



# TORNADO-ER



## ADVANCED AUTOMATIC TARGET ACQUISITION SYSTEM

The TORNADO-ER is an advanced IR system designed to automatically detect and acquire land and maritime targets. The TORNADO-ER System provides a unique solution by using highly sensitive sensors and advanced Real-time video algorithms. CP Technologies' TORNADO-ER System may be integrated with complimentary systems in order to offer a full solution for defense and homeland security (HLS) operational requirements. CP Technologies' EO/IR systems have been in worldwide daily operation since the 1990s, on a wide variety of air, maritime and land platforms.

### APPLICATIONS

- Coastal Surveillance
- Terrain Surveillance
- Border Surveillance
- Force Protection

### FEATURES

- Automatic Detection
- Panoramic View
- Target Acquisition
- Advanced Imaged Processing

## Who We Are

CP Technologies designs, fabricates and integrates standard and customized high-performance computing platforms and LCD monitors for military, industry, and commercial applications.

Using COTS components, CP Technologies provides solutions for customers who need reliable systems that will operate in a variety of harsh conditions and who require revision control and hardware consistency for multi-year programs.

CP Technologies is an ITAR Registered and ISO 9001:2015 Certified business that has been operating in Southern California for over twenty years.

**Assembled in the USA**  
**ISO 9001:2015 Certified**  
**ITAR Registered**

**CP Technologies**  
 2620 Deep Well Ranch Rd  
 Prescott, AZ 86301  
 combatproven.tech  
 858.571.4330



# TECH SPECS

## ELECTRO-MECHANICAL

<b>Type</b>	2 Gyro-stabilized (2 Axes)
<b>Field of Regard</b>	Azimuth: 360° x N Elevation: 20° to -20°

## PHYSICAL SPECS

<b>TI 400mm Weight</b>	44lbs / 20kg
<b>TI 100mm Weight</b>	29bs / 13kg
<b>Gimbal Weight</b>	92bs / 42kg
<b>Op Temp</b>	-10° C to 45° C

## OPTIONAL

- Control & Display Unit (CDU)
- Digital Video Recorder (DVR)

## IMAGE PROCESSING

- Local AGC
- Video Enhancement
- Automatic Video Tracker
- Automatic Scanning

## THERMAL IMAGING SENSOR 400mm

<b>Spectral Range</b>	3-5 $\mu$ m
<b>Detector</b>	FPA 640x512 XBN
<b>Lens</b>	400mm
<b>Field of View</b>	1.38°

## THERMAL IMAGING SENSOR 100mm

<b>Spectral Range</b>	8-12 $\mu$ m
<b>Detector</b>	FPA 640x512 XBN
<b>Lens</b>	100mm
<b>Field of View</b>	5.52°

## ELECTRICAL INTERFACE

<b>Voltage</b>	22 VAC or 28 VDC
<b>Consumption</b>	500W Nominal
<b>Video Out</b>	GigE

### QUESTIONS?

Reach out to us at  
combatproven.tech  
or call 858.571.4330

## ENGINEERED TO YOUR SPECIFICATIONS

- In-house engineering department
- Design and build of rapid prototypes. Experience with solving difficult customer application problems through knowledge of the industry and custom system design and manufacturing capability
- Our Engineers use Solid Works 3D CAD modeling software for mechanical design and thermal simulation
- Design experience with MIL-STD-167, MIL-STD-461, MIL-STD-810, and MIL-S-901, in addition to FCC, UL, CE, and country specific agency requirements

## REVISION CONTROL & CONFIGURATION MANAGEMENT

- Our Program Managers will assure your products are revision controlled for the life of the program
- Configuration Management to assure TAA Compliance and system compatibility
- One part number for life of the program
- Counterfeit and obsolescence management

## FACILITY AND TEST

- All integration work is performed in a state-of-the-art, ESD-controlled facility
- Our facility has 23,000 sqft and has dedicated 12,000 sqft to manufacturing and 3,000 sqft to engineering
- Operate to anti-static standard ANSI/ESD S20.20-2007 and electronics assembly standard IPC-A-610, Revision E-2010

## QUALITY COUNTS

- ISO 9001:2015 Certified
- 100% system inspection before shipment
- All integrated systems undergo a minimum 24-hour system test and burn-in before shipment to the customer
- Assistance with 3rd party verification of system specifications
- 5-year warranty on all servers and 3-year warranty on LCD monitor products
- TAA compliant
- Built in the USA

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