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# ANTI DRONE'S RADAR COMPUTER (RC)



Commitment towards Technology & Quality Services

## INTRODUCTION

*The Radar Computer (RC) will be used in Anti Drone System. It has been designed in compliance with MIL-461E and MIL-STD-810G. It is highly compact, lightweight, ideal for outdoor harsh environments.*

*The Radar computer primarily consists of 2 Nos of Single Board Computer (SBC), GPGPU module and a Power supply module. Among the 2 Nos of SBCs, One No of SBC is dedicated for Signal Processing (which is Windows 10 based OS) and second SBC is dedicated for Radar Data Processing & Radar controller (which is Linux based OS) functions.*

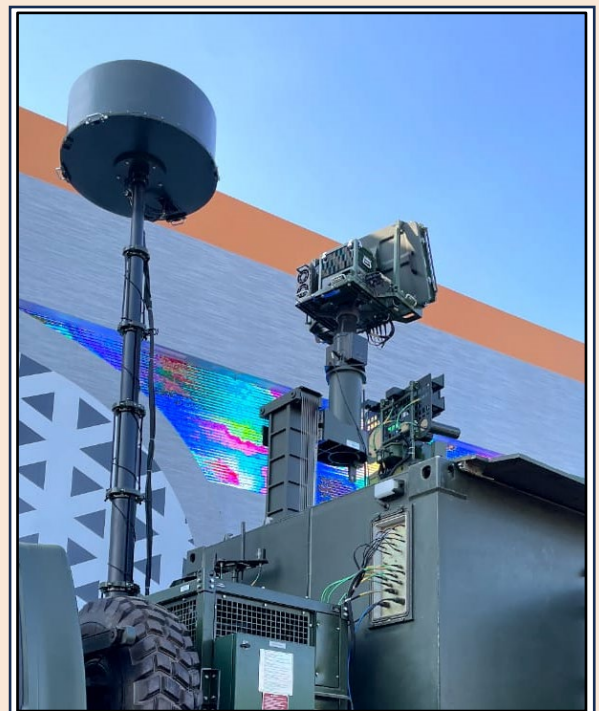
*Radar processing and Signal processing algorithms of RC will be used for tracking drones, tracing and killing of deleterious drones with the great accuracy. Range of the radar will be about 5kms.*

*The Radar computer will be interfaced with the Exciter–Receiver (Ex-Rx) with expanded beam optical connectors. The data received from the antenna will be sent to RC through Ex-Rx. sFPDP converts Optical signals into the electrical signals.*



### ➤ KEY FEATURES:

- Compact design
- 2 Nos of Xeon – Based Single Board Computer
- Embedded with sFPDP card used for signal processing.
- SBC will be connected to GPGPU through PCIe
- Rugged Construction to meet MIL Standards
- USB/Ethernet / RS232/R485 Connectivity
- Connector for External Display Interface
- Connector for External Ex-Rx\_ALNS.





➤ **TECHNICAL SPECIFICATION:**

SBC's Processor	Intel Xeon, 3U VPX, 12Core
Ethernet	1 no of 1 Gb Ethernet, 1 no of 10 Gb Ethernet
SBC's	2No's
GPGPU	1No
RAM	32 GB
Storage	320 GB SLC based SSD (OS Disk)
OS	RHEL 7.X (Latest Version) / Windows 10
Serial Port	2 RS232, 1 RS422
Display	1 no HDMI
GPIO	2 Nos
sFPDP Module	XMC interface, 4Channels, 2.5 Gbps
sFPDP Interface	LC Duplex



➤ **ELECTRICAL SPECIFICATION:**

Input Voltage	+28V DC
Power	+28V DC, ON/OFF Switch and Status LED
Operating Temperature	-20°C to +55°C
Storage Temperature	-30°C to +85°C

➤ **MECHANICAL SPECIFICATION:**

Weight	14 Kgs
Dimensions (LxWxH)	332x150x273
Material	Aluminium
IP rating	IP65
Mounting	Flange/ Screw mount

**MECHANICAL DIMENSION:**

