

DORUK | DBF

Digital Beamforming
Radar



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Digital Beamforming Radar

Electronically Scanned Radar system family operating in the X-band and based on a Digital Beamforming (DBF) architecture.

2D DBF

Designed as a 2D Frequency Modulated Continuous Wave (FMCW) Radar system. This radar system offers low antenna output power and high portability features.

• Detection Range	10 to 15,000 m
• Target Speed	0.2 to 30 m/s
• Elevation Coverage (Single Panel)	20°
• Azimuth Coverage (Single Panel)	20°

Target Detection Ranges

• Small UAV	≤ 3 km
• Pedestrian	≤ 6 km
• Small Vehicle	≤ 8 km
• Helicopter	≤ 12 km

3D DBF

Digital Beamforming (DBF) based Frequency Modulated Continuous Wave (FMCW) 3D radar.

The Radar can be effectively utilized in various mission scenarios such as surveillance radar, tracking radar, fire control radar, and reconnaissance radar.

• Detection Range	50 m – 30.000 m
• Elevation Coverage	90°
• Azimuth Coverage	360°
• Range Accuracy	5 m
• Target Speed	2-400 km/h

Detection Range

• Small UAV (RCS ≤ 0,01 m ²)	≤ 6 km
• UAV (RCS ≤ 0,1 m ²)	≤ 10 km
• Small Vehicle (RCS ≤ 0,3 m ²)	≤ 13 km
• Helicopter (RCS ≤ 1 m ²)	≤ 17 km

