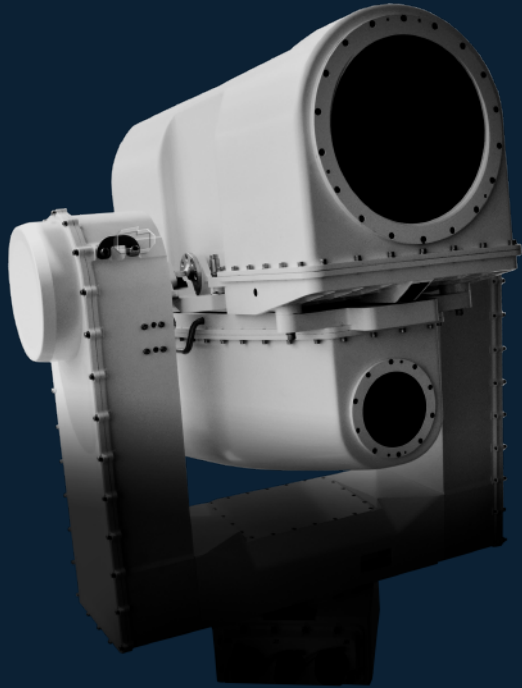


# TORNADO-ER

Advanced IR Scanning System



The TORNADO-ER is an advanced IR system designed to automatically detect and acquire land, air and maritime targets.

Tornado-ER is a passive, 360° panoramic scanning sensor, providing long-range detection in electronic warfare environments. It serves as a redundant or complementary system, creating a full scanning area supported by embedded artificial intelligence to assist the operator through real-time signal analysis and threat assessment.

The TORNADO-ER System provides a unique solution by using highly sensitive sensors and advanced Real-time video algorithms.

CONTROP's TORNADO-ER System may be integrated with complimentary components in order to offer a full solution for defense and homeland security (HLS) operational requirements.

# TORNADO-ER

## Advanced IR Scanning System

### Electro-Mechanical

Type: 2 Gyro-stabilized (2 Axes)  
Field of Regard: Azimuth: n x 360° (continuous)  
Elevation: +20° to -20°

### Thermal Imaging (TI) Sensor 400mm

Spectral Range: 3.0 - 5.0  $\mu\text{m}$   
Detector: FPA 640x512 XBN  
Lens: 400 mm  
Field of View: 1.3°

### Thermal Imaging (TI) Sensor 100mm

Spectral Range: 3 - 5  $\mu\text{m}$   
Detector: FPA 640x512 XBN  
Lens: 100 mm  
Field of View: 5.5°

### Physical Characteristics

TI 400mm Weight: 20kg  
TI 100mm Weight: 13kg  
Gimbal Weight: 42kg

### Electrical Interface

Voltage: 220 VAC or 28VDC  
Power Consumption: 500 Watt (nominal)  
Video Outputs: GigE

### Environmental Conditions

Temperature: -30° to 55° C  
Humidity: Up to 95% (non-condensing)



75 kg



Radar



GPS



Control Unit



Command & Control Systems

### Features

Automatic Detection  
Panoramic View  
Target Acquisition  
Advanced Image Processing

### Optional

Control & Display Unit (CDU)  
Digital Video Recorder (DVR)  
AI Capabilities

### Image Processing

Local AGC  
Video Enhancement  
Automatic Video Tracker  
Automatic Scanning