

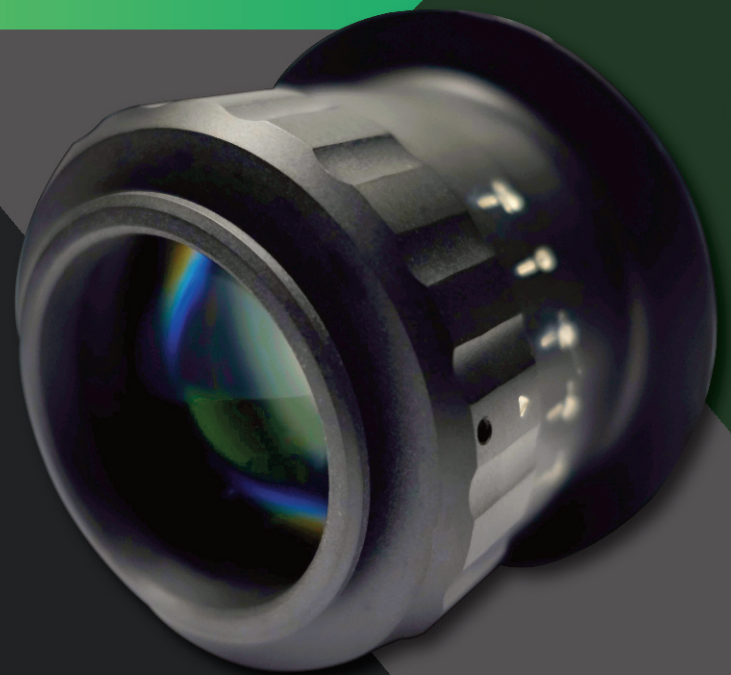
Cobra-Eye

EXCELITAS
TECHNOLOGIES®



Light Weight Flat Field Display for SXGA Micro Display

Cobra Eye, compact and light weight flat field eyepiece based on providing the user with high quality performance optically while ensuring comfort in a lightweight robust design. Cobra Eye enables a low distortion, wide field of view image, this makes it the ideal choice for integration into thermal, night vision, virtual reality, and augmented reality systems. The design of eyepiece utilizes a combination of glass and plastic elements to meet a required weigh of 60g with a -6D to 2D dioptic adjustment. It has excellent correction of aberrations and colour, which provides high resolution images across the FOV. This also makes the eyepiece ideal for monochrome and colour display viewing applications. In addition Cobra Eye avoids vignetting to ensure uniformity in brightness across the total FOV. The lightweight optic is configurable to customer needs.



22mm
EFL



COTS

DIOPTRER
+2D to -6D

1280 x 1024
SXGA
Micro Display

ITAR
FREE



Applications

- Border Surveillance
- Law Enforcement
- Marine and Naval Surveillance
- Hunting

Enabling the future through light

www.excelitas.com

Cobra-Eye

Light Weight Flat Field Display Eyepiece for SXGA

Eyepiece Parameters

Resolution:	50lp/mm
Distortion:	4%
Pixel Pitch:	9.6um
Compatibility List:	EMAGIN Microoled
Effective Focal Length:	22mm
Eye Relief:	25mm
Full Field View Angle:	40°
Dioptr Range:	+2D to -6D
Max Display Size:	12.3mm x 9.8mm, 15.7mm Diagonal (SXGA)
Weight:	60g

Field of View

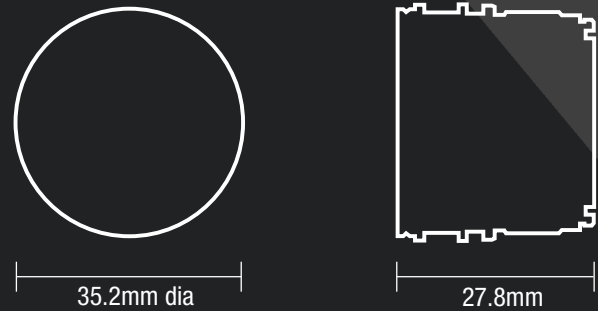
Display	Pixel(um)	Display	HFOV	VFOV
VGA	15	640x480	24°	18°
DSVGA	15	800x600	30°	23°
SVGA+	15	852x600	32°	23°
SXGA	9.6	1280x1024	31°	25°

Environmental Specifications

Operating Temperature:	-40°C to + 55°C
Storage Temperature:	-51°C to +71°C
Vibration:	5 to 55Hz and force up to 2.5g
Mechanical Shock:	40g / 6ms
Solar Radiation:	MIL-STD-810G
Sealing:	IP68

Mechanical Interface

Size



Parts are subject to controls under the Singapore, Strategic Goods (Control) Act (SGCA).

Excelitas Singapore is registered and compliant, with Singapore Customs and adheres to the Strategic Goods (Control) Act (SGCA), a set of government regulations that controls the manufacturing and exporting activities of defence articles.

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