

Shipping Now!

Introducing the Integrated Thermal Imager and PTZ for Intrusion Detection and Object Tracking

This new emerging technology for situational awareness provides actionable intelligence for quick suitable responses.

The VTR thermal camera sensor with the SN683D PTZ delivers integrated guarding technology that provides a live 360-degree surveillance feed that continually searches for intruders in an expansive area.

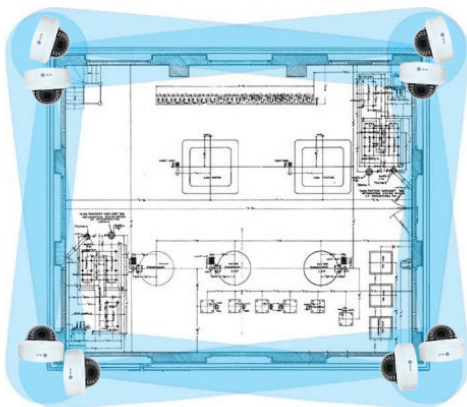
Vicon's new high-powered thermal sensor cameras detect, identify and track intruders using thermal detection and seamlessly integrate with our high-speed SN683D PTZ dome camera to provide full situational awareness. When a threat is detected, the PTZ automatically slews to cue, providing immediate confirmation and forensic coverage. Detection alerts automatically notify personnel of potential threats, delivering GPS coordinates of the intruder's location with a map of the property.



Shown here integrated with PTZ

Product at a Glance

- Thermal detection and tracking of intruders up to 400 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
- *The SN683D PTZ camera is sold separately.**



You will need
Eight Fixed Thermal Cameras...



...to get the surveillance coverage
of **ONE** VTR/SN683D

The thermal sensor does the work of multiple fixed cameras, decreasing the number of security personnel needed to monitor critical areas.

This figure illustrates better perimeter coverage 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.

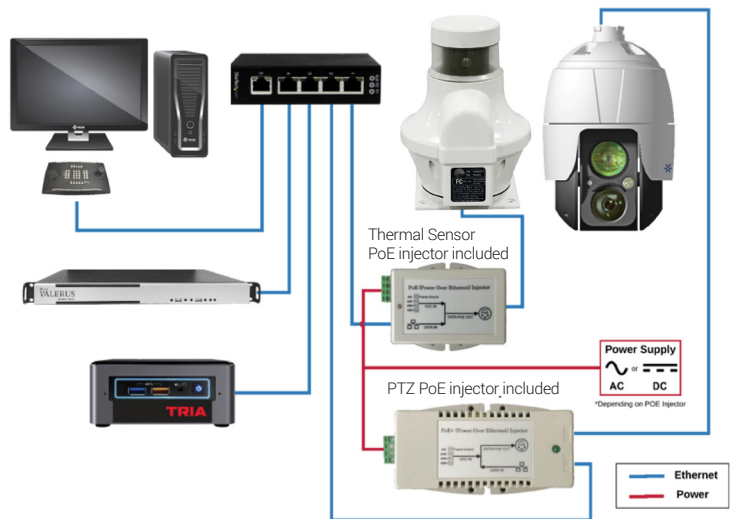
The continuous 360° scanning for thermal intrusion detection monitors both inside and outside the perimeter using sophisticated analytics to determine and classify detections. It provides rapid geospatial detection of multiple targets from every direction. Instant slew-to-cue PTZ auto-tracking action 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 more than 400 meters and vehicles over an area of 1500 meters.

The unit easily integrates into Vicon's Valerius 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.

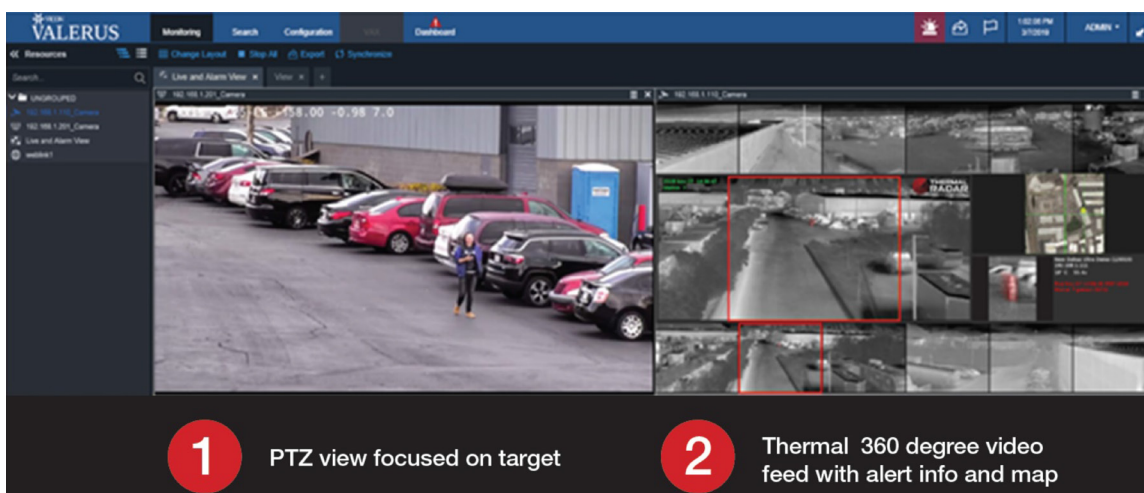
How it Works

A typical system includes the items below; each item is sold separately:

- Thermal Sensor unit (choice of lens focal length)
- SN683D-WIR PTZ Dome Camera
- 1 VLR-TRIA integration appliance for each thermal sensor that integrates the thermal sensor-PTZ combination with Valerius VMS
- Mounting Accessory according to the installation type (*wall, gooseneck or roof mount as well as corner and pole mounting brackets*)



The VTR thermal sensor with SN683D 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.



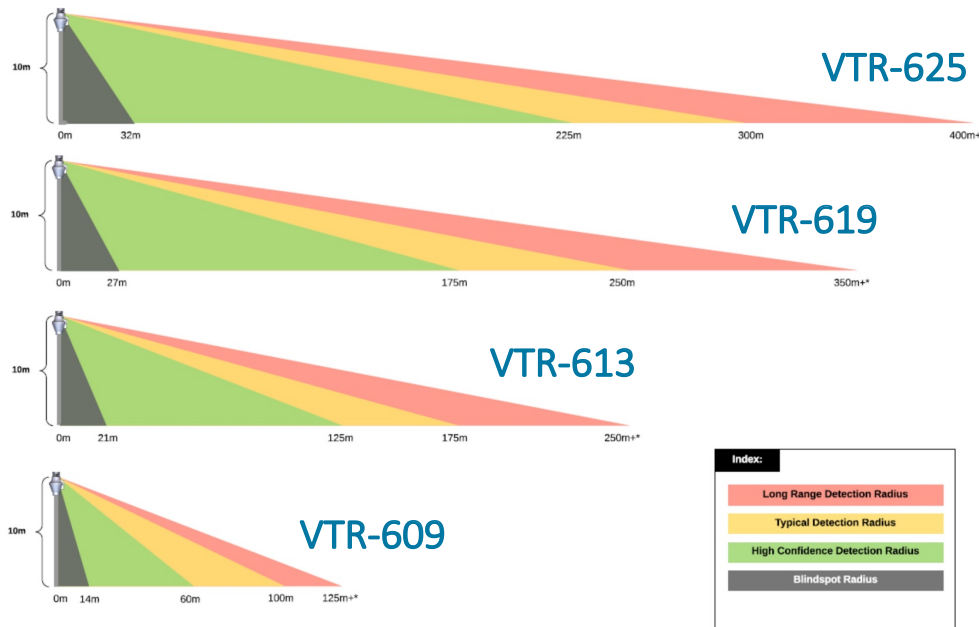
The unique integration of the VTR thermal camera sensor and the SN683D with the Valerius VMS provides two views. The image on the left (#1) is directly from the PTZ. The images on the right (#2) are from the thermal imaging sensor and the customizable user-friendly UI can be configured to meet your exact facility needs.

Specification and Detection Distance Chart



SPECIFICATIONS	9mm – VTR-609	13mm – VTR-613	19mm – VTR-619	25mm – VTR-625
Thermal Sensor Resolution	640x512	640x512	640x512	640x512
Thermal Radar RPM	53	42	35	28
Thermal Radar Stations	6	9	12	16
Thermal Radar Refresh Rate	1.1s	1.4s	1.7s	2.1s
Thermal Radar VFOV	56°	37°	26°	20°
DETECTION DISTANCE (MAN)				
• High Confidence Detection	60m	125m	175m	225m
• Typical Detection	100m	175m	250m	300m
• Long Range Detection	125m	250m+	350m+	400m+
DETECTION DISTANCE (VEHICLE)				
• High Confidence Detection	250m	350m	500m	750m
• Typical Detection	350m	500m	800m	1000m
• Long Range Detection	500m	800m	1200m	1500m

Thermal Sensor Detection Radius by Model



THERMAL CAMERA SPECIFICATIONS

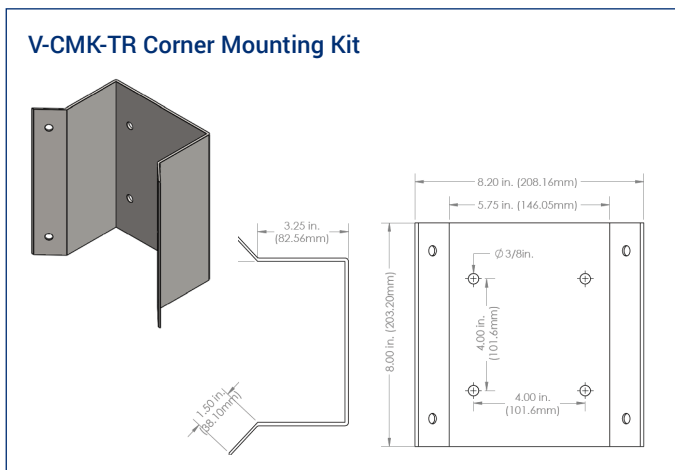
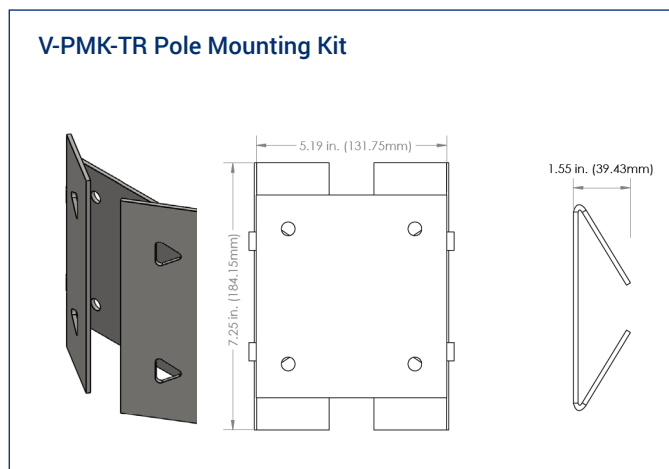
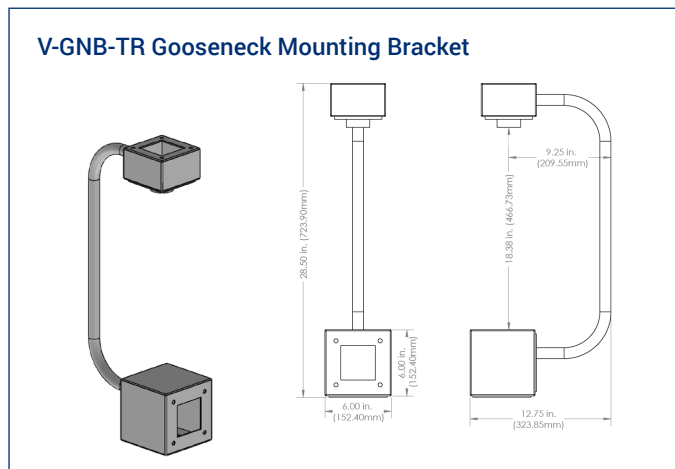
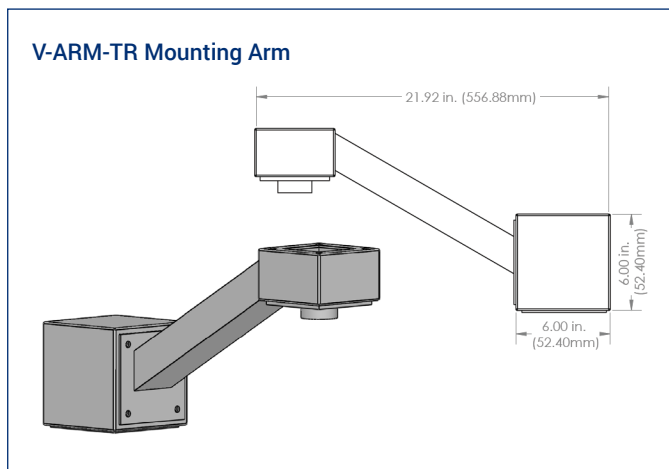
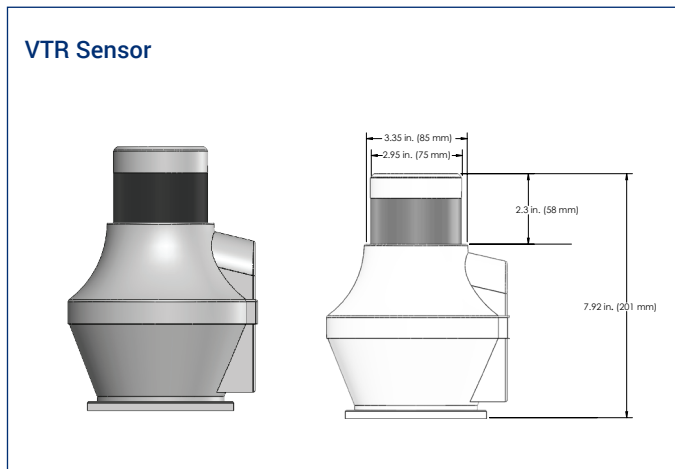
Thermal Imager Module	
Thermal Sensor Type	FLIR® Tau 2 sun safe VOx microbolometer
FPA Resolution	640 x 512
Image Bit Depth	12 bit - raw
Lens Focal Length	9 mm, 13 mm, 19 mm, 25 mm
Speed and Resolution	
Rotation Speed	10 - 54 RPM, configurable
Image FOV (H)	360 degrees continuous
Image FOV (V)	56°, 37°, 26°, 20°
Image Resolution	0.66 - 4.72 megapixels
Communication	
Ethernet	10/100 BaseT with PoE power (IPv4/IPv6)
Network Protocols	Zeroconfig system with multicast, DNS/DNS-SD Service Discovery, DHCP, NTP, TCP/IP, UDP/IP
Processor and Analytics	
Processor	1 GHz Arm® Cortex® A8 Plus C84x+ DSP
Embedded Analytics	Thermal Sensor: Intrusion; Classification PTZ: Tracking
Detection Zones	Configurable Areas of Interest and Exclusions
Detection Range	Environmentally Dependent
Human	Up to 400 m
Vehicle	Up to 1500 m
Environmental	
Operating Temperature	-40 to 131° F (-40 to 55° C)
Storage Temperature	-40 to 185° F (-40 to 85° C)
Certification	IP66
Power Requirements	
Power Source	PoE, IEEE 802.3at, 802.3af
Input Voltage	20 - 57 VDC

PTZ SPECIFICATIONS

PTZ Camera	SN683D-WIR
Image Sensor:	1/2.8-inch progressive scan Sony Starvis CMOS
Max Resolution:	3 MP (2048 x 1536)
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.
Electronic Shutter Speed:	1 ~ 1/10,000 sec
Day/Night Performance:	True day/night (IR cut filter)

Wide Dynamic Range (WDR):	True WDR (120 dB)
Minimum Illumination:	Color: 0.35 lux, B/W: 0.013 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)
Max. Aperture:	f/1.6
Iris:	Autoiris
Zoom/Focus Adjust:	Motorized focus and zoom
Horizontal Field of View:	1.9° - 58.1°
Network Video Transmission	
Network:	10Base-T, 100Base-TX, RJ-45
Image Compression:	H.265/H.264 and M-JPEG
Resolution:	2048x1536, 1920x1080 (1080P), 1440x1080, 1280x1024/720, 1024x768, 800x600/480, D1, 640x480, 400x240, CIF
Protocol:	IPv4/IPv6, TCP/IP, HTTP, HTTPS, RTSP, 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
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
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.
Approvals:	FCC Class A, CE, IP66; IK10

Thermal Camera Sensor and Mounting Accessories



Ordering Information

A typical system includes the items below; each item is sold separately:

- Thermal Sensor unit (*choice of lens focal length*)
- SN683D-WIR PTZ Dome Camera
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- Mounting Accessory according to the installation type (*wall, gooseneck or roof mount as well as corner and pole mounting brackets*)

Model	Product Code	Description
Thermal Sensor Camera		
VTR-609	10514-00	THERMAL SENSOR CAMERA; 360° thermal imaging module; 640x512 resolution; 9 mm focal length
VTR-613	10514-05	THERMAL SENSOR CAMERA; 360° thermal imaging module; 640x512 resolution; 13 mm focal length
VTR-619	10514-10	THERMAL SENSOR CAMERA; 360° thermal imaging module; 640x512 resolution; 19 mm focal length
VTR-625	10514-20	THERMAL SENSOR CAMERA; 360° thermal imaging module; 640x512 resolution; 25 mm focal length
Thermal Sensor Accessories		
VLR-TRIA	10514-30	VALERUS VMS INTERFACE APPLIANCE; PC running thermal technology software; one-to-one; required for use with VTR/SN683D and Valerus
V-ARM-TR	10514-40	MOUNTING ARM; for VTR/SN683D combination; includes interface for combined VTR sensor and the SN683D dome
V-GNB-TR	10514-41	GOOSENECK MOUNTING BRACKET; for VTR/SN683D combination; includes interface for combined VTR sensor and the SN683D dome
V-PMK-TR	10514-42	POLE MOUNTING KIT; for VTR/SN683D combination
V-CMK-TR	10514-43	CORNER MOUNTING KIT; for VTR/SN683D combination
V-RMK-TR	10514-44	ROOF MOUNTING KIT; for VTR/SN683D combination
PTZ Dome Camera		
SN683D-WIR*	10308-30	3 MP PTZ IP CAMERA DOME; rugged vandal-proof IP66, integral 1/2.8" CMOS day/night camera with 4.6-165 mm (36X) zoom lens; IR illumination; wall or ceiling mounting options

**The SN683D PTZ camera is sold separately.*

Please contact your [regional sales representative](#) or visit www.vicon-security.com for more information



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