

# Subsea Low-Light Camera (LLC)

This low light camera has been specially developed by SLD for underwater inspections and navigation applications, involving very low subsea light levels and poor visibility, yet producing high resolution images.

Designed for a depth of 3000m, this unit comprises of an extremely sensitive high resolution camera with a high power led-array and a large dynamic range, lending itself to optimum operation in low and high light intensities. It also has a motorized zoom, auto focusing and an auto iris, for maximum flexibility.

Active cooling of the CCD is utilized to reduce thermal noise along with innovative digital processing to remove normal background noise associated with pixel to pixel variation.

In circumstances of high turbidity, the camera may be used in conjunction with SLD's Intelligent Imaging Software, which reduces the noise associated with turbid sea water in order to produce an enhanced image.

The low light camera has a superior performance in comparison to a traditional SIT camera, in terms of capturing images in dense and murky underwater environments.

The camera is designed for use on permanent installations and can also be used as a video pig for pipeline inspection.



## Technical Specifications

<b>Weight</b>	12Kg
<b>Dimensions</b>	External: 150mm (D) x 350mm (L)
<b>Power Consumption</b>	50W
<b>Depth rating</b>	3000m
<b>CCD Modules</b>	Cooled down to 100°C
<b>Resolution</b>	512 x 512 pixels
<b>Frame per second</b>	30 FPS
<b>Lenses</b>	Zooming 12x or 24x
<b>Focal Length</b>	4,5mm, 6mm, 12mm
<b>Illumination Ring (Optional)</b>	6 x 1 W at 473nm
<b>Data Transmission</b>	RS-232 and Composite
<b>Software</b>	Friendly software which requires no expert to operate



### Features

- High resolution, 658 VGA with outstanding low-light-level gain sensitivity
- Large dynamic range allowing operation in low and high light intensity
- Motorized zoom and auto iris for maximum flexibility
- Intelligent software to reduce noise associated with turbid seawater
- Digital processing to remove the normal background associated with pixel to pixel variation and the thermal noise
- Compact and light weight unit suitable for eyeball ROVs and AUVs