



**THERMAL  
RADAR**<sup>TM</sup>  
Visionary Thermal Detection

# 360° THREAT DETECTION

CONTINUOUS & COST-EFFECTIVE  
Perimeter and Infrastructure Protection



[WWW.THERMALRADAR.COM](http://WWW.THERMALRADAR.COM)



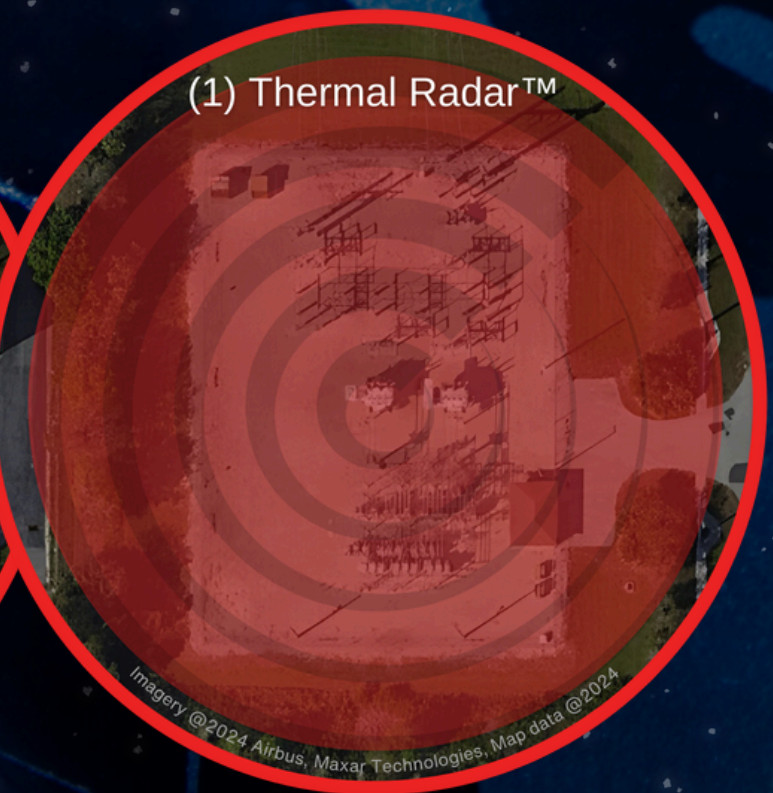
# THE THERMAL RADAR DIFFERENCE

- Inside-out approach to threat mitigation
- Slew-to-cue functionality to an integrated PTZ
- Edge analytics for human, vehicle & fire detection
- Optional Advanced AI-Powered Analytics for Deeper Data Insights
- Geospatial location-based detection alerts
- Patented thermal display of full 360° coverage area
- Independent customizable areas of interest / detection zones / priority zones
- Passive thermal detection and surveillance solution
- No export license required for most international applications
- Reduces device count, infrastructure, and licensing costs
- Proprietary adaptive analytics result in low false-positive alerts
- Simultaneous detection of multiple targets

## TRADITIONAL PERIMETER COVERAGE



## THERMAL RADAR COVERAGE



**Thermal Radar provides superior perimeter protection and decreases the costs of installation, licensing, monitoring, and maintenance.**



# CONTINUOUS THREAT DETECTION & IDENTIFICATION

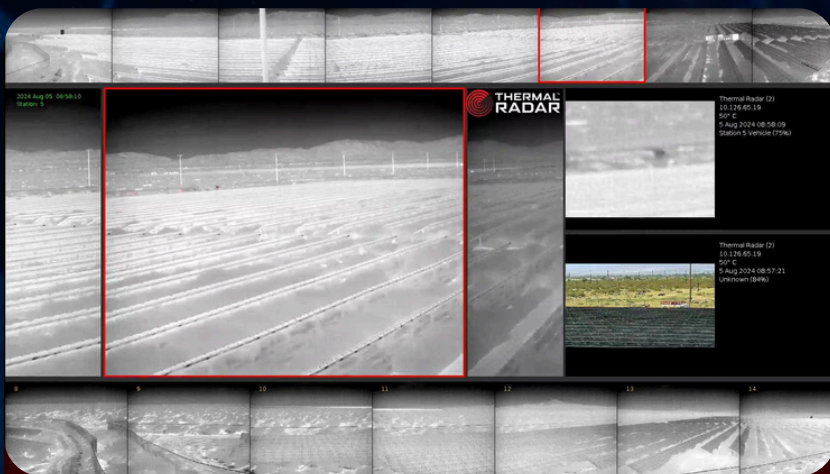
Hydra™ integrates Thermal Radar with many pan-tilt-zoom (PTZ) cameras for continuous thermal detection and automatic optical tracking/identification of threats. Hydra also integrates into many video management system (VMS) platforms.

## EXAMPLE OF INTEGRATED PTZs

- Avigilon
- Axis
- Bosch
- Hanwha
- Panasonic
- Sony
- Vicon

## EXAMPLE OF INTEGRATED PLATFORMS

- Avigilon
- Digital Watchdog
- Exacq
- Genetec
- IMMIX
- Milestone
- Network Optix
- Qognify
- Redvision
- Valerus
- VMS Core
- Wave

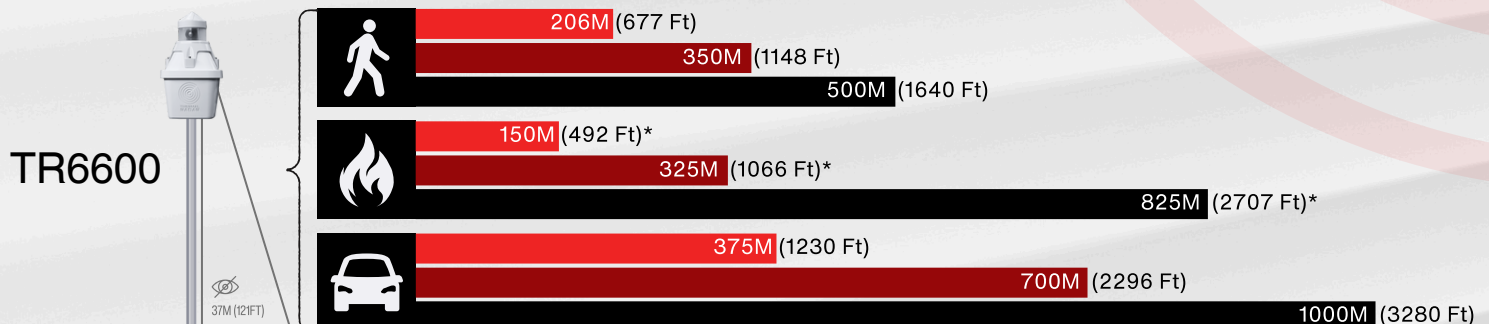
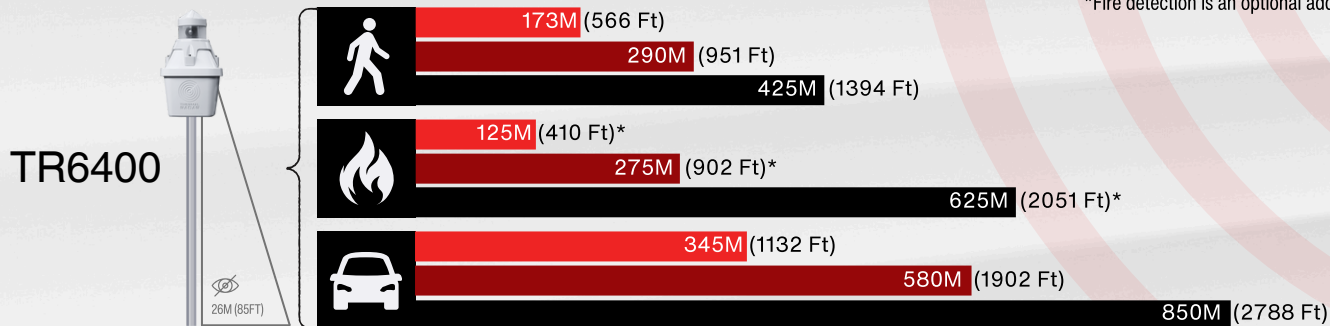
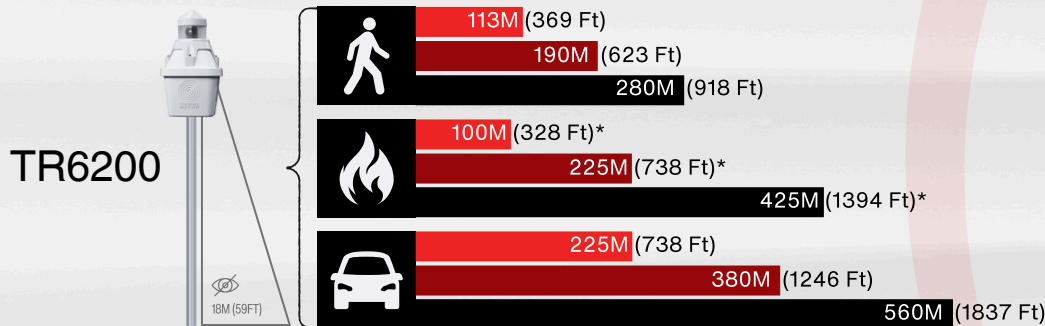
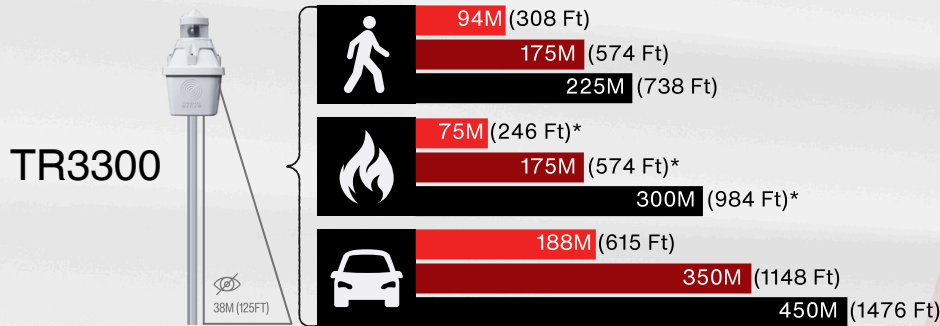
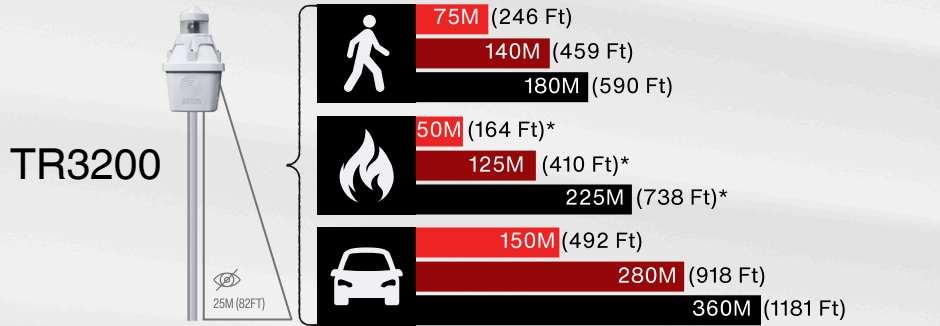


## VMS MONITORING

- 360° Thermal Coverage Display
- Geospatial Mapping of Threats
- Customizable Detection Alerts
- Customizable Priority Zones



# DETECTION RANGES



High Confidence Distance

Mid-Range Distance

Maximum Distance



Actual detection ranges may vary significantly depending on environmental factors, installation specifics, and other variables unique to the location. High humidity, for example, can reduce thermal contrast and impact detection performance, particularly over longer distances. Therefore, the distances shown here should be used as general estimates and not definitive guarantees of performance. We recommend consulting with security experts or certified installers to ensure the product and its installation align with your specific security requirements.

\*Fire detection is an optional add-on

Thermal Radar's fire detection analytics are designed to enhance early fire detection through advanced thermal imaging technology. However, performance may be influenced by atmospheric conditions such as fog, smoke, rain, snow, and humidity, which can affect visibility, detection accuracy, and range. Additionally, factors like fire size, intensity, growth rate, and the fire's distance from the camera may impact the system's ability to detect fires in a timely manner. This product does not guarantee the detection of all fires or the protection of property, assets, or individuals from fire-related damage or harm. Thermal Imaging Radar assumes no liability for fires that are not detected, or for any loss, injury, or damage resulting from a fire, regardless of the system's operational status. It is recommended that the Thermal Radar system be used as part of a comprehensive, multi-layered security and fire safety plan.



# SPECIFICATIONS

## 3- and 6-Series



	3-Series	6-Series
THERMAL IMAGER		
Type	Uncooled VOx Microbolometer	Uncooled VOx Microbolometer
Frame Rate	9Hz/60Hz	9Hz/60Hz
FPA Resolution	320	640
Image Bit Depth	2.3 - 16 bit thermal infrared	2.3 - 16 bit thermal infrared
Lens Focal Length	2.3mm -13.8mm	8.7mm - 24mm
Configuration	White hot or black hot configurable	White hot or black hot configurable
SPEED AND FIELD-OF-VIEW		
Rotation Speed	Between 15 and 60 RPM	Between 15 and 60 RPM
Image HFOV	360°	360°
Image VFOV	19° - 40°	14° - 39°
POWER REQUIREMENTS		
Input Power	IEEE PoE+ (802.3at) – LTPoE++ (90W)	IEEE PoE+ (802.3at) – LTPoE++ (90W)
Input Connection	RJ 45	RJ 45
Power Consumption	Less than 20 watts	Less than 20 watts
PROCESSOR AND ANALYTICS		
Processor	Quad Core 64-bit	Quad Core 64-bit
Memory	4GB Ram (Upgrade Available)	4GB Ram (Upgrade Available)
Embedded Analytics	Intrusion (Security) & Fire Detection	Intrusion (Security) & Fire Detection
Available Analytics	Optional Advanced AI-Powered Analytics for Enhanced Classification and Deeper Data Insights	
Detection Zones	Configurable areas of interest, exclusions, motion filters, skip stations, and priority zones	
COMMUNICATION/NETWORK SECURITY		
Ethernet	Autoswitch 100 Mbps–1 Gbps	Autoswitch 100 Mbps–1 Gbps
Network Security	HTTPS & TLS with password protection	HTTPS & TLS with password protection
ENVIRONMENTAL		
Operating Temperature Range	-35° to + 60° C (Up to 75° C Available)	-35° to + 60° C (Up to 75° C Available)
Storage Temperature Range	-35° to + 85° C	-35° to + 85° C
Protection Standard	IP67	IP67
PHYSICAL		
Dimensions	5.75" (W) X 7.075" (H) (146 mm X 197mm)	5.75" (W) X 7.075" (H) (146 mm X 197mm)
Weight	<7 lbs. (3 Kilos)	<7 lbs. (3 Kilos)
GENERAL		
PTZ Integration	PTZ Slew-to-Cue commands upon detection	PTZ Slew-to-Cue commands upon detection
VMS Integration	ONVIF compliant RTSP stream, alerts	ONVIF compliant RTSP stream, alerts
Warranty	2 Years	2 Years
RTSP VIDEO OUT		
Video Compression & Streaming	H.264	H.264
Resolution	Panoramic Stream Resolution 1080p	Panoramic Stream Resolution 1080p
Thermal Frame Rate	4 - 30 FPS	4 - 30 FPS







# THERMAL RADAR™

Visionary Thermal Detection

*Visionary*  
THERMAL  
DETECTION



Hydra™ on Gooseneck



Mobile Sentry™



Tower Sentry™



Hydra™ on Standard Arm

Custom Manufactured  
Mounting Options for  
Surveillance Trailers, Buildings,  
Light/Utility Poles, and Stand-  
Alone Solar Deployments