

Vision Enhancer Module (VEM)

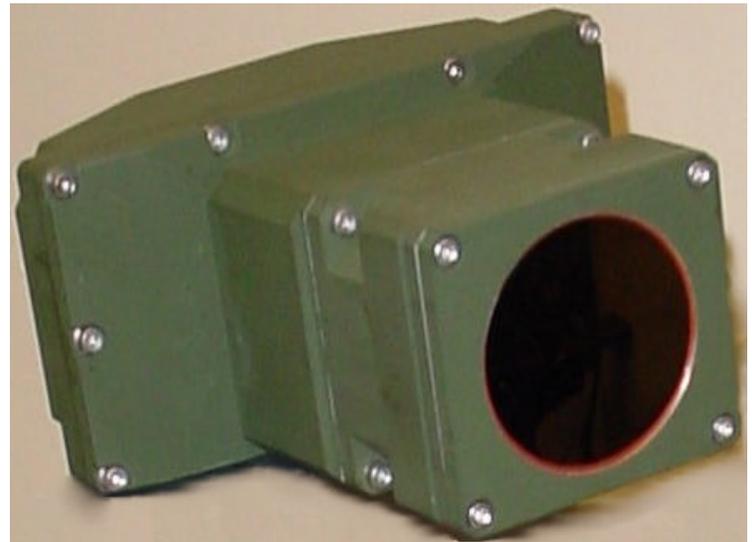
THALES

Date Revised: 27 JAN 04

VENDOR DESCRIPTION

The VEM unit is a passive uncooled Thermal Imager (TI), operating in the far spectral band. VEM operations are fully controlled via serial link.

- High-resolution uncooled focal plane array
- Fast optics (F# 0.8), resulting in a very sensitive system
- Athermalized optics
- Large field of view (FOV)
- Compact and lightweight aluminum housing
- Sealed enclosure ensuring reliable operation in harsh environments
- One connector only
- Low power consumption



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Business Category: Large Business

PIR

Hardware		Environmental	
Interface:	RS-422	Operational Temp. High:	+55°C
Video output:	NTSC or PAL	Operational Temp. Low:	-40°C
Field of view:	Horiz. 40° x Vert 30°	Storage Temp. High:	+55°C
NETD:	< 50 mK	Storage Temp. Low:	-46°C
Steady state voltage:	18 Vdc to 32 Vdc	Altitude	Operational up to 3048 m (15,000 ft)
Consumption:	3.5 watts	Humidity	98% relative humidity per MIL-STD-810E
Weight:	3 kg	Immersion	Resistant per MIL-STD-810, Test 512.3, procedure I for 2 hrs in 1m H ₂ O
Dimensions	132 mm (length) x 140 mm (width) x 78 mm (height)	Cleaning	Operational after exposure to ½ inch water stream at 415 kPa at range of 2 meters for 10 minutes
Mating connector P/N:	JD38999/26JB35JN (Stress relief hardware P/N: M85049/91/11J) or D38999/26WB35SN	Sand/Dust	Resistant per MIL-STD-810, Test 510.3, procedure II for 90 minutes per face and MIL-STD-810, Test 510.3, procedure I
MTBF:	> 10,000 hrs	Salt	Resistant per MIL-STD-810E, Method 509.3, procedure I
		Fungus	Resistant to MIL-STD-810, Test 508.4, procedure I
		Shock/Vibe	Random vibration, drop test & loose cargo test / MIL-STD-810E
		EMI/EMC	Complies w/MIL-STD-461, Level CE 102, CS 101, CS 114, RE 102, RS103, RS105-1, CS116

Target Range DRI	Conditions	Detection	Recognition	Identification
NATO	Target contrast: 1.25C Target dimension: 2.3m x 2.3m Probability of detection: 50% Atmospheric transmission: 0.7 km-1	1 km	330 meters	170 meters
Group of 3 Men	Target contrast: 2C Target dimension: 1.8m x 2.3m Probability of detection: 50% Atmospheric transmission: 0.7 km-1	960 meters	290 meters	150 meters