

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



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GEOLOCK™

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