



NAVBOX | 10-A

aselsan

MILITARY GRADE AI COMPUTING UNIT

#Navigation



INDUSTRIAL GPU MODULE
DIVERSE INTERFACE
MULTI-SENSOR CONNECTION
AI-READY
VISUAL NAVIGATION



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MILITARY GRADE AI COMPUTING UNIT

NAVBOX 10-A is a military grade, high performance computing unit, designed by ASELSAN, to be used in sensor fusion and edge AI applications.

NAVBOX 10-A runs ASELSAN Visual Navigation System, integrating ASELSAN FLIR and ANS Systems seamlessly, in GNSS-denied environments, providing accurate navigation capability when GNSS jamming/spoofing is present.

NAVBOX 10-A utilizes a 275-TOPS industrial grade GPU SoM for the most computationally demanding tasks such as AI at the edge. The device includes a 2 TB industrial grade SSD for ultra-fast data storage.

NAVBOX 10-A provides various high-speed connections, for different applications, such as USB 2.0/3.0 and 1 Gbe ethernet.

Applications

- Visual Aided Navigation
- Alternative Navigation Applications
- Sensor Fusion Applications
- Edge-AI Applications

General Specifications

- Input Voltage: 28 VDC
- Power Consumption: up to 80 W* (including fans).

System Interfaces

- Military grade circular connectors
- 4xRS422
- 2xCAN bus
- 4xEthernet (1 Gbe)
- 1xHDMI
- USB 3.0

Visual Aided Navigation System

NAVBOX 10-A presents ASELSAN Visual Aided Navigation System (VANS) for aerial platforms such as UAVs and rotary-wing platforms, which can utilize ASELSAN FLIR systems' imaging capabilities, as well as other imaging sensors on-board, and provides accurate, absolute position information for ANS where GNSS information is not available or unreliable.

VANS features multi-modal image matching, from DayTV and/or MWIR images, to provide the platform continuous mission capabilities for both day and night operations.

Environmental Conditions

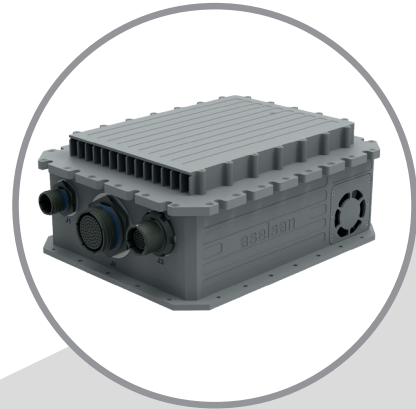
- Operating Temperature: -40 to +55 deg Celsius
- MIL-STD-704F and MIL-STD-810F/G compliant.

Electromagnetic Conditionss

- MIL-STD-461 CE 101/102, CS 101/114/115/116, RE101/102 and RS103

Dimensions and Weight

- Dimensions: 244x188x95.5mm (LxWxH)
- Weight : < 3000 gr



Specifications are subject to change without any notice. | All tolerances are within $\pm 10\%$.