

TALON™

HIGH-PERFORMANCE MULTI-SENSOR
THERMAL IMAGING SYSTEM IN A COMPACT,
LIGHTWEIGHT 9" PACKAGE



APPLICATIONS

- SURVEILLANCE
- RECONNAISSANCE
- TARGET ACQUISITION AND TRACKING
- FORCE PROTECTION
- SEARCH AND RESCUE (SAR)
- MANNED AND UNMANNED PLATFORMS

FEATURES

- Compact, multi-sensor system
- State-of-the-Art imaging
- Single LRU option
- Electron Multiplication CCD
- Embedded IMU/GPS and LRF
- Laser Pointer/Illuminator
- Analog and Digital Video Interfaces
- Multi-target autotracker
- Advanced fiber optic gyro stabilization
- Military hardened and qualified

BENEFITS

- Up to six simultaneous payloads in a 9" package: IR, Color CCD, EMCCD, Laser Pointer or Laser Illuminator, LRF, IMU
- Continuous zoom 640 x 480 infrared camera and two EO options (color and color/EMCCD combination) deliver high-resolution imagery day or night
- Eliminates separate electronics box, significantly reducing overall system weight and simplifying platform integration and logistics
- Extreme low light capability in sub-quarter moon conditions. Works in ZERO ambient light conditions in conjunction with laser illuminator
- Supports high accuracy range-to-target, target geolocation and GeoLock™ capability. Also works with platform GPS/INS/EGS/AHARS Systems for higher accuracy solutions
- Identifies targets for observers using NV devices while remaining invisible to others. The illuminator also augments EMCCD performance in low light conditions
- TALON provides NTSC or PAL analog video and SMPTE 292M and DVI digital video for all channels, maximizing resolution and range performance
- Advanced capability that tracks targets or scenes with all imagers (IR, CCD, EMCCD)
- Outstanding gimbal stability maximizes EO and IR sensor range performance
- TALON configurations delivered to multiple military programs. Proven quality, reliability and performance in the most demanding military environments



High resolution thermal imagery



High fidelity digital daylight/low light TV





TALON™

THERMAL IMAGER

Detector type	Indium Antimonide Focal Plane Array
Zoom ratio	10x continuous, 18x overall (all optical)
Image resolution	640 h x 480 v

DAYLIGHT/COLOR CCD TV – EO OPTION #1

Performance	Long Range using FLIR-designed optics with maximized focal lengths
Zoom	25x continuous zoom

COMBINATION COLOR CCD/ELECTRON MULTIPLICATION LOW LIGHT TV (EMCCD TV) – EO OPTION #2

Performance	Long Range extreme low light capability using FLIR-designed optics. Zero ambient light capability when used in conjunction with the laser illuminator
Zoom	10x continuous zoom Color CCD 20x continuous zoom EMCCD

EYESAFE LASER RANGEFINDER

Laser type	Class 1 (eyesafe)
Max. range	20 km

LASER POINTER

Nominal wavelength	830 nm
Power	135 mW nominal
Classification	Class 3b (per IEC 60825 & U.S. 21 CFR Part 1040)

LASER ILLUMINATOR

Nominal wavelength	830 nm
Power	1.9 W
Classification	Class 4 (per ANSI Z136.1-2000)

TURRET SENSOR UNIT (TSU) – SINGLE LRU TSU ALSO AVAILABLE

Gimbal range of motion	360° AZ, 360° EL Continuous
Slew rate	0° to 140° /sec

CONTROL ELECTRONICS UNIT (CEU) – NOT REQUIRED FOR SINGLE LRU VARIANT

Interfaces	MIL-STD-1553, ARINC 429, RS-232 RS-422, Analog and Digital Video Output (SMPTE). All interfaces also available in single LRU configuration.
Power	18-32 VDC

MULTIPLE ERGONOMIC, RUGGEDIZED CONTROL UNIT OPTIONS

NVIS compatible
Fully sealed design



CORPORATE HEADQUARTERS

FLIR Systems, Inc.
27700 SW Parkway Ave.
Wilsonville, OR 97070
PH: +1 800.727.3547

BOSTON

FLIR Systems, Inc.
25 Esquire Road
North Billerica, MA 01862
PH: +1 800.464.6372

HUNTSVILLE

FLIR Systems, Inc.
Huntsville, AL USA
PH: +1 256.325.3547

PITTSBURGH

FLIR Systems, Inc.
Freeport, PA USA
PH: +1.724.295.2880

WASHINGTON, D.C.

FLIR Systems, Inc.
2800 Crystal Drive, Suite 330
Arlington, VA 22202 USA
PH: +1 703.416.6666

EUROPE

FLIR Systems Ltd.
West Malling, Kent
United Kingdom
PH: +44.1732.220011

CANADA

FLIR Systems Ltd.
Burlington, ON
Canada
PH: +1 800.613.0507

SWEDEN

FLIR Systems AB
Täby, Sweden
PH: +46.8.753.2500

MIDDLE EAST

FLIR Systems Middle East, FZCO
Dubai Airport Free Zone
PH: +9714.299.6898

www.flir.com/GS

GEOLOCK™

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Extraordinary Vision