

STAINLESS STEEL PREDATOR ULTRA THERMAL CAMERA



**DESIGNED
& MANUFACTURED
IN EUROPE**

**Thermal Ruggedised
High Speed Pan,
Tilt & Zoom Camera**


360VISION
TECHNOLOGY

Stainless Steel Predator Ultra Thermal Camera

Thermal imaging CCTV surveillance cameras from 360 Vision Technology deliver high-resolution images in all environments, and can see through smoke, dust, light fog, haze and darkness.

The ideal choice for effective 24-hour surveillance and intrusion detection, Predator Thermal cameras include analogue and 1/1.9" Sony HD equipped models that deliver incredible colour or mono images during the hours of darkness.

Heat based thermal imaging can be used to detect recently driven vehicles and hidden persons, recently disturbed ground, footprints and hidden objects with heat traces. In addition, thermal imaging CCTV can be used in process control, where accurate fault detection via thermal imaging can be used to detect potential health & safety issues.

■ Stainless Steel Predator Ultra Thermal 'Hybrid' camera option available



Support & Compatibility

Our commitment to the ONVIF organisation also extends to constant and proactive direct communication with VMS leading VMS manufacturers to ensure FULL feature and operational compatibility.

Our standard warranty is 3 years. In addition, our NEW and innovative Support Package provides an extremely low cost 5 year Warranty Extension – offering additional layers of benefit for customer framework and maintenance agreements.

We believe in our manufacturing quality, we do not subscribe to the low cost/replace ideology so prevalent in our industry – let us show you how our FIXED FEE service will actually SAVE you money!

Low Power

'Low Power Mode' for inactive periods of operation, 'Intelligent Illumination' and 'Night Setting Presets' to control the illumination activity and low consumption components that all add up to greatly reduced power device for applications such as solar, fuel, battery and other low voltage sensitive applications

On Board Recording

Recording options of up to 256Gb give network backup, time lapse, FTP and alarm recording. Network sensing automatically senses when connection is lost to ensure that full HD, real time images can be recorded inside the camera, ensuring no information is lost

Latest Camera Modules

All Predator cameras now benefit from a choice of either Starvis or ULTRA low light technology from the stunning new 1/1.9" ULL sensors. Larger sensor = brighter, crisper and more defined COLOUR images at night

Dual Camera Technology

With a flexible specification using Dual Camera Technology, Predator Ultra Thermal can be ordered in a wide range of camera formats including Dual 640 Thermal Cameras and Thermal camera plus 1080P HD colour/Mono camera. Combining two camera technologies in one unit ensures the greatest technical flexibility and application compatibility

360 Degree View

Continuous rotation pan, unobstructed 360 degree view, 160 degree tilt all contribute to unhindered views usually associated with Dome alternatives

Ruggedised

Unlike our competitors, a self-calibrating 'Attack Detect' mode senses any forced or unnatural movement and INSTANTLY re-calibrates to the correct position, ensuring alarm and positional presets are not compromised

Paint Options

Standard high quality paint finish and optional long life 'Extreme' paint finish for marine/coastal applications – ensuring the operational and aesthetic features of the Predator are protected

Attack Detect Feature

Predator Ultra Thermal's Attack Detect feature ensures if a physical attack is detected, the camera will automatically return to its original position – ensuring no loss of evidential footage

Direct Drive Mechanism

Unlike many competitor products that utilise belt based drive systems, Predator incorporates ultra reliable and extremely quiet Direct Drive mechanisms, resulting in long life, high (and consistent) preset accuracy and long term reliability

Dedicated Setup Apps

3 APPS for Discovery, Configuration and Update. With an innovative thumbnail index, select and program from one central Network point. No need for browser add-ins, security permissions or Internet necessary updates

Thermal Imaging

360 Vision Thermal Imaging technology can deliver high resolution images through smoke, dust, light fog, haze and the darkest of nights. Thermal imaging uses an object's heat trace to detect recently driven vehicles, hidden persons, recently disturbed ground, footprints and objects that are hidden to conventional camera technology

LED White Light

Predator Ultra Thermal offers a comprehensive range of white light illumination options - featuring distances up to 200m. White light offers powerful illumination for overt applications, intruder tracking and deterrence

HD RANGE	40 X HD ULTRA
Colour / Mono	YES
Imager	1 / 1.9" Type Exmor
Zoom Optical / Digital	40 x, 12 x
Pixels [Effective]	Approx 2.38 Megapixels
Horizontal view angle	60 [W] °-1.8 ° [T]
Lens Size	6 -240 mm
Min Sensitivity - Colour	0.002 Lux
Min Sensitivity - Mono Int	0.0002 Lux
Signal Noise Ratio	>50 dB
Picture Flip	YES
Picture Freeze	YES
PRODUCT FEATURES - All Predator Cameras have the following functions	
Stainless Steel	316 stainless steel
Focus / Iris	Auto / Manual
Presets	360
Tours	4 (Max 90 Presets per tour)
Learned Patrols	4 Mimic tours - up to 30 minutes duration each
Privacy Zones	Up to 24
Variable pan speed / coverage	0.1-120° / Sec 360 ° continuous rotation, absolute positioning
Variable tilt speed / coverage	0.1-120° / Sec 180 ° absolute positioning
Auto Homing	Goes to preset, tour or mimic tour after prescribed time
Col / Mono Change over	4 Levels 3 fixed, 1 custom / user defined
Operating Temperature	- 50 °C to + 60 °C with optional heater
Power	24Vdc to 36 Vdc
Mounting options	Wall, Corner, Pole and Soffit
Certification	CE & FCC approval; ingress IP68; Impact IK10; Vibration & Shock certified approvals.
SIRIUS ILLUMINATION [OPTIONAL]	IR & WHITE LIGHT
SIR 110	IR Only
SIR 160	IR Only
SIR 275	IR Only
SIR 140 WL	IR / White light Combination
SIR250WL	IR / White light Combination

CODEC	25 FPS	ASPECT	30 FPS
HD 1080P	1920 x 1080	16:9	1920 x 1080
HD 720P	1280 x 720	16:9	1280 x 720
D1	720 x 576	4:3	720 x 480
VGA	640 x 480	4:3	640 x 480
QVGA	432 x 240	16:9	432 x 240
Distribution	Multi Codec 2 Streams		
Image Compression	H.264 , MPEG4 , MJPEG		
Protocols	ONVIF (S), TCP/IP, HTTP, HTTPS, QoS, RTP, RTSP, 360SDK, 802.1x (MD5, TLS, PEAP) NTP, FTP, SNMP.		
Compression Levels	CBR, VBR, CVBR		

Thermal Range	SM 320	SM 640	TC 336	TC 640
Thermal Imager	Uncooled Vox Microbolometer			
FPA / Digital Video Display	320 x 256	640 x 512	336 x 256	640 x 512
Pixel Pitch	12 µm		17µm	
Spectral Band	7.5 - 135 µm			
Full Frame Rate	60 Hz Baseline		25 / 50 Hz (PAL)	
Exporting Frame Rates	N/A		25 / 50 Hz (PAL)	
Sensitivity (NETD)	Industrial <30mK Performance <50mK Commercial <60mK			
Scene Range (High Gain)	+0°C + 140 °C		- 25 °C + 100 °C	- 25 °C + 135 °C
Scene Range (Low Gain)	+0°C + 500 °C		- 40 °C + 550 °C	
PAL / NTSC	YES			
Image Optimizer	YES			
Digital Detail Enhancement	YES			
Polarity Control (Black Hot / White Hot)	YES			
Colour Monochrome Palettes (LUTS)	YES			
Digital Zoom (Continuous)	N/A		2x , 4x	2x , 8x
Operating Temperatures	-4 0° C to +180 ° C			
Power (Thermal ONLY)	1w Max		1w Max	1.2w Max
Certification (Thermal ONLY)	Safety Mark : CE approval: Ingress: IP68 Certified			
Video Output	1Vp to p 75 Ω Ohm			

TC 336 THERMAL	9mm	13mm	19mm	25mm	35mm	50mm	60mm	100mm
HFOV [Horizontal Field of View]	35 °	25°	17 °	13 °	9.3 °	6.5 °	5.5°	3.3°
TC 640 THERMAL	9mm	13mm	19mm	25mm	35mm	50mm	60mm	100mm
HVOF [Horizontal Field of View]	69°	45 °	32 °	25°	18 °	12.4 °	10.4°	6.2°

SM 320 THERMAL	2.3mm	4.3mm	6.3mm	9.1mm	14mm	18mm
HFOV [Horizontal Field of View]	92 °	50 °	34 °	24 °	16 °	12 °
SM 640 THERMAL	4.9mm	8.7mm	14mm	18mm	24mm	36mm
HVOF [Horizontal Field of View]	95 °	50 °	32 °	24 °	18 °	12 °

Standard Paint Options	RAL
Black	9005
White	9003
Cool Grey	7035
Mild Grey	7001



Detection, Recognition, Identification of Human Target using 336 Pixel Core

9mm lens	Detection approx. 205m
	Recognition approx. 52m
	Identification approx. 28m
13mm lens	Detection approx. 300m
	Recognition approx. 74m
	Identification approx. 37m
19mm lens	Detection approx. 450m
	Recognition approx. 112m
	Identification approx. 58m
35mm lens	Detection approx. 780m
	Recognition approx. 200m
	Identification approx. 100m
50mm lens	Detection approx. 1.0km
	Recognition approx. 250m
	Identification approx. 128m
65mm lens	Detection approx. 1.45km
	Recognition approx. 370m
	Identification approx. 170m
100mm lens	Detection approx. 2.1km
	Recognition approx. 540m
	Identification approx. 270m

Detection, Recognition, Identification of Vehicle with 2.3 critical dimension using 336 Pixel Core

9mm lens	Detection approx. 590m
	Recognition approx. 150m
	Identification approx. 74m
13mm lens	Detection approx. 840m
	Recognition approx. 215m
	Identification approx. 108m
19mm lens	Detection approx. 1.3km
	Recognition approx. 330m
	Identification approx. 165m
35mm lens	Detection approx. 2.15km
	Recognition approx. 560m
	Identification approx. 280m
50mm lens	Detection approx. 2.6km
	Recognition approx. 700m
	Identification approx. 350m
65mm lens	Detection approx. 3.9km
	Recognition approx. 1km
	Identification approx. 530m
100mm lens	Detection approx. 5.3km
	Recognition approx. 1.5km
	Identification approx. 760m

Detection, Recognition, Identification of Human Target using 640 Pixel Core

13mm lens	Detection approx. 390m
	Recognition approx. 95m
	Identification approx. 47m
25mm lens	Detection approx. 820m
	Recognition approx. 210m
	Identification approx. 104m
35mm lens	Detection approx. 980m
	Recognition approx. 245m
	Identification approx. 122m
50mm lens	Detection approx. 1500m
	Recognition approx. 380m
	Identification approx. 190m
65mm lens	Detection approx. 1.9km
	Recognition approx. 490m
	Identification approx. 245m
100mm lens	Detection approx. 2450m
	Recognition approx. 650m
	Identification approx. 330m

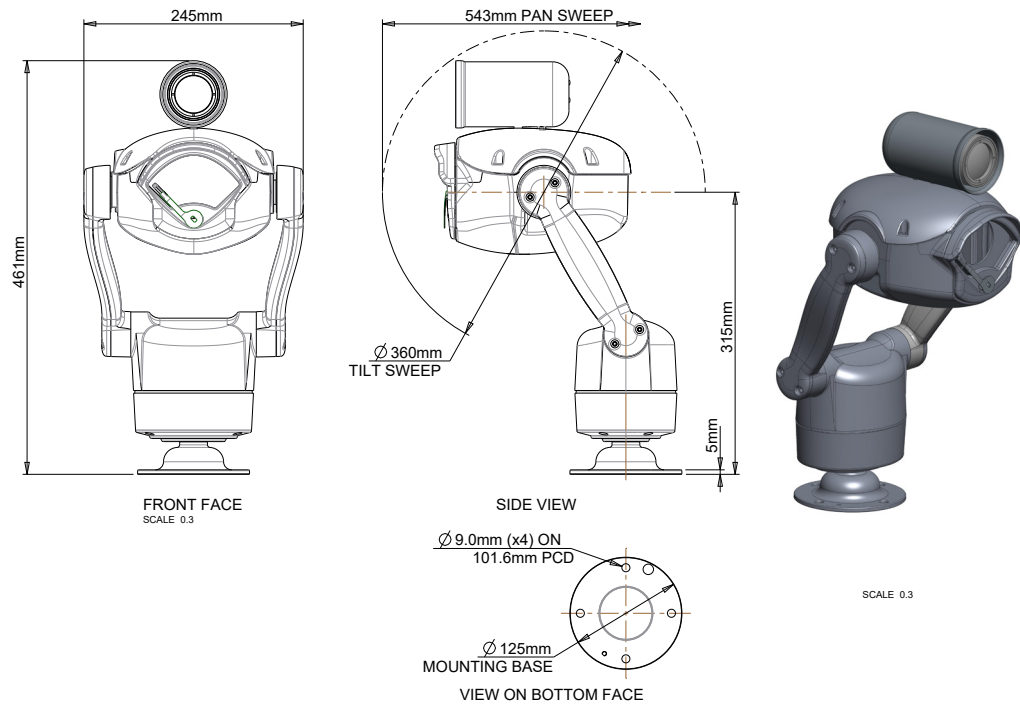
Detection, Recognition, Identification of Vehicle with 2.3 critical dimension using 640 Pixel Core

13mm lens	Detection approx. 1080m
	Recognition approx. 275m
	Identification approx. 140m
25mm lens	Detection approx. 2200m
	Recognition approx. 580m
	Identification approx. 290m
35mm lens	Detection approx. 2550m
	Recognition approx. 680m
	Identification approx. 340m
50mm lens	Detection approx. 3.9km
	Recognition approx. 1060m
	Identification approx. 540m
65mm lens	Detection approx. 4.8km
	Recognition approx. 1350m
	Identification approx. 680m
100mm lens	Detection approx. 6km
	Recognition approx. 1750m
	Identification approx. 900m



Predator with no lamps

Weight: 14kg



Predator Bracketry

Wall Bracket

Weight: 3kg

Pole Mount Adapter (PMA)

Weight: 3.6kg

