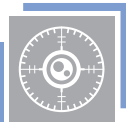




3D Radar M4 3D Air Surveillance Radar



This three-dimensional air surveillance radar is a tactical, long range, fighter interceptor system with active phase array antenna; early warning; and ECCM capabilities operating in S band. It is developed to meet the primary requirement of the first stage of air defense network. The tactical and mobility feature of the system as well as reducing number of operators and organizations in charge can be regarded as an end user strategy element. Air targets intelligence which is detected by different sensors such as tracking radars, medium and short range radars are transferred to a command and control shelter via a secure network and will be combined in that center.

APPLICATIONS

- Burn Through: concentrating the power in the direction of the active jammer in order to increase the radar range in the direction of the active jammer
- SLB: blanking the active input jamming signals from the side lobe
- SLC: cancelling the active input jamming signals from the side lobe
- Frequency hopping: random selection of radar operating frequency to encounter active and passive jammers
- JATS: smart selection of radar operating frequency by analyzing the active jamming signals
- Pulse Compression: standing against active jammers and providing the radar with capability of Low Probability of Interception (LPI)
- CFAR: standing against passive jammers and determining the automatic threshold level.
- Clutter Map: standing against passive jammers and cancelling the surface strong clutter
- Low SLL Antenna: standing against Anti-Radiation Missile (ARM) and passive jammers
- Sector Blanking (transmission switch off): turning off the transmitter in standby mode in order to hide radar from interception equipment and also keeping it safe against Anti-Radiation Missile (ARM)
- Pulse Doppler Mode: standing against the passive jammers like chaff and better cancellation of volume clutter.

