

CamIR adapter¹⁵⁵⁰

High Resolution near infrared converter for CCD cameras

The **CamIR adapter¹⁵⁵⁰** enables standard CCD cameras to image in the NIR range 1495-1595nm. The module is inserted between a large format lens and a CCD camera to give an instant imaging system which extends sensitivity into the telecoms wavelength bands.

AST's proprietary conversion optics converts the 1495-1595nm wavelength band to Si-based CCD detectable wavelengths without undesirable fading or lag during use. The large format anti-reflection coated input window ensures maximum image resolution is transferred to the attached CCD camera.

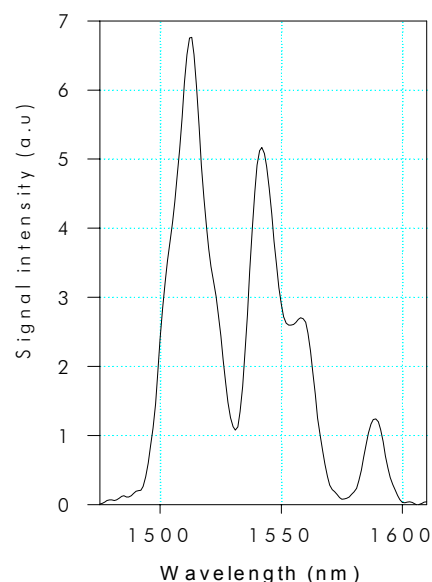
The CamIR adapter is available as an OEM product only. Please contact AST for customised badging and volume pricing.

CamIR adapter¹⁵⁵⁰



- **Extends the range of CCD cameras into the infrared – (1495-1595 nm)**
- **High resolution, low distortion and good uniformity gives superior image quality**
- **No image fading or lag**
- **Cost effective**
- **Works with selected CCD cameras**
- **High quality anti-reflection coated optics used throughout**

IR Excitation Spectrum



Technical Specification

Optical characteristics	
Active area	Ø27.5 mm
IR spectral sensitivity	1495 to 1595 nm
Peak IR sensitivity	1510 / 1540 nm Note that spectral response is not flat across IR range. Multi-peak response.
Maximum Resolution	12 lp/mm over active area 40 lp/mm at CCD focal plane
converted IR output λ	950 to 1075 nm
Distortion	-1.0% Barrel Distortion (Inverted image)
Linearity	Non-Linear IR converted output \propto IR input intensity $^1.41$
Spectral Transmission	360 to 2000nm at F30.8
Maximum Illumination	1 W/cm ² (damage may occur if this limit is exceeded)
Dynamic Range	Examples of expected dynamic range: Analogue cameras: Typically 30 – 40dB Digital cameras: Typically, 12 bit (48dB), 16 bit (68dB)
Other characteristics	
Dimensions	Ø 46 mm x L 97 mm
Operating Temperature	-10°C to + 40°C
Weight	210g

Requirements	
Lens Mount	42mm mount and C-Mount (adapter supplied) T, Canon FD, Minolta, Pentax K, Nikon, Olympus (adapters available separately)
Lens format	Large format (>28mm image circle)
Camera format	½" format
Camera Mount	C-Mount

Application Areas

- **Beam shape profiling** **Covert Surveillance**
- **Machine vision** **Material inspection**
- **Imaging optical outputs of components such as optical fibre ends, amplifiers, routers and switchers, fibre gratings, splitters and couplers.**



Continuous Development - AST is continually developing technology to meet the advances in camera technology. In addition to our standard product range, AST has the ability to customize solutions for particular design specifications.

In the interest of product development Applied Scintillation Technologies reserve the right to make alterations to any of its product range.

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