

ThermoVision[®] 2000[™]

APPLICATIONS

- Perimeter Security
- Coastal Surveillance
- Border Patrol
- Government Facilities Security
- Force Protection
- Training Range
- Fire Control
- Drug Interdiction
- Vessel Traffic Monitoring

PORTABLE LONG-RANGE INFRARED SURVEILLANCE SYSTEM

ThermoVision 2000 is a state-of-the-art long-range, platform-mounted thermal imaging system, offering unmatched performance with its long-wave Gen-III QWIP sensor and internal three field-of-view optical system. Designed with field-hardened enclosures and long-life components, ThermoVision 2000 withstands the most severe environmental conditions. With an operating range in excess of 10 kilometers, ThermoVision 2000 has the power to bring even the most distant targets to light.

PROVEN IN THE FIELD

ThermoVision systems have been installed at over 700 mobile and fixed bases around the world, conducting critical multi-role missions that include force protection, surveillance, and tactical awareness. The U.S. Air Force TASS (Tactical Automated Security System) program depends on ThermoVision's rugged design, crystal clear imagery, and networkability to keep its installations safe around the clock.

RESULTS ORIENTED

ThermoVision 2000's long-wave, narrow-band QWIP 320x240 FPA delivers high thermal sensitivity in both warm and cold climates and makes the system resistant to existing laser aggression weapons. Three fields of view ensure mission flexibility and effectiveness. Pan out for situational awareness or zoom in tight to identify targets. A powerful on-board processing capability provides innovative features such as infrared auto-focus, automatic image optimization, and network communication.

BUILT FOR RAPID DEPLOYMENT

The military-qualified COTS ThermoVision 2000 is designed with robust components in a field-hardened enclosure, allowing it to readily withstand virtually any atmospheric or environmental condition. The entire system consists of four main — parts tripod, pan and tilt unit, display control unit, and power supply. A single operator can set up the system in minutes, making it ideal for mobile operations and quick deployments.

BACKED BY THE FLIR NAME

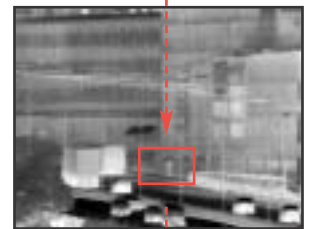
FLIR is the world's leading supplier of infrared imaging systems for military, paramilitary, and law enforcement applications. FLIR's global network of service and training centers assures customers the experience, resources, and commitment they demand.



Wide FOV
25°



Medium FOV
6°



Narrow FOV
.98°



Distance: 2.3 km



IMAGING PERFORMANCE WITH A 320 X 240 DETECTOR

Number of Fields of View	3
Wide	25° x 19°
Middle	6.0° x 4.5°
Narrow	0.99° x 0.74°
IFoV Wide	1.37 mRad
IFoV Middle	0.33 mRad
IFoV Narrow	0.054 mRad
Min. Focus Distance	20-100 m
Thermal Sensitivity	0.03 °C
Image Frequency	50/60 Hz
Electronic Zoom Function	Up to 4 times in real time
Image Freeze	Yes

DETECTOR

Type	GaAs, Quantum Well Infrared Photodet (QWIP), 320x240 pixels
Spectral Range	8-9 µm
Cooling	Integrated Stirling
Start-up Time	<6 minutes

IMAGE PRESENTATION

Video Output	RS170 EIA/NTSC or CCIR/PAL, composite and/or S-video
Presentation	2 color palettes/B&W or W&B selectable 14-bit digital serial link

RANGE PERFORMANCE

Nato Tank, STANAG 4349 Detection	>17 km
----------------------------------	--------

DIGITAL IMAGE

Type	Full dynamic, 14-bit digital image data
------	---

OPTICS

Field of View/Min Switch Time	<0.5 s
Lens Identification	Automatic, refocused when switched
Coating	High efficiency. Optional, hard carbon
Focus	Auto or manual

POWER INPUT

Voltage	18-35 V DC
Power Consumption	20 watts

ENVIRONMENTAL SPECIFICATION

Operating Temperature Range	-32° C to +55° C
Storage Temperature Range	-40° C to +70° C
Humidity	Operating and storage: 10% to 95%, non-condensing
Encapsulation	Metal, IP 65 IEC529
Bump	Operational: 25 g IEC 68-2-29
Vibration	Operational: 2 g IEC 68-2-6
EMI/EMC	MIL-STD 461 D, US FCC 15 J Class A, EN5008-1, EN50082-1

PHYSICAL CHARACTERISTICS

Weight	18 kg (7 kg, module only)
Size	503 x 312 x 267 mm (303 x 240 x 188 mm, module only)

INTERFACES

Remote Control	RS 232 , RS 485 and Ethernet (USB optional)
Ext. Sync	Gen. lock input (optional)

CORPORATE HEADQUARTERS

FLIR Systems, Inc.
16505 SW 72nd Ave.
Portland, OR 97224
USA
PH: +1 503.684.3731
PH: +1 800.322.3731
FX: +1 503.684.3207

BOSTON

FLIR Systems Boston, Inc.
16 Esquire Road
North Billerica, MA 01862
USA
PH: +1 978.901.8000
PH: +1 800.GO.INFRA
FX: +1 978.901.8885

EUROPE

FLIR Systems Ltd.
2 Kings Hill Avenue
West Malling, Kent
ME19 4AQ
United Kingdom
PH: +44.1732.220011
FX: +44.1732.220014

CANADA

FLIR Systems Ltd.
5230 South Service Road
Suite 125
Burlington, ON L7L 5K2
Canada
PH: +1 905.637.5696
PH: +1 800.613.0507
FX: +1 905.639.5488

SWEDEN

FLIR Systems AB
Rinkebyvagen 19
P.O. Box 3
SE-182 11 Danderyd
Sweden
PH: +46.8.753.2500
FX: +46.8.753.2364

MIDDLE EAST

FLIR Systems Inc.
Middle East Office
UB Building
Suite 108
P.O. Box 35021
Dubai
United Arab Emirates
PH: +971.4.2822339
FX: +971.4.2822527

Equipment described herein may require US Government authorization for export purposes. Diversion contrary to US law is prohibited.

©2002 FLIR Systems, Inc. Specifications are subject to change. Check website. 0613