SENSPEX
APPLIED SCIENCE & TECHNOLOGY

DETECT / TRACK / SUPPORT

MID-RANGE AWARENESS
PRECISION AT DISTANCE

SPX-550

MID-RANGE MWIR SYSTEM



MWIR CLARITY
Penetrate haze, smoke, and complete darkness. Maintain clear vision.

EXTENDED RANGE
550 mm lens to detect man-sized targets at distances over 18 km.

AI-POWERED
Advanced processor designed for demanding video and AI workloads.

DYNAMIC STABILIZATION
Active Electro-Mechanical Stabilization engineered to handle real-world conditions.

MARITIME
COASTAL & NAVAL

DEFENSE
BORDER & BASE

TRAINING
VIDEO & SUPPORT

DETECTION	RECOGNITION	IDENTIFICATION
18.2 km	9.5 km	4.5 km

* Human Target 1.8 × 0.5 m · Critical dimension (CD): 0.95 m

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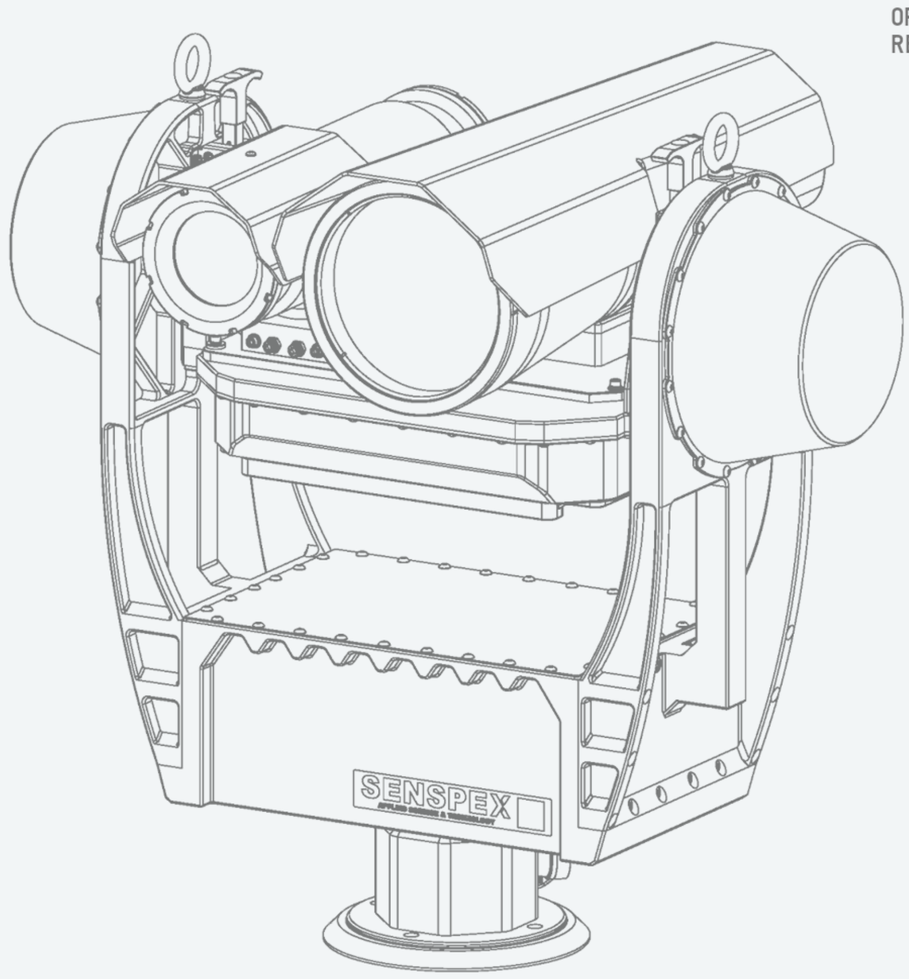
APPLIED SCIENCE & TECHNOLOGY

SPX-550

TECHNICAL SPECIFICATIONS

DETECTION	RECOGNITION	IDENTIFICATION
18.2 km	9.5 km	4.5 km

* Human Target 1.8 × 0.5 m · Critical dimension (CD): 0.95 m



SYSTEM CONTROL & VIDEO-PROCESSOR

Video Formats	Analog NTSC/PAL, CVBS, Differential UTP Digital IP: HEVC/H.265, H.264, MJPEG, RTP RTSP; ONVIF
Control Interface	422/485, HTTP/ TCP/ IP, ONVIF, Pelco D, TASS, Sub-System Commands
Embedded Software Modules	Moving Object Detection, Motion Analytics, Target Tracking, Target Recognition & Classification, Edge Enhancement, LAP/LACE Scene Enhancement

ISR X50 HIGH-SPEED POSITIONER

Pan Speed	0.01° to 300°/sec
Pan Angle	Continuous 360°
Tilt Speed	0.01° to 300°/sec
Tilt Angle	+90° / -60°
Position Resolution	18-bit; 0.0014°
Position Repeatability	±0.001°
Position Accuracy	±0.004°

OPERATIONAL OVERVIEW

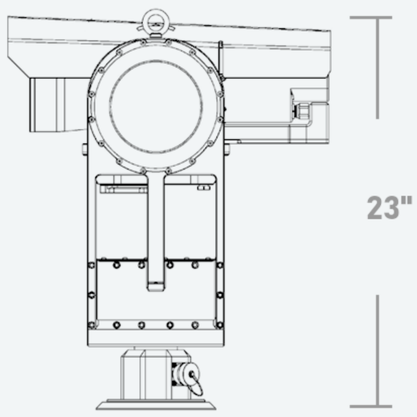
Operating Power	16 - 32 VDC, 240 W (max)
Operating Temperature	-26°F to +131°F | -32°C to +55°C
Storage Temperature	-40°F to +158°F | -40°C to +70°C
Weight	~ 79 lbs | 35.8 kg
Dimensions	19" (L) x 24" (W) x 23" (H) 48 cm (L) x 61 cm (W) x 58 cm (H)
Environmental	MIL-STD-810H

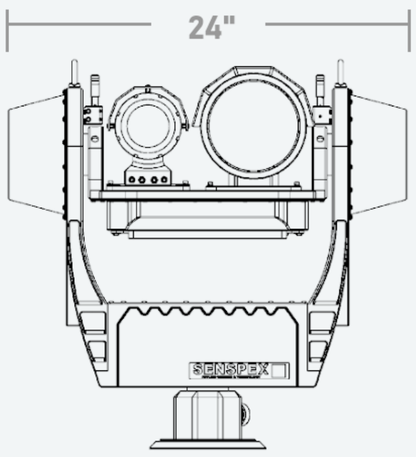
THERMAL IMAGING CAMERA

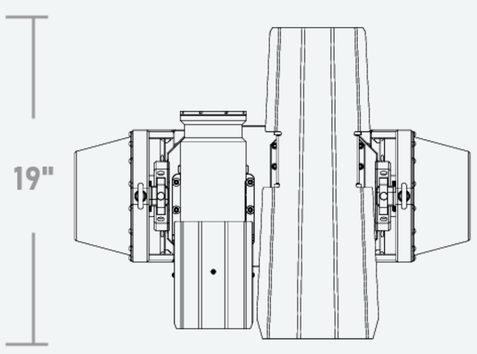
Type	3 - 5 µm Cryo-Cooled MWIR SSL High Operating Temperature
Cooler Lifetime Rating	20,000 Operating Hours* *Typical test result, actual life depends on operating patterns and conditions
Lens	F/4, 30-550 mm Continuous Zoom
Resolution	SD Option: 640x512 px 15 µm
Field-of-View	SD Option: 18° x 13.7° Wide 1.0° x 0.75° Narrow
Housing	IP67 Rated, Sealed & Dry Nitrogen Backfilled, Lens Defrosters

VISIBLE SPECTRUM CAMERA

Sensor	1/3" HD CMOS
Resolution	1920x1080; 2 MPx
Lens	Continuous Zoom; 30X Optical, 12X Digital
Field-of-View	63.7° wide to 2.3° narrow (Optical HFOV)
Signal to Noise	>50 dB
Min Illumination	0.013-0.002 Lux
Features	Day Night ICR, Wide Dynamic Range, Defog, Noise Reduction, Motion Detection, Image Stabilization







FIELD-PROVEN. MISSION-READY.

Manufacturer reserves the right to change specifications to reflect latest changes in technology and improvements at any time without notice.
Export is subject to US Government regulations.

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