

TOTAL AWARENESS



OERLIKON AMMR

AESA MULTI-MISSION RADAR

The Oerlikon AMMR (AESA Multi-Mission Radar) represents a modern radar, which offers superior performance, ease of operation and can be elegantly integrated in a wide range of platforms. By using adaptive full digital beamforming techniques in the S-band it is predestined for short and very short range air defence (SHORAD / VSHORAD) applications. The full spectrum of air threats, classical, emerging and asymmetric can automatically be detected, classified and tracked. Even the most demanding targets such as mini/micro UAS and rockets, artillery and mortars (RAM) performing high angle attacks or unpredicted movements are successfully detected and processed.

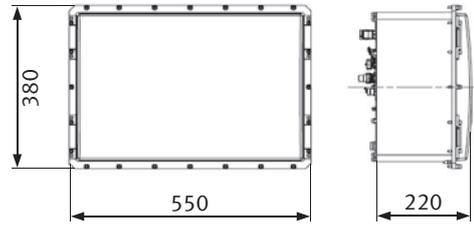
Multiple waveforms and settings are chosen in real time to optimally scan the air in azimuth and elevation. Once a target has been detected, the powerful post processing algorithms embedded in the system are used to spectrally analyze the exact nature of the target. Multiple contacts can be tracked and classified simultaneously. Based on over 60 years of experience in air defence, the Oerlikon AMMR is designed to operate under the most trying environmental and jamming conditions and has been equipped with the latest ECCM features.

Each single radar panel provides 90° azimuth and elevation coverage. Multiple panels can be merged together offering full 360 degrees awareness.

MAIN FEATURES

- Software-defined pulse Doppler multi-mission radar
- Simultaneous scanning for a wide range of threats
- AESA (Active Electronically Scanned Array) staring antenna
- Gallium nitride solid state amplifiers
- Fully digital beamforming technology
- Automatic target classification (FW, RW, RAM, UAS, missile)
- Outstanding ECCM performance (wide band frequency management, track-on-jammer, asynchronous pulse suppression, low probability of intercept, SLC/MLC/SLB)
- Compact design, low weight and easy installation for a wide range of tactical applications (stationary or mobile)
- On the move operation
- High reliability, fault tolerant design

AMMR SINGLE TILE STARING



SPECIFICATIONS

| Parameter | AMMR – single tile | Detection range | |
|-----------------------|--|---------------------|--------|
| Frequency band | S band | Fighter aircraft | >20 km |
| Volume coverage | 90° azimuth (±45°), -20° to +70° elevation | Hovering helicopter | >12 km |
| Technology | AESA staring antenna, GaN solid state transmitters | Missile | >10 km |
| Interfaces | Ethernet, ASTERIX protocol | RAM | >5 km |
| Input power | 28V | Small UAS | >5 km |
| Power consumption | 900 W | | |
| Dimensions | 0.38 x 0.55 x 0.22 m (H x W x D) | | |
| Weight | 32 kg | | |
| Operating temperature | -40° to +50°C plus solar radiation | | |

We reserve all rights in connection with this document. Data and descriptions have only an information value. Modifications are reserved.

Rheinmetall Italia S.p.A.

Via Affile 102 · 00131 Rome · Italy · info@rheinmetall.it · www.rheinmetall.com