

HD Format EMCCD Camera

The high resolution, HD format camera, providing a full 24 hour performance. Available for new systems or as a replacement upgrade for the widely used and successful DVS24/1000 EMCCD camera.

Unlike all previous EMCCD cameras this new camera does not suffer FRAME SHIFT SMEAR, therefore does not need a frame shift shutter.

Operates as a normal CCD camera; no danger of image burn, unlike intensified CCD cameras or EBCMOS cameras. Both a price and performance alternative for those camera types.



In addition to the proven performance of EMCCD cameras the new HD format camera offers even higher resolution and night vision capability. The camera, built around the latest OnSemi Interline Transfer sensor, has improved near infrared sensitivity. In addition, the sensor design includes an intra-scene gain feature providing the ability to image in extremely lowlight, even when bright objects are within the dark scene. DVS is, therefore, able to offer a single camera that is truly able to provide quality images from Sunlight down to Starlight.

Key Features and Benefits

Resolution	1920 x 1080 active pixels
Format	2/3 inch HD format
Global Shutter	Excellent imaging over moving objects
Frame Rate	60 fps in standard Mode
Intra-Scene Switchable Gain	Dynamic compensation under changing conditions
Wide Dynamic Range	Imaging of bright regions in an otherwise dark scene
Exceptional Low Light Imaging	Enables imaging in widely varying conditions, Sunlight to Starlight
Image Readout	USB3 or HD-SDI (customer specified at time of order)

Technical Specifications

General Data

Input Voltage:	12Vdc
Power:	30W typical cooled 18W typical uncooled
Mass:	<0.500kg (module form) < 0.750kg (housed)

Mechanical Dimensions

Square Mono-body camera	
Length	90mm
Width:	60mm
Height:	60mm
Mounting:	¼" UNC Tripod Thread

Environmental Data

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

Optical Data

Lens Fitting:	C-mount (custom fittings on request)
CCD Type:	OnSemi: EMCCD Monochrome EMCCD Colour Customer specified at time of order
Active Pixels:	1920 (H) x 1080 (V)
Output:	Monochrome or Colour subject to camera type ordered
Image Readout:	USB3 or HD-SDI Customer specified at time of order
Frame Rate:	60 fps in normal mode 30 fps in intra-scene mode

Operation

Camera is automatic in operation and includes the DVS Gain management system providing the optimum image over a full 24 hr period.

Manual Control Operation

Manual control of camera

Options

1. Customer specific configurations
2. Customer specific housing
3. Available in modular form
4. Lenses available on request



Monochrome in clear starlight



Colour in clear starlight