



CM-IRH

VEHICLE ELECTRONICS

Camera Module InfraRed – CM-IRH

The Camera Module, CM-IRH, is a compact thermal camera unit. It includes a VGA LWIR sensor module and digital processing blocks for video transmission and camera control over Ethernet according to the Saab Video Distribution System (VDS).

The unit is designed for distributed power typically routed from adjacent Ethernet-switch e.g. single cable concept.

Saab is able to meet specific customer needs for highly specialized products and services in a number of technical areas. Our rugged vehicle computer- and video- systems are designed to provide high levels of performance and reliability in the toughest environments. Whether your need is minimum space or maximum capability, we can provide a system to meet your specific application.

Main design features

The CM-IRH includes a LWIR sensor module, a lens, video-, communication processing and power supply. The front glass holder includes a defroster. While not in use, the front glass is protected by a fully automatic controlled powerful hatch to protect glass from dust or external forces.

The Saab DIVA-CORE is used for video transmission over Ethernet, as part of the Saab VDS concept.

The Saab VDS concept support distribution of video with high image quality and very low delay of transmission from camera to display.

- LWIR VGA resolution
- Military connector
- Climatically sealed housing
- Protective hatch
- Prepared for future functionality
- Fast start-up
- Qualified according to MIL-STD-810F, MilStd-1275 and MIL-STD-461F

Configuration

- Resolution; 640 x 480 active picture elements
- Pixel pitch; 17 μm
- Array type; uncooled microbolometer (a-Si)
- Thermal sensitivity; (NETD) 55 mK @ 30°C with f/1 lens
- Spectral band; 8 μm to 14 μm
- NUC shutter for calibration
- Horizontal orientation (“laying”)
- Lens: 9.6 mm f/1.0, athermalized, fixed focus, HFOV approx. 69°
- Germanium front glass, hard/AR-coated + defroster
- Saab DIVA-CORE module
- Distributed power, single cable design
- Power input, based on MIL-STD-1275, normal mode

External connectors

The unit is equipped with one rear, straight-out connector type MIL-C-38999, series 3.

Mechanical interface

The RCAM-IR is assumed to be fixed mounted in the vehicle. External damping devices are not required.

Dimensions

| | |
|--------|------------------------------|
| Height | 100 mm |
| Width | 160 mm |
| Depth | 160 mm (external connectors) |
| Weight | Approx. 5 kg |

Miscellaneous

Power consumption: nom. 10 W, max. 120 W (defroster active)

Options

- Camera lenses, customized field of view
- Vertical orientation (“standing”)

Environmental

- Operating temperature: -40°C to +60°C
- Storage temperature: -46°C to +70°C

Specifications subject to change without notice

