



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



PRODUCT

Vicon's high-powered thermal sensor cameras provide 360° coverage of open spaces to detect, identify and track intruders. Combined with Vicon's high-speed SN683D or SN688D PTZ dome camera, the resulting product delivers situational awareness of any physical incursion that may threaten a facility or its perimeter, doing the work of multiple fixed cameras, 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 product and viewed in a browser using its IP address.

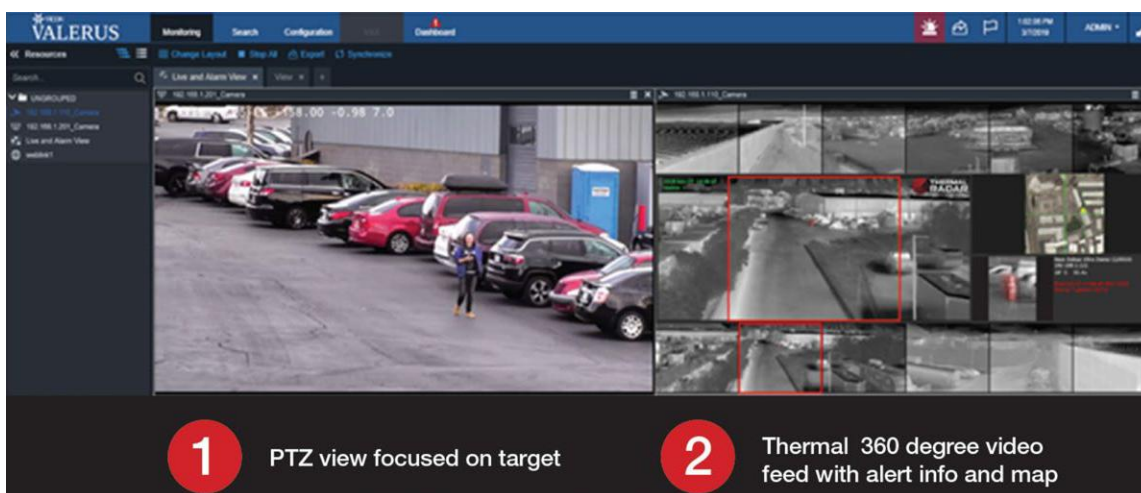


SN688D Camera

Thermal Sensor

SN683D Camera

The VTR thermal sensor with SN683D or SN688D PTZ is a mission-critical and operationally relevant solution for wide area intrusion detection. It provides comprehensive and cost-effective perimeter security through analytics-based thermal intrusion detection and geospatial alarm generation.



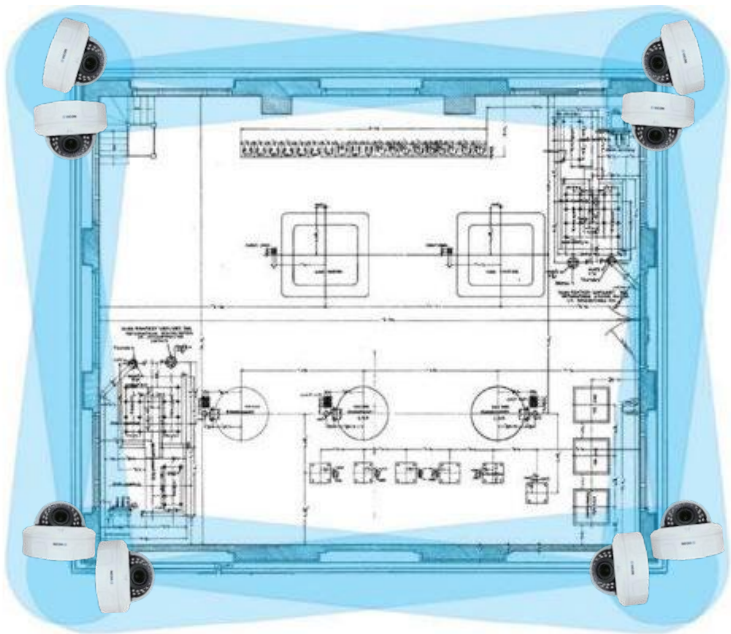
The unique integration of the VTR thermal camera sensor and the SN683D or SN688D PTZ with the Valerus VMS provides two views. The image on the left (#1) is directly from the PTZ. The images on the right (#2) are from the thermal imaging sensor and the customizable user-friendly UI can be configured to 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; 8.7mm 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
Accessories	
V-ARM-TR	Mounting arm; for mounting the VTR-PTZ combination; includes interface that connects VTR unit to the SN683D/SN688D; required for each unit
V-GNB-TR	Gooseneck mounting bracket; for mounting the VTR-PTZ combination; includes interface that connects VTR unit to the SN683D/SN688D; 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

Refer to the page of graphics at the end of this document for diagrams and dimension drawings of these products.

The VTR thermal camera sensor with the SN683D/SN688D PTZ provides smart detection and targeted surveillance. The figure below illustrates how it 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.



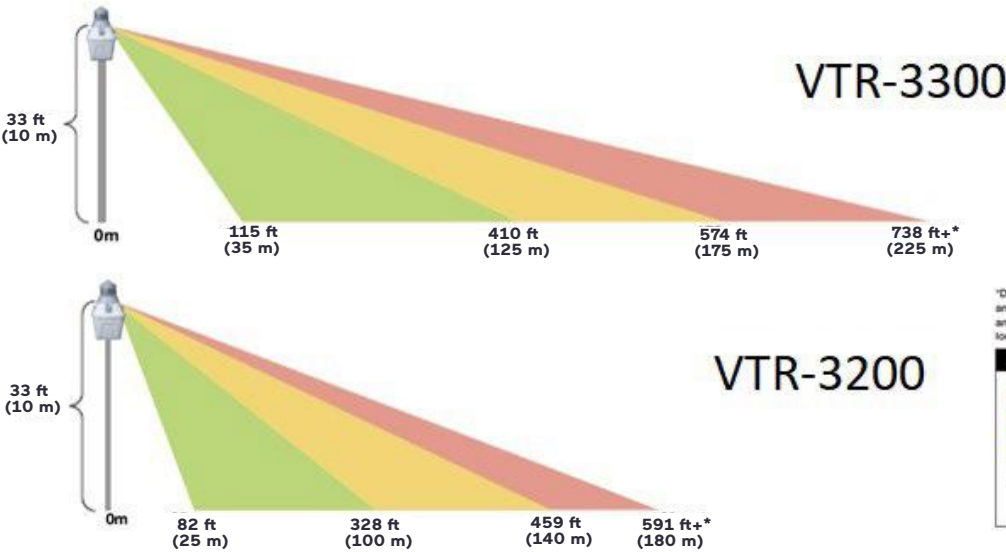
You will need
Eight Fixed Thermal Cameras...



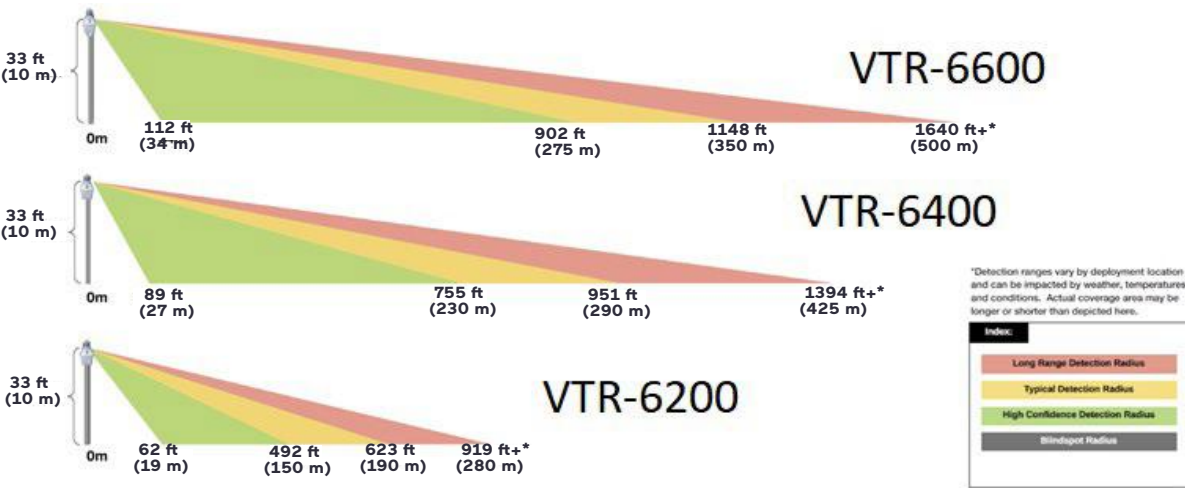
...to get the surveillance coverage
of ONE VTR/PTZ

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



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





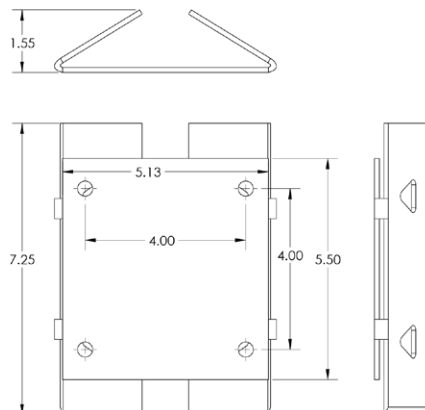
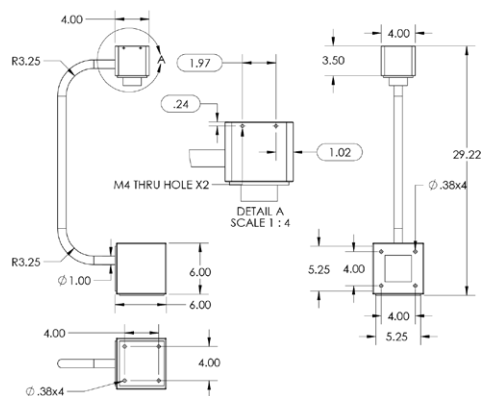
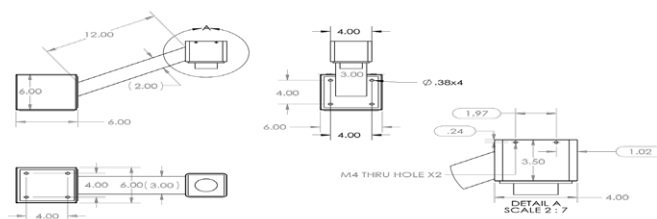
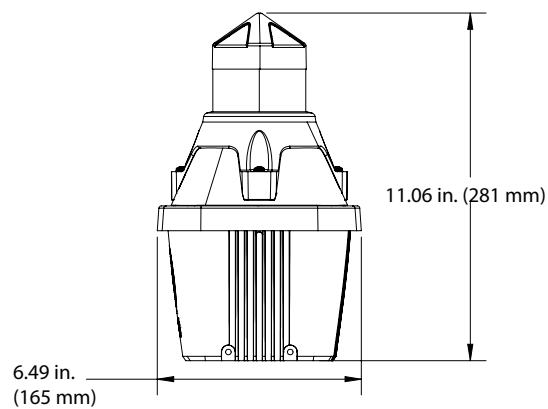
Thermal Camera Specifications

Model	VTR-3000 Series		VTR-6000 Series
Thermal Imager Module			
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	
Speed and Resolution			
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	
Communication			
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		
Processor and Analytics			
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		
Video			
Compression (Streaming):	H.264		
Resolution/Frame Rate:	1080p/8-15 fps		
Detection Range			
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	
Environmental			
Operating Temperature:	-4 to 140° F (-20 to 60° C); Storage: -4 to 185° F (-20 to 85° C)		
Certification:	IP67		
Power Requirements			
Power Source/Connector:	PoE+, IEEE 802.3at, 802.3at - LTPoE++ (90 W); RJ-45		
Power Consumption:	<16 W, 12 W typical		
Mechanical/General			
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		
PTZ Integration:	PTZ Slew-to-Cue commands upon detection		
VMS Integration:	ONVIF compliant: RTSP stream, alerts		

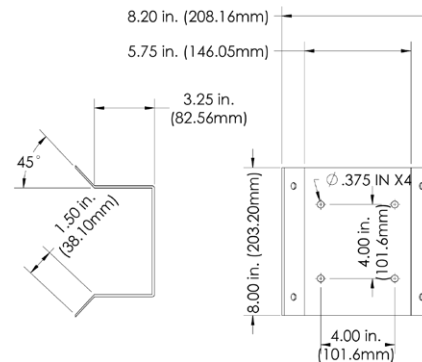
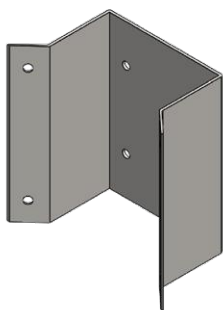
PTZ Camera	SN683D-WIR	SN688D-WIR
Image Sensor:	1/2.8-inch progressive scan Sony Starvis CMOS	1/1.7-inch progressive scan Sony Starvis CMOS
Max Resolution:	3 MP (2048 x 1536)	4K (8 MP)
Image Settings:	Dynamic adjustable bit rate. Digital image effects: flip. Configurable brightness, contrast, high sensitivity. White balance. Digital zoom. Gain control. Exposure control. Electronic shutter speed. Day/night mode. BLC (Backlight Compensation). Dynamic Noise Reduction (2DNR/3DNR). Motion detection (16 zones). Privacy masking (16 zones). Event notification.	
Video Content Analysis (VCA):	Tampering. Defog. Intrusion Detection.	Defog. Museum Search. Advanced Analytics:Tampering, Intrusion Detection, Intelligent Motion, Line Cross/Counter, Loitering, Object Left/Removed, Wrong Direction, Crowd Detection, Face Detection. Classification Filter for applicable - Human, Vehicle.



Electronic Shutter Speed:	1 ~ 1/10,000 sec	
Day/Night Performance:	True day/night (IR cut filter)	
Wide Dynamic Range (WDR):	120 dB True WDR	
Minimum Illumination:	Color: 0.35 lux, B/W: 0.013 lux @ 50 IRE; 0 lux (IR LED ON)	Color: 0.75 lux, B/W: 0.0 lux @ 50 IRE; 0 lux (IR LED ON)
IR Illuminator:	Distance: 1312 ft (400 m). Angle: 5 - 60°. Synchronized, manual or fixed mode.	
Lens		
Focal Length:	4.6 - 165 mm (36X optical zoom)	6 - 180 mm (30X optical zoom)
Max. Aperture:	f/1.6	
Iris:	Autoiris	
Zoom/Focus Adjust:	Motorized focus and zoom	
Horizontal Field of View:	1.9° - 58.1°	2.7° - 55.4°
Network Video Transmission		
Network:	10Base-T, 100Base-TX, RJ-45	
Image Compression:	H.265/H.264 and M-JPEG	
Resolution:	2048×1536, 1920×1080 (1080P), 1440×1080, 1280×1024/720, 1024×768, 800×600/480, D1, 640×480, 400×240, CIF	3840×2160, 3072×2048, 2592×1944/1520, 2560×1440, 2048×1536, 1920×1080 (1080P), 1440×1080, 1280×1024/720, 1024×768, 800×600/480, D1, 640×480, 400×240, CIF
Protocol:	IPv4/IPv6, TCP/IP, HTTP, HTTPS, RTSP, RTCP, RTP, DHCP, FTP, DDNS, UDP, uPnP, QoS, Zeroconf, Bonjour, ONVIF	
Frame Rate:	Max. 60 fps (50 fps, PAL) dual stream; 30 fps (25 fps, PAL) triple stream	Max. 30 fps (25 fps, PAL)
Streams:	Quad stream (3x H.265/H.264 and 1 x M-JPEG)	
Users:	Live viewing for up to 10 clients; playback for up to 3 clients	
Web Browser:	Internet Explorer®; Safari®, Firefox®, Google Chrome®	
Security:	IP address filtering, HTTPS encrypted data transmission, SSL, password protection	
Local Recording:	Micro-SD slot provided; customer supplied SD card	
Mechanical and Electrical		
Construction:	Die-cast aluminum base; tamperproof screws	
Pan Range:	360° continuous pan	
Pan Speed:	380°/second maximum	
Tilt Range:	100° (-10° to 90°)	
Tilt Speed:	380°/second maximum	
Presets:	256	
Tours:	8	8 tours; 8 patterns
Audio Capability:	Two-way audio; G.711 compression	
Mounting:	Mounting accessories available for pendant/wall and in-ceiling	
Dimensions:	7.9 in. (201.8 mm) (Diam) x 12.5 in. (317.8 mm) (H)	
Weight:	11.2 lb (5.1 kg)	
Input Power:	UPoE (injector included); 12 VDC ±10%. Injector dimensions: H: 1.25 in. (31.8 mm); W: 2.375 in. (60.3 mm); D: 5.375 in. (136.5 mm)	
Current (IR on):	500 mA @ PoE; 2.3 A @ 12 VDC	
Power Consumption (IR on):	28 W	
Controls and Connectors		
Connectors:	Power: 12 VDC DC jack; Network/UPoE: RJ-45 CAT 5; Alarm In (4)/Out (1): screw terminal; SD Card Slot; Audio In and Out: jack (Audio Out requires external amplifier)	
Environmental		
Operating Conditions:	Temp: -22° to 149° F (-30° to 65° C) Humidity: up to 90%, relative, non-condensing Limitations in certain weather conditions, including blizzard conditions and freezing rain with high winds.	Temp: -22° to 131° F (-30° to 55° C) Humidity: up to 90%, relative, non-condensing Limitations in certain weather conditions, including blizzard conditions and freezing rain with high winds.
Approvals:	FCC Class A, CE, IP66; IK10	
Country of Origin:	Korea	



V-CMK-TR Corner Mounting Kit



V-RMK-TR Roof Mounting Kit



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Vicon Data Sheet Number: 8009-7317-01-00

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