

KEY BENEFITS

- ▶ Enhanced Visibility 24 hours/day in all types of weather conditions
- ▶ Compact and versatile thermal imaging dual band sensor
- ▶ Can be used in a multi-sensor array, for vehicle situational awareness or border surveillance applications
- ▶ Designed and made for use in all environmental conditions
- ▶ Continuously operable at ambient temperatures from -40°C to $+50^{\circ}\text{C}$, even during exposure to solar radiation
- ▶ Qualified to vibrations and shocks typically associated with military vehicle operations
- ▶ PAL / NTSC video configurations available in digital or analog output configuration
- ▶ Maximum Exportability



MINERVA Dual Band Sensor





MINERVA

Dual Band Sensor

OVERVIEW

The Minerva dual band sensor is a compact and versatile sensor system ideal for driver's vision enhancement, rear or reversing camera applications, or general situational awareness.

This module has a thermal imager integrated with a colour/low light day camera. This combination allows enhanced visibility 24 hours per day in all types of weather conditions.

This thermal imager has both enhanced sensitivity for night viewing and new powerful sensor electronics with non-linear AGC (Automatic Gain Control) suitable for high dynamic scenes day or night.

Thales has designed the MINERVA dual band sensor module in a small footprint: 58mm x 93mm x 110mm sealed enclosure with the ability to be fully submerged in water for extended periods of time; a significant feature for vehicles with amphibious capability.

All exposed optical surfaces incorporate a tough diamond-like coating (DLC) or Sapphire Window that is resistant to scratching and abrasion.

DAYLIGHT SENSOR

The daylight sensor is also available as a stand alone camera and it is configured for low light as well as maximum high dynamic range scenes.

SWIR VARIANT COMING IN 2014!

SPECIFICATION

SPECTRAL BAND:

- 8-12 μm

DETECTOR:

- Microbolometer UFPA 640 x 480, 1024 x 768

IR HFOVS:

- 13°, 27°, 40°, 50°, 60°, 90°

DAYLIGHT FOVS:

- 16°, 32°, 42°, 54°, 78°, 96°

FOCUS:

- Athermalized, Focus Free, 5m to Infinity

INPUT POWER:

- MIL-STD-1275 compliant 28 VDC or 12 VDC vehicle supply

VIDEO OUTPUT:

- EIA-RS-170A (30 Hz) or CCIR (25 Hz)

VIBRATION:

- MIL-STD-810E, Table 514.4 All

BLOWING SAND & DUST:

- MIL-STD-810, Test 510.3

OPERATIONAL TEMPERATURE RANGE:

- -40°C to +50°C

IR SENSOR DIMENSIONS (mm):

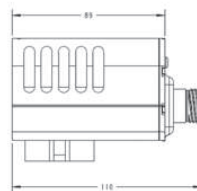
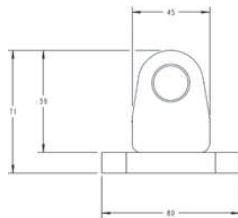
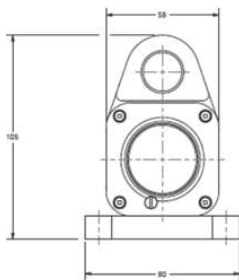
- W: 58, H: 93, D: 110

DAYLIGHT SENSOR DIMENSIONS (mm):

- W: 45, H: 59, D: 110

WEIGHT (g):

- < 1000



Thales has a policy of continuous development and improvement and consequently the equipment may vary from the description and the specification of this document. This document may not be considered as a contract specification. Graphics do not indicate use or endorsement of the featured equipment or services.

THALES CANADA, DEFENCE AND SECURITY, OPTRONICS – 4868 Levy Street, Saint-Laurent, Quebec, Canada H4R 2P1
 Tel: +1 (514) 337-7878 - Fax: +1 (514) 337-1107 - E-mail: info@ca.thalesgroup.com