

### Product at a Glance

- ▶ Thermal detection and tracking of intruders up to 1640 ft/500 m in a 360° panoramic view
- ▶ Integrated high-speed PTZ provides real-time tracking
- ▶ Geospatial tracking on localized maps
- ▶ Excellent performance regardless of lighting or weather conditions
- ▶ Dual inputs to VMS provide PTZ image and multi-screen customized thermal display
- ▶ One thermal unit can replace up to 8 fixed cameras
- ▶ Perfect for large storage yards, parking lots, power plants or other secure areas



### OVERVIEW

Vicon's high-powered thermal sensor cameras provide 360° coverage of open spaces to detect, identify and track intruders. With Vicon's V2005D-PTZ Roughneck AI PTZ Dome, the solution delivers situational awareness of any physical incursion that may threaten a facility or its perimeter, doing the work of multiple fixed cameras and decreasing the number of security personnel needed to monitor critical areas.

The continuous 360° scanning for thermal intrusion detection monitors both inside and outside the perimeter using sophisticated analytics to determine and classify detections. It provides rapid geospatial detection of multiple targets from every direction. Instant slew-to-cue PTZ autotracking action allows multiple targets to be observed simultaneously and provides immediate confirmation and forensic coverage. When a detection occurs, the coordinates are sent to the integrated PTZ, triggering an instant response to zoom in on the incursion. Human intrusions can be detected over a wide area of 1640 ft (500 m) and vehicles over an area of 4921 ft (1500 m).

Available in with 320x256 and 640x512 resolutions and a variety of lenses, there is a model to fit any installation. With the built-in TRIA functionality, the thermal sensor and PTZ outputs can be displayed in a unique combined view that clearly shows any intruder's location and identity.

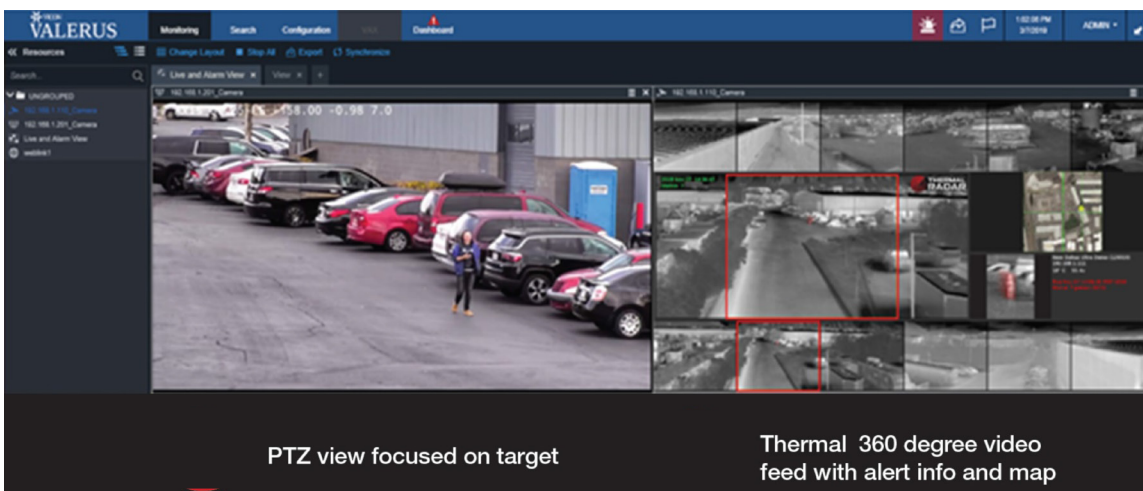
The unit easily integrates into Vicon's Valerus as well as many other VMS solutions over LAN or mobile. It can also be used as a standalone solution and viewed in a browser using its IP address.



Thermal Sensor

V2005D-PTZ Camera

When combined, the VTR thermal sensor and PTZ deliver a mission-critical and operationally relevant solution for wide area intrusion detection. This provides comprehensive and cost-effective perimeter security through analytics-based thermal intrusion detection and geospatial alarm generation.



PTZ view focused on target

Thermal 360 degree video feed with alert info and map

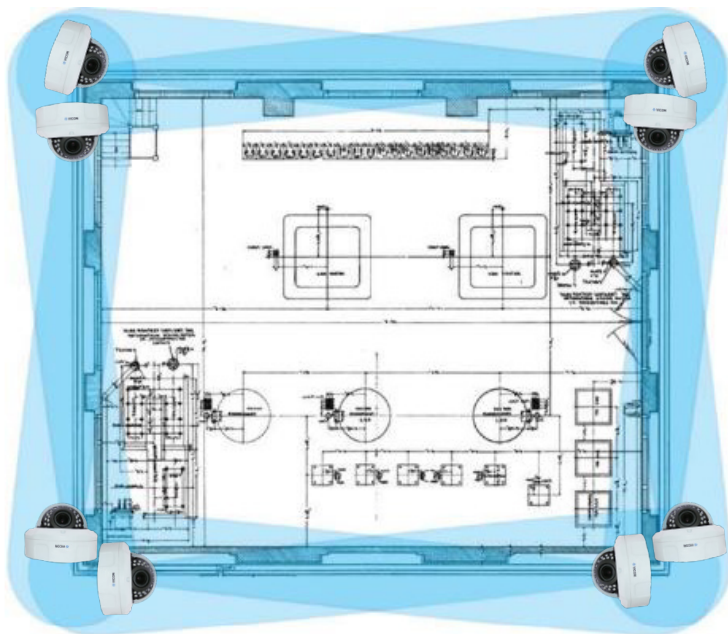
The unique integration of the VTR thermal camera sensor and the V2005D-PTZ with the Valerus VMS provides two views. The image on the left is directly from the PTZ. The images on the right are from the thermal imaging sensor and the customizable user-friendly UI can be configured to meet your exact facility needs.

## PRODUCT DESCRIPTIONS

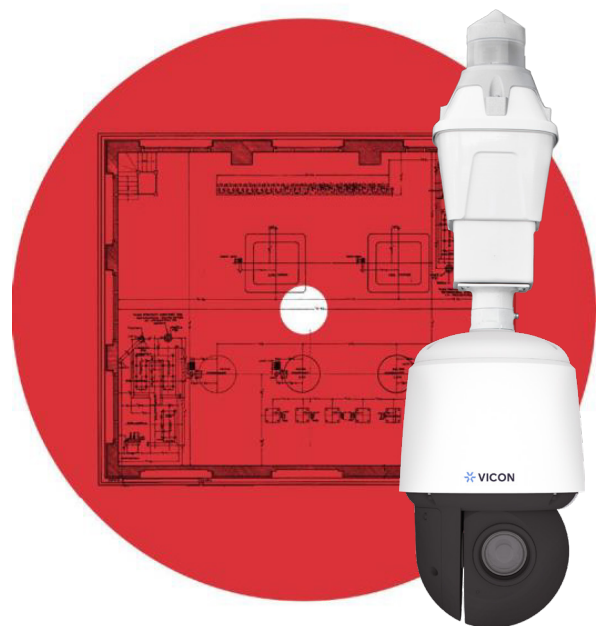
Model Number	Description
VTR-3200	Thermal sensor camera; 320 x 256 resolution; 6.3 mm focal length
VTR-3300	Thermal sensor camera; 320 x 256 resolution; 9.1 mm focal length
VTR-6200	Thermal sensor camera; 640 x 512 resolution; 8.7 mm focal length
VTR-6400	Thermal sensor camera; 640 x 512 resolution; 14 mm focal length
VTR-6600	Thermal sensor camera; 640 x 512 resolution; 18 mm focal length
<b>Accessories</b>	
V-ARM-TR	Mounting arm; for mounting the VTR-PTZ combination; includes interface that connects VTR unit to the V2005D-PTZ; required for each unit
V-GNB-TR	Gooseneck mounting bracket; for mounting the VTR-PTZ combination; includes interface that connects VTR unit to the V2005D-PTZ; required for each unit
V-PMK-TR	Pole mounting kit; for mounting the VTR-PTZ combination
V-CMK-TR	Corner mounting kit; for mounting the VTR-PTZ combination
V-RMK-TR	Roof mounting kit; for mounting the VTR-PTZ combination
<b>PTZ Dome</b>	
V2005D-PTZ	Roughneck AI 5 MP PTZ dome camera;

The thermal camera sensor and the PTZ provide smart detection and targeted surveillance.

This solution offers better perimeter coverage - and beyond the perimeter - with just one sensor vs. 8+ fixed thermal cameras. Establish a perimeter anywhere and the rotating thermal sensor provides continuous thermal coverage, securing your business borders.



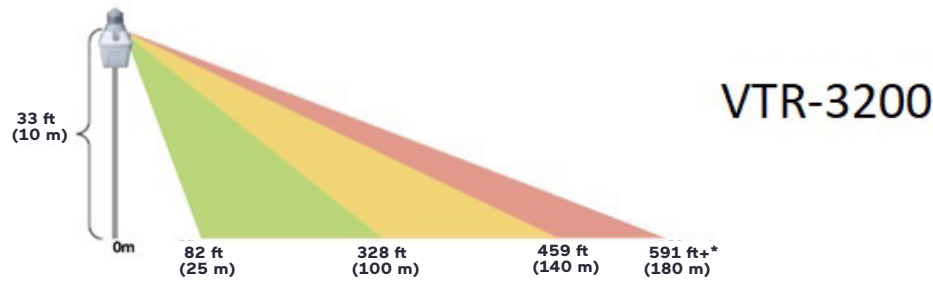
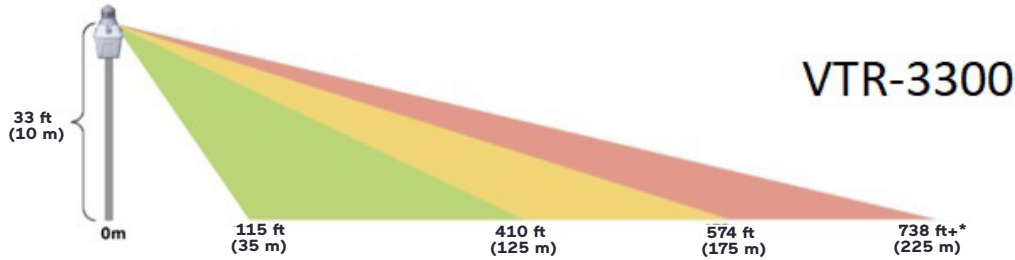
**You will need  
Eight Fixed Thermal Cameras...**



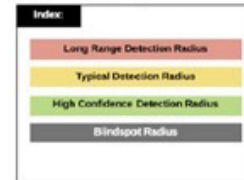
**...to get the surveillance coverage  
of ONE VTR/PTZ**

# DETECTION RANGES

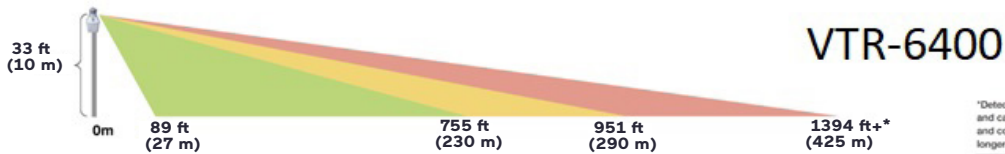
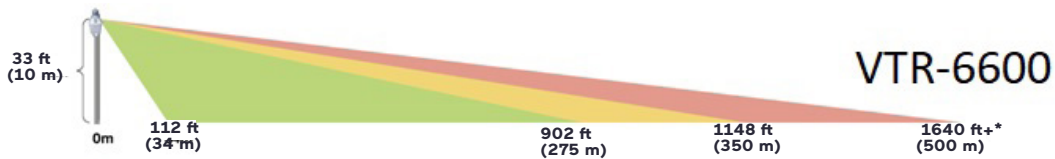
VTR-3200/VTR-3300	
Human	Up to 738 ft/225 m
Vehicle	Up to 2461 ft/750 m
Fire	Up to 1.6 mi/2.5 km



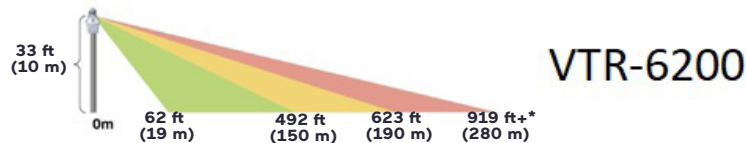
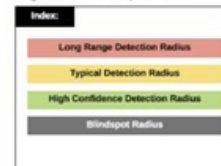
\*Detection ranges vary by deployment location and can be impacted by weather, temperatures, and conditions. Actual coverage area may be longer or shorter than depicted here.



VTR-6200/VTR-6400/VTR-6600	
Human	Up to 1640 ft/500 m
Vehicle	Up to 4921 ft/1500 m
Fire	Up to 3.1 mi/5 km



\*Detection ranges vary by deployment location and can be impacted by weather, temperatures, and conditions. Actual coverage area may be longer or shorter than depicted here.



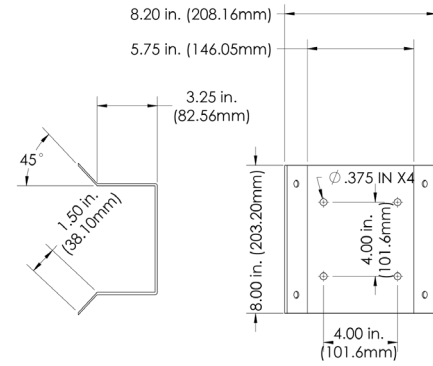
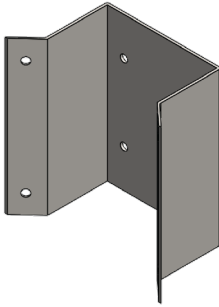
## Thermal Camera Specifications

Model	VTR-3000 Series	VTR-6000 Series
<b>Thermal Imager Module</b>		
Thermal Sensor Type:	FLIR® Boson Uncooled VOx microbolometer	
Frame Rate:	9 Hz/60 Hz	
FPA Resolution:	320 x 256	640 x 512
Image Bit Depth:	16 bit thermal infrared	
Lens Focal Length:	6.3 mm, 9.1 mm	8.7 mm, 14 mm, 18 mm
<b>Speed and Resolution</b>		
Rotation Speed:	VTR-3200: 35 RPM; VTR-3300: 28 RPM	VTR-6200: 42 RPM; VTR-6400: 35 RPM; VTR-6600: 28 RPM
Image FOV (H):	360° continuous	
Image FOV (V):	VTR-3200: 19.5°; VTR-3300: 27.3°	VTR-6200: 19.5°; VTR-6400: 25.6°; VTR-6600: 39.3°
Image Resolution:	320 x 256 per station	640 x 512 per station
Stations:	VTR-3200: 11; VTR-3300: 15	VTR-6200: 8; VTR-6400: 11; VTR-6600: 15
Refresh Rate:	VTR-3200: 1.7 s; VTR-3300: 2.1 s	VTR-6200: 1.3 s; VTR-6400: 1.7 s; VTR-6600: 2.1 s
<b>Communication</b>		
Ethernet:	Autoswitch 100 Mbps - 1 Gbps	
Network Security:	TLS with password protection	
Network Protocols:	Zeroconfig system with multicast, DNS/DNS-SD Service Discovery, DHCP, NTP, TCP/IP, UDP/IP	
<b>Processor and Analytics</b>		
Processor:	Quad Core, 64-bit	
Memory:	4 GB RAM	
Embedded Analytics:	Security: intrusion and classification, fire detection, temperature monitoring	
Detection Zones:	Configurable Areas of Interest, Exclusions and Motion Filters	
<b>Video</b>		
Compression (Streaming):	H.264	
Resolution/Frame Rate:	1080p/8-15 fps	
<b>Detection Range</b>		
Human:	Up to 738 ft/225 m	Up to 1640 ft/500 m
Vehicle:	Up to 2461 ft/750 m	Up to 4921 ft/1500 m
Fire:	Up to 1.6 mi/2.5 km	Up to 3.1 mi/5 km
<b>Environmental</b>		
Operating Temperature:	-4 to 140° F (-20 to 60° C); Storage: -4 to 185° F (-20 to 85° C)	
Certification:	IP67	
<b>Power Requirements</b>		
Power Source/Connector:	PoE+, IEEE 802.3at, 802.3at - LTPoE++ (90 W); RJ-45	
Power Consumption:	<16 W, 12 W typical	
<b>Mechanical/General</b>		
Dimensions (W x H):	6.49 in. x 11.06 in. (165 mm x 281 mm); refer to dimensional diagram	
Weight:	About 7 lb (3 kg)	
Country of Origin:	USA; Warranty: 1 year from date of purchase	
PTZ Integration:	PTZ Slew-to-Cue commands upon detection	
VMS Integration:	ONVIF compliant: RTSP stream, alerts	
<b>PTZ Camera</b>		
<b>V2005D-PTZ</b>		
Image Sensor:	1/2.8-inch progressive scan Sony Starvis CMOS	
Max Resolution:	5 MP (2592 x 1536)	
Image Settings:	Digital image effects: defog, flip, mirror. Configurable brightness, contrast, saturation, hue, sharpness. White balance. Backlight Compensation (BLC). HLC. Gain control. Gamma correction. Electronic shutter speed. Day/night mode. Dynamic Noise Reduction (3DNR). Motion detection (4 zones). Privacy masking (8 zones). Dynamic ROI. Event notification. Electronic Image Stabilization (EIS).	
Intelligent Video Analytics:	5 profile/presets. Motion. Tampering/Defocus. Intrusion. Loitering. Line Cross/Counting. Object Left/Removed. Area Counting. Wrong Direction. Museum Search.	

AI-Based Object Classification Analytics:	Vehicles, people, animals
Electronic Shutter Speed:	1/30 ~ 1/10,000 sec
Day/Night Performance:	True day/night (IR cut filter)
Wide Dynamic Range (WDR):	True WDR (120 dB)
Minimum Illumination:	Color: 0.03 lux, B/W: 0.01 lux )
IR Illuminator:	Distance: 492 ft (150 m). Adaptive IR/Smart IR (automatic).
<b>Lens</b>	
Focal Length:	5.2 - 148 mm (30X optical zoom; 8X digital zoom)
Max. Aperture:	f/1.3 - f/4.8
Iris:	Autoiris
Zoom/Focus Adjust:	Motorized focus and zoom
Field-of-View:	2.14° - 58.1° (H). 1.2° - 33.8° (V).
<b>Network Video Transmission</b>	
Network:	10Base-T, 100Base-TX, RJ-45
Image Compression:	H.265/H.264 and M-JPEG
Resolution:	2592x1944/1520, 2560x1440, 2048x1536, 2304x1296, 1920x1080 (1080P), 1600x1200/900, 1440x1080, 1280x960/720, 800x600/480, 640x480, 400x240
Protocol:	IPv4/IPv6, TCP, HTTP, HTTPS, RTSP, RTCP, RTP, RTMP, DHCP, FTP, DDNS, DNS, UDP, uPnP, QoS, ARP, HLS, ICMP, IGMP, LDAP, NTP, SMTP, SNMP v1/2c/3, TLS/TLS, 802.1X, PPPoE, Zeroconf, Bonjour, ONVIF
Frame Rate:	Max.30 fps (25 fps, PAL)
Streams:	Triple stream
Users:	Live viewing for up to 10 clients
Web Browser:	Internet Explorer®, Safari®, Firefox®, Google Chrome®, Microsoft Edge
Security:	IP address filtering, HTTPS encrypted data transmission, SSL, IEEE 802.1X, Digest Authentication, Advanced Security
Local Recording:	Micro-SD slot provided; customer supplied SDHC/SDXC card
<b>Mechanical and Electrical</b>	
Construction:	Aluminum base; polycarbonate dome bubble
Pan Range:	360° continuous pan
Pan Speed:	300°/second maximum
Tilt Range:	95° (-15° to 90°)
Tilt Speed:	160°/second maximum
Presets:	128
Tours/Patterns:	4/4
Alarm:	2 alarm inputs; 2 alarm outputs
Audio Capability:	Two-way audio; G.711 compression
Mounting:	Mounting accessories available
Dimensions:	7.5 in. (190 mm) (Diam) x 13.2 in. (336 mm) (H)
Weight:	11.5 lb (5.2 kg)
Input Power:	PoE++ (IEEE 802.3bt, Class 7); 24 VAC ±10%; 48 VDC ±10%.
Current (IR on):	2.5 A @ 24 VAC; 1.25 A @ 48 VDC
Power Consumption :	Total Power: 48 W. PTZ Camera: 11 W; P/T Function: 12 W; IR: 19 W; Heater: 5.5 W; Blower: 0.9 W.
<b>Controls and Connectors</b>	
Indicators and Connectors:	Power: 24 VAC/48 VDC terminal block; Network/PoE: RJ-45 CAT 5; Audio In/Out and Alarm In/Out: screw terminal; SDHC/SDXC Card Slot; Reset button. Default button. Indicators: green LED flashes for booting and software updating.
<b>Environmental</b>	
Operating Conditions:	Temp: -40° to 140° F (-40° to 60° C) Humidity: up to 90%, relative, non-condensing Limitations in certain weather conditions, including blizzard conditions and freezing rain with high winds.
Approvals:	UL, FCC Class A, CE, IP66; IK10 (housing)/IK07 (lens cover); RoHS
Country of Origin:	Taiwan
Warranty:	5 years



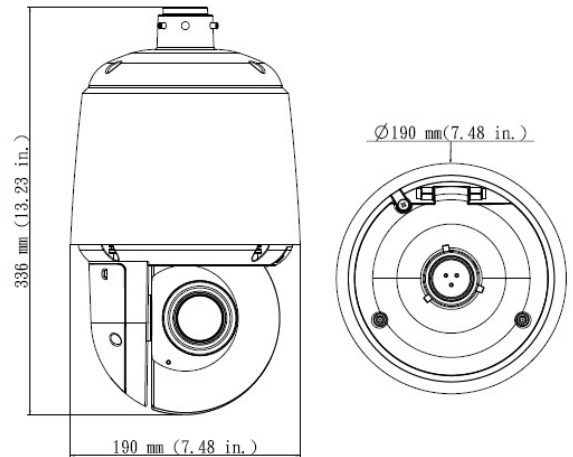
V-CMK-TR Corner Mounting Kit



V-RMK-TR Roof Mounting Kit



V2005D-PTZ



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 Vicon Data Sheet Number: 8009-7317-02-00

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