

# TALON™

HIGH-PERFORMANCE AIRBORNE MULTI-SENSOR  
THERMAL IMAGING SYSTEM IN A COMPACT, LIGHT-  
WEIGHT 9" PACKAGE



## APPLICATIONS

SURVEILLANCE  
RECONNAISSANCE  
TARGET ACQUISITION & TRACKING  
FORCE PROTECTION  
SEARCH AND RESCUE (SAR)  
PURSUIT AND PATROL  
DRUG INTERDICTION  
MINE DETECTION  
ENVIRONMENTAL MONITORING

## 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



CCD-TV camera



IR camera



# 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](http://www.flir.com/GS)

**GEOLOCK™**

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