

# DORUK | VR

Vision Radar



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## Vision Radar

DORUK-VR is a cutting-edge Integrated Detection and Surveillance System consists of DORUK 3D Radar, Day/ Thermal Cameras, Laser Range Finder and Laser Designator Components as Fully Integrated System

### Specifications

#### X-Band Pulse Doppler Radar with Pulse Compression

- Multi-target tracking up to 300 targets
- Simultaneous detection & classification
- Track-while-scan capability
- High accuracy and resolution
- Adjustable sector width
- Azimuth Coverage 360°
- Elevation Coverage 55°
- Scanning Rate up to 30 rpm

#### Detection Range

- Small UAV (RCS = 0.01 m<sup>2</sup>) ≤ 6 km
- UAV (RCS = 0.1 m<sup>2</sup>) ≤ 10 km
- Pedestrian ≤ 5 km
- Glider ≤ 20 km
- Big vehicle ≤ 20 km
- Aircraft ≤ 28 km



#### Thermal Vision (night) Module

- Sensor Type Cooled
- Spectral Range 3–5 μm
- Sensor Resolution 640 × 512 pixels
- Optical Zoom ×22
- Digital Zoom ×4
- Wide FOV (Horizontal) 35.4° ±10%
- Narrow FOV (Horizontal) 1.6° ±10%



#### Day Tv Module

- Image Characteristics Full HD (1920×1080), Frame Rate > 25 fps
- Picture Mode Color, B&W
- Optical Zoom ×22
- Digital Zoom ×12
- Wide Horizontal FOV 58.1° ±10%
- Narrow Horizontal FOV 2.3° ±10%
- Ultra Low Light Feature



#### Laser Rangefinder (LRF)

- Wavelength 1064 nm
- Minimum Measuring Distance 100 m  
(For an Object Size of 0.5m x 0.5m and a Meteorological Visibility Range of 10 km)
- Maximum Measuring Distance 20,000 m  
(For an Object Size of 5m x 5m and a Meteorological Visibility Range of at least 30 km)
- Measurement Accuracy ± 5 m



#### Laser Designator

- Wavelength 1064 nm
- Laser Beam Divergence ≤ 0.5 mrad
- Range Measurement 1–30 Hz  
(single pulse)
- Designation Range up to 7 km
- NATO STANAG 3733 Compatible

