

Protective IR Optics by ELCAN

LIGHTWEIGHT, RUGGED, THERMAL WEAPON SIGHTS



SpecterIR and SpecterIR+ Overview:

The **SpecterIR** and **SpecterIR+** are rugged, shock and water resistant, thermal weapon systems developed to the same demanding standards employed on ELCAN optical and image intensified sights that are deployed with military forces all over the world. They enable the detection and acquisition of moving man-size objects despite darkness, smoke, dust and most fogs. Unlike image intensified night vision devices, these systems easily detect targets from the surroundings based on their heat signature, not visible light.

The **SpecterIR+** is an extended range version using the latest uncooled 320x240 infrared detector technology matched with superb ELCAN optical performance. The result is a simple-to-use thermal weapon sight less than 3 lbs with the extended range performance needed for combat situations. Specter IR+ also incorporates additional capabilities with a 2x digital zoom, reticle options, and integrated digital magnetic compass in the display.

Typical Applications:

- Military operations
- Border Security
- High risk perimeter security (oil fields, power plants, etc.)
- Government and law enforcement

System Benefits:

Latest 320 x 240 FPA Technology

Using the latest uncooled microbolometer technology ensures our customers obtain the clearest images for their detection and surveillance needs.

Rugged Design

ELCAN thermal sights are contained within a cast aluminum housing surrounded by a rugged santoprene cover. They were designed to meet stringent military standards for operation in harsh environments, but still weighs < 1.36 kg.

Easy to Use – No Menus

Operator has easy access to key function buttons, allowing the operator to maintain visual contact during operation of the system.

2X Electronic Zoom (SpecterIR+)

Electronic zoom capabilities enhance the standard detection capability of the system. Easily accessible zoom button controls allow the user to obtain more detailed information of an object without losing visual contact.

Flexible Options

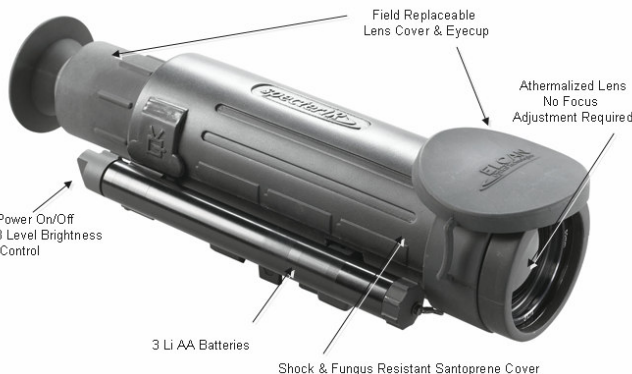
The Specter product line offers competitive solutions for either short or long range detection and acquisition requirements:

- Short range – SpecterIR
- Longer range – SpecterIR+

**FROM THE LARGEST
MANUFACTURER OF
MILITARY INFRARED
OPTICAL SYSTEMS**

SpecterIR / SpecterIR+ Specifications

Performance Specifications	SpecterIR	SpecterIR+
Detect Man (1.5m x 0.5m)		
Stationary	> 400 meters	> 1000 meters (+)
Detect Vehicle (2.3m x 2.3m)		
Stationary	> 1000 meters	> 2000 meters (+)
(Note: 70% Probability of detection)		
Optics	50mm f1, f/1, athermalized	50mm f1, f/1, athermalized
Field of View	8.6° (H) x 6.4° (V)	11.0° (H) x 8.25° (V)
Magnification: Standard	2.2X	2.2X
With 2X Electronic Zoom	Not Available	4.4X
Detector		
FPA Format	160 x 120	320 x 240
Type and Material	Uncooled Amorphous Silicon Microbolometer	Uncooled Amorphous Silicon Microbolometer
Spectral Response (Waveband)	7 – 14 μm	7 – 14 μm
NETD (Thermal Sensitivity)	100 mK (0.1°C)	50 – 80 mK (.05°C - .08°C)
General System Specifications		
Physical Features		
Size	323mm (L) x 105mm (W) x 95mm (H)	
Display Type	320 x 240 VGA Display	
Weight	< 1.36 kg with batteries	
Operational Temperature Range	- 20°C to 60°C	
Environmental	MIL-STD-810F environmental Tests	
Rugged Design	Aluminum housing surrounded by Santoprene cover	
Video Output	NTSC or PAL format via BNC connector	
Power Requirements		
Internal Power	3 AA Lithium Batteries – 5 hours @ 25°C	
External Power	Optional AC / DC power adapter capability	
Low Battery Indicator	Note: SpecterIR+ only	
Startup (from off)	< 5 seconds standard	
Additional Features		
Electronic Compass	Note: SpecterIR+ only	
Reticle options (user changeable)	Mil-Dot Style option Cross Hair Style option No Reticle option	
Polarity Control	Black Hot / White Hot	
Brightness Control	Note: SpecterIR+ only	
Gain / Level Control	Automatic	



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