal input.

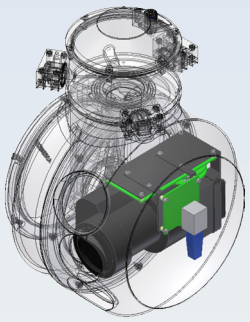
GMS (Gain Management System) Performance

Automatic provision of the optimum image under all illumination conditions, using the GMS and Noise Filter.

LLCC MANUAL CONTROL OPTIONS:

Manual control of camera functions provides;

- Noise filter
- On-chip gain
- Video gain
- Electronic shutter
- Gamma — user selectable value
- Exposure control
- Cut filter operation



* Built to defence standards for Shock, Vibration, Temperature

DVS
Tel: +44(0) 1580 881199 Fax: +44(0) 1580 880910 email: info@dvsmil.com
Millham, Mountfield, Robertsbridge, East Sussex, TN32 5LA, UK

Note: EMCCD cameras are subject to UK government export licence regulations

DVS reserve the right to modify the data outlined without prior notice (E & OE)