TELEDYNE FLIR

THERMOVISION™ 3000 MULTISENSOR

Surveillance system for long-range applications

APPLICATIONS

DETECT PERSONNEL AND VEHICLES

SECURE BORDERS

MONITOR PORTS, AIRPORTS, AND MILITARY BASES

CRITICAL FACILITIES PROTECTION



The ThermoVision™ (THV) 3000 long-range surveillance system detects and classifies illegal activities and threats in total darkness, smoke, sand haze, and broad daylight conditions. The thermal camera is equipped with a long-wave, cooled Quantum Well Infrared Photodetector (QWIP) and switchable optics offering three different fields of view. It provides excellent situational awareness while also closely monitoring suspect activities in real-time upon detection. Ideal applications include perimeter security, border and coastal surveillance, force protection, and mid-range threat detection.

The THV 3000 is also available as a multi-sensor. A daylight camera, GPS unit, digital magnetic compass, and optionally, a laser range finder, can all be mounted on a quick, accurate pan-tilt. It's unique cooled LWIR sensor is less impacted by sun reflections and sees more details through smoke and sand haze than MWIR systems. The cooled QWIP also detects potential threats at farther distances than uncooled detectors, while providing higher definition details at closer distances.

FEATURES

COOLED QWIP DETECTOR

See what people are carrying at close distances without sending someone into the field to investigate false alarms.

DIGITAL DETAIL ENHANCEMENT (DDE)

Enhanced contrast and image processing enable the operator to see small objects at long distance. This can be the difference between actually seeing a threat or missing it.

TRUE 24/7 SURVEILLANCE

A high-definition color camera in the visible waveband works seamlessly alongside thermal imaging for continuous surveillance on the brightest of days and darkest of nights.

FAST TARGETING

Fast, accurate, easy-to-install pan-tilt effortlessly adapts to multiple slew to cue applications.

HIGH RELIABILITY

Minimize downtime and related service and maintenance costs. The recently upgraded video platform also significantly improves image performance over the previous THV 3000 generation.

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SPECIFICATIONS

THERMAL IMAGING	THERMOVISION 3000
Detector type	Quantum Well Infrared Photodetector (QWIP): 640 x 480 pixels
Spectral range	8.0 to 9.2µm
Number of fields of view	3
WFOV ThermoVision 3000	25° (H) x 19° (V)
MFOV ThermoVision 3000	7.8° (H) x 5.8° (V)
NFOV ThermoVision 3000	1.3° (H) x 0.96° (V)
Thermal sensitivity	30 mK max
Image frequency	ThermoVision 3000: 25 Hz PAL or 30 Hz NTSC
Focus	Automatic or Manual
Electronic zoom	2x, 4x
Image processing	Digital Detail Enhancement (DDE): yes
VISUAL (MULTI-SENSOR):	
Built-in color TV	NTSC 1/4" Color CCD PAL 1/4" Color CCD
Optical zoom	1.7° to 57.8° horizontal, continuous
Electronic zoom	12x continuous
PAN-TILT (PAN-TILT VERSIONS ONLY)	
Az Range; Az velocity	n x 360°; 0.3° - 65°/sec continuous
El Range; El velocity	+/-35°; 0.3° - 30°/sec
Accuracy	1 mrad
Resolution	0.1 mrad
LASER RANGE FINDER (OPTIONAL ON MULTI-SENSOR)	
Type / range	Erbium glass, eye safe / 80 m to 20 km
OPTIONAL SYSTEM FEATURES FOR MULTI-SENSOR	
Geo positioning internal GPS	Multi-sensor option
Digital magnetic compass	DMC
IMAGE PRESENTATION	
Video output	NTSC or PAL composite video, 14-bit digital image data
Connector types	BNC
Digital video from multi-sensor	VOIP h.264 video

POWER	
Requirements	18-35 V DC
Consumption	35 W typical - 140 W with heaters
Multi-sensor	55 W typical - 140 W with heaters
ENVIRONMENTAL SPECIFICATIONS	
Operating temperature range	-32°C to +55°C
Storage temperature range	-40°C to +70°C
Automatic window defrost	Yes
Humidity	Mil-Std-810F, 507.4
Rain	Mil-Std-810F, 506.4
Sand/dust	Mil-Std-810F, 510.4
Icing/freezing rain	Mil-Std-810F, 521.2
Shock	Mil-Std-810F, 516.5
Vibration	Mil-Std-810F, 514.5
Solar radiation	Mil-Std-810F, 505.4
PHYSICAL CHARACTERISTICS	
Camera weight	18 kg - 25 kg for multi sensor
Camera size	503 x 312 x 267 mm
Shipping size / Weight sensor head	440 x 630 x 580 mm (h x w x l) 30 kg
Pan/tilt	320 x 350 x 300 mm (h x w x l): 14 kg Pan/Tilt version only
Accessories	440 x 630 x 580 mm (h x w x l) 25 - 30 kg

(Weight is depending on system cable length)

INTERFACES	
TCP/IP	Command and control all functions
RS-232	Command and control all functions
RS-485	Command and control all functions

RANGE APPROXIMATELY 2200M



Standard



Upgraded

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