

TACTICAL - MILITARY - SECURITY - PREDATOR



SENSE

(+ - (+ -

POWER



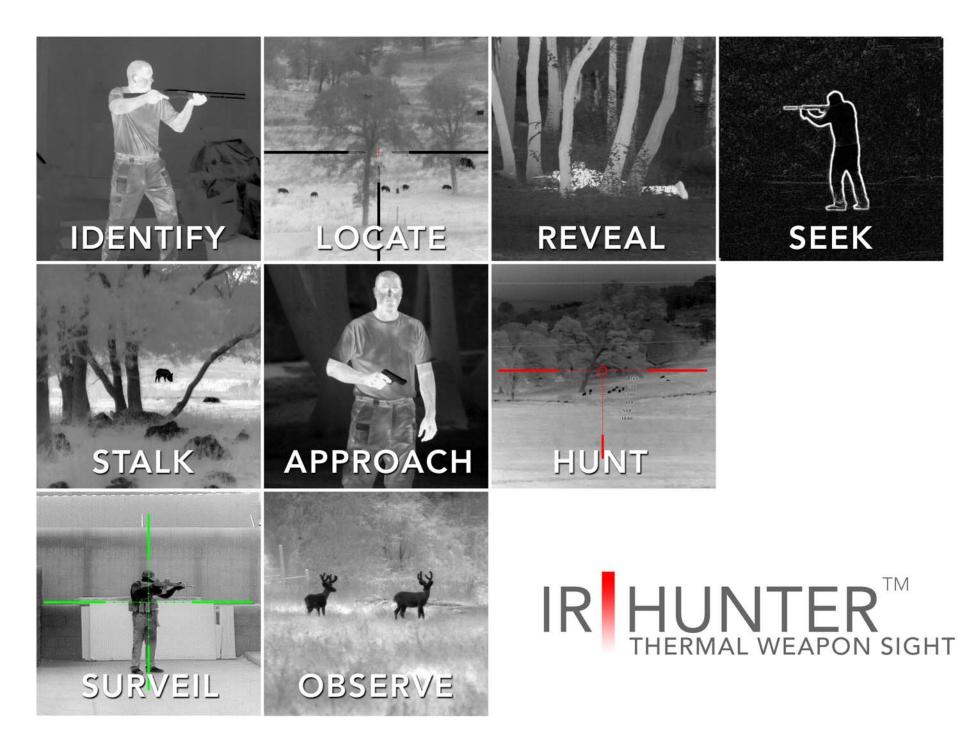
PROTECT

















PERFORMANCE - PRECISION - PERFECTION

The IR HUNTER combines the performance of a military thermal sight with the precision of a high end rifle scope. Never before has there been a thermal sight that is so easy and intuitive to use with so many options and features. The best way for us to show you how good the IR HUNTER works is to put it next to the competition.



Tactical by Design.....



Engineered to be balanced on your weapon system this state of the art Thermal Sighting platform is ready to rock. From its reflex red dot sight to the tactical turret knobs this is the one. A truly affordable, precision optical device that operates 24-7 all year round.



The IR HUNTER[™] is not just your everyday thermal sight, it can easily convert into a Clip-On thermal sight.

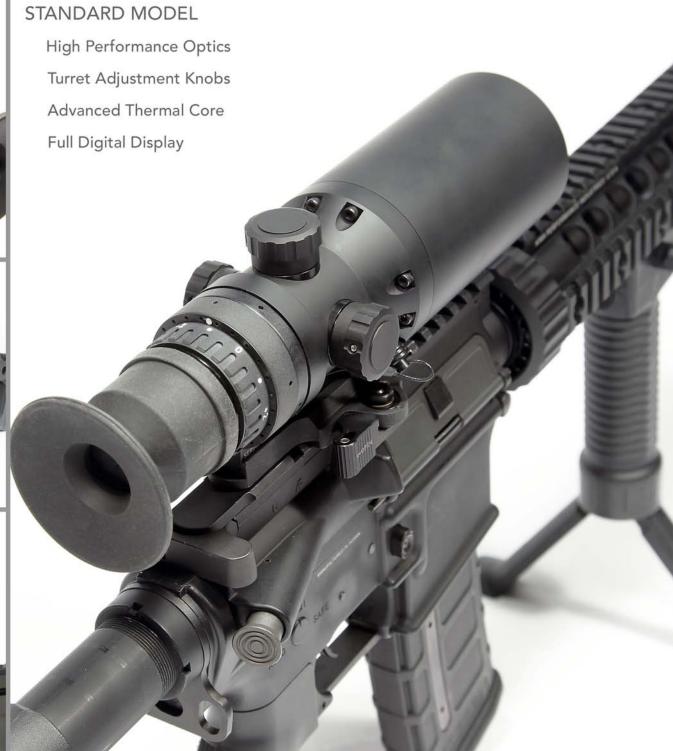
- Built-In Alignment Software
- Operation is Simple
- Easy to Switch Modes
- Best of Both Worlds
- Ask about recommended optics

System	Model No.	Resolution	Objective Lens	Display	Base Magnification	Digital Magnification
IR HUNTER™	IRH160-20-SBL	160x120	19mm f/1.1	800x600	2x - 16.6° Field of View	4x - 8.3° Field of View
IR HUNTER™	IRH320-20-SBL	320×240	19mm f/1.1	800x600	2x - 16.6° Field of View	8x - 4.2° Field of View
IR HUNTER™	IRH320-35-SBL	320×240	35mm f/1.2	800x600	3x - 8.7° Field of View	12x - 2.2° Field of View
IR HUNTER™	IRH640-20-SBL	640x480	19mm f/1.1	800x600	1x - 33.2° Field of View	8x - 4.2° Field of View
IR HUNTER™	IRH640-35-SBL	640×480	35mm f/1.2	800x600	1.5x - 17.4° Field of View	12x - 2.2° Field of View
IR HUNTER MARK II	IRHM2-640-20	640×480	19mm f/1.1	640×480	1.5x - 22.4° Field of View	12x - 2.8° Field of View
IR HUNTER MARK II	IRHM2-640-35	640×480	35mm f/1.2	640×480	2.5 x - 12.4° Field of View	20x - 1.5° Field of View

























CLIP-ON FEATURE

Advanced Software Allows Dual Mode Use

Works as Both a Clip-ON and Dedicated Sight

Clip-On Mode works only with Approved Day Optics

E-Z User Calibration Interface

Accuracy Enhanced Design

No Special Optics Required













DESERT MODEL

Durable Coyote Tan Color

Available in Standard or Tactical or Clip-On Models

SPECIAL ORDER





SYSTEM OVERVIEW

The IR HUNTER is 100% American Built and we went a step further to ensure all our components are top of the line. We have taking great pride in that our systems are hand assembled and manufactured with the greatest care.



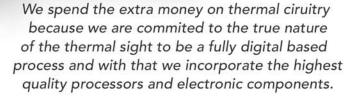




System	Model No.	Sensor	Lens	Display	Size	Weight
IR HUNTER™	IRH160-20-SBL	FLIR TAU2 160x120	19mm f/1.1	KOPIN AMLCD 800x600	6.5" L x 3.1" W x 2.9" H	825 Grams
IR HUNTER™	IRH320-20-SBL	FLIR TAU2 320x240	19mm f/1.1	KOPIN AMLCD 800x600	6.5" L x 3.1" W x 2.9" H	825 Grams
IR HUNTER™	IRH320-35-SBL	FLIR TAU2 320x240	35mm f/1.2	KOPIN AMLCD 800x600	7.4" L x 3.1" W x 2.9" H	995 Grams
IR HUNTER™	IRH640-20-SBL	FLIR TAU2 640x480	19mm f/1.1	KOPIN AMLCD 800x600	6.5" L x 3.1" W x 2.9" H	825 Grams
IR HUNTER™	IRH640-35-SBL	FLIR TAU2 640x480	35mm f/1.2	KOPIN AMLCD 800x600	7.4" L × 3.1" W × 2.9" H	990 Grams
IR HUNTER MARK II	IRHM2-640-20	BAE MicroIR 640x480	19mm f/1.1	EMAGIN OLED 640x480	6.5" L × 3.1" W × 2.9" H	825 Grams
IR HUNTER MARK II	IRHM2-640-35	BAE MicroIR 640x480	35mm f/1.2	EMAGIN OLED 640x480	7.5" L × 3.1" W × 2.9" H	990 Grams



FULLY DIGITAL ARCHITECTURE



THERMAL SENSOR

The eye of the IR Hunter using military technology to detect the slightest temperature.



The IR HUNTER uses the TAU 2 thermal core from FLIR Systems that uses a 17um MICRON detector. The core comes in 160x120, 320x320 and 640x480 resolutions to meet a range of requirments.

LWIR (Long Wave Infra-Red)

Proven Core Technology

Uncooled Technology

Built-In Shutter

VOx (Vanadium Oxide)

LEARN MORE - DETECTION, RECOGNITION and IDENTIFICATION

As you can see to the right there are 2 sets of images, one with a gun and the other with a stick. In set 1st you have detection which means you can see the man is holding something. In the second is Recognition which means you can see it is a gun versus a stick and in the 3rd is Identification meaning you can see it is a shotgun.

Aluminum Housing - Not Plastic

Improves Thermal Stabilization

Solid Interface

4 Points of Contact for Accuracy





Sensor	Туре	Spectral Band	Native Resolution	Micron Pitch	Sensitivity
160x120 TAU2	VOx	7.5 - 13.5 µm	168 x 128 pixels	34 µm	<50 mK at f/1.0
320x240 TAU2	VOx	7.5 - 13.5 μm	336 x 256 pixels	17 µm	<50 mK at f/1.0
640x480 TAU2	VOx	7.5 - 13.5 μm	640 x 512 pixels	17 µm	<50 mK at f/1.0

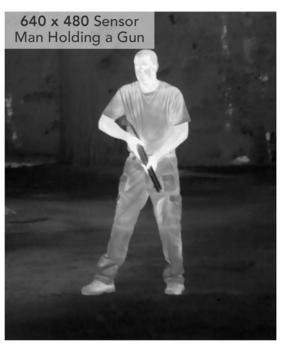












Please Note - All Images are 100% taken with the IR Hunter System and are actual images and not touched up.

THERMAL SENSOR

The eye of the IR HUNTER MK II using military technology to detect the slightest temperature difference.



The IR HUNTER MK II uses the MicroIR thermal core from BAE Systems that uses a 12um MICRON detector. The core delivers high performance clean 640x480 imagery at an astounding 60hz frmae rate.

12um MICRON

LWIR (Long Wave Infra-Red)

Uncooled Technology

60hz High Speed Frame Rate

VOx (Vanadium Oxide)

High Sensitivity

LEARN MORE - 12um MICRON versus 17um MICRON versus 25um MICRON

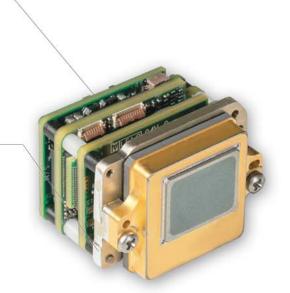
As you can see to the right, there are 3 sets of images taken at the same time and showing the difference between the different Micron sizes. The smaller the Micron the narrower the FOV (field of view) meaning the smaller the Micron the more magnification you will get from the same optics.

Miniaturized Circuitry

Longer Battery Life

Integral Heat Sync

ForThermal Stability



BAE SYSTEMS

Sensor	Туре	Spectral Band	Native Resolution	Micron Pitch	Sensitivity
640x480 MicroIR	VOx	7.5 - 13.5 μm	640 x 480 pixels	12 µm	<50 mK at f/1.0

SENSOR MICRON PITCH



Image taken with 640 x 480 Sensor 12um MICRON 35mm Lens

System Magnification 12° FOV

IR HUNTER MARK II



640x480 at 2x Zoom showing 320 x 240 12um MICRON 35mm Lens

System Magnification 6° FOV

IR HUNTER MARK II



Image taken with 640 x 480 Sensor 17um MICRON 35mm Lens

System Magnification 17° FOV

IR HUNTER™



Image taken with 320 x 240 Sensor 17um MICRON 35mm Lens

System Magnification 9° FOV

IR HUNTER™



Image taken with 320 x 240 Sensor 25um MICRON 35mm Lens

System Magnification 12° FOV

GERMANIUM LENS

The IR Hunter uses only the best materials in the objective lens assemblies.

Protective Window

DLC Hard Carbon Coated

AR Coated Germanium Lenses

Thermally Stabilized

High Environmental Durabiliy

Shock resistant







LEARN MORE - 640x480 vs. 320x240

A 320x240 sensor is basically identical to a 640x480 sensors in the 2x digital zoom mode. This means that if you compare an identical 320 system to a 640 system with the same lens the 640 will give you a wider FOV (field of view) - but the 640 system will not give you more magnification and actually equals the magnification of a 320.



Lens Size	Speed	Lens Type	160x120 34um MICRON	320x240 17um MICRON	640x480 17um MICRON	640x480 12um MICRON
19mm	F/1.1	Athermalized	16.6° FOV Horizontal	16.6° FOV Horizontal	33.2° FOV Horizontal	22.4° FOV Horizontal
35mm	F/1.2	Athermalized	n/a	8.7° FOV Horizontal	17.4° FOV Horizontal	12.4° FOV Horizontal

OPTICS MAGNIFICATION



IR HUNTER 320 x 240 Sensor 17um MICRON Man @ 700 Yards 35mm Lens

A 19mm Lens would have a comparable view at 700 yards



IR HUNTER MARK II

640 x 480 Sensor 12um MICRON Man @ 1,000 Yards 35mm Lens

A 19mm Lens would have a comparable view at 550 yards



IR HUNTER™

320 x 240 Sensor 17um MICRON Man @ 350 Yards 35mm Lens

A 19mm Lens would have a comparable view at 190 yards



IR HUNTER MARK II

640 x 480 Sensor 12um MICRON Man @ 500 Yards 35mm Lens

A 19mm Lens would have a comparable view at 275 yards



IR HUNTER™

320 x 240 Sensor 17um MICRON Man @ 210 Yards 35mm Lens

A 19mm Lens would have a comparable view at 115 yards



IR HUNTER MARK II

640 x 480 Sensor 12um MICRON Man @ 300 Yards 35mm Lens

A 19mm Lens would have a comparable view at 165 yards

MICRO DISPLAY

Your system is as only good as your display so you want the best.

Highest Quality Displays

Combat Proven

Full Color Image (Color Models)

250,000 in Military Thermal Sights

Digital Calibrated Modules

High Reliability





	Display	Display Type	Resolution	Color	Gray Levels	Contrast	Rate	Pitch
	KOPIN	AMLCD	SVGA 800x600	24 Bit	256	100:1	60hz	15 µm
_	EMAGIN	OLED	VGA 640x480	30 Bit	256	10,000:1	60hz	15 µm

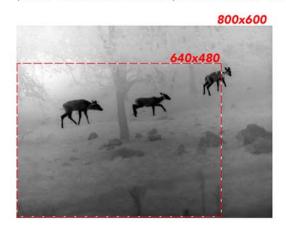
IR HUNTER MK II System EMAGIN 640x480 OLED Display

Our IR HUNTER MK II offers a 1:1 ratio of sensor to display resolution for the sharpest image possible. The screen size is not as large as the Kopin but it makes up for it with a super crisp image on the display.



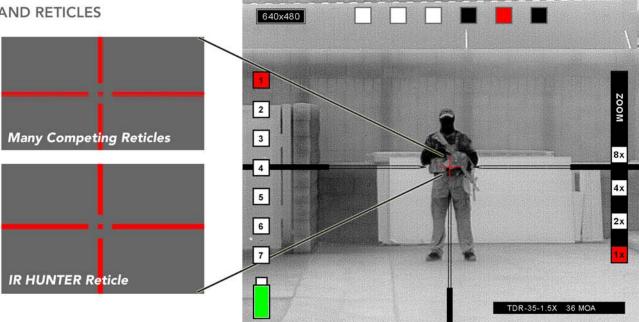
IR HUNTER System KOPIN 800x600 AMLCD Display

Unlike most other systems we actual drive the entire 800x600 display for a bigger and more detailed image. Compared to 640x480 the Kopin display has 50% more pixels which means more precise reticles and graphics.



MORE PRECISE GRAPHICS AND RETICLES RETICLE DETAILS

Our reticles are generated with a full processor and displayed in a digital format. This allows us to make MOA and MIL accurate reticles based on a pixel by pixel level. The illustration to the right shows you how blurry many competing systems using analog based reticles are seen in close up detail.



ETR ENHANCED TARGET RECOGNITION

INCREASED TARGETING

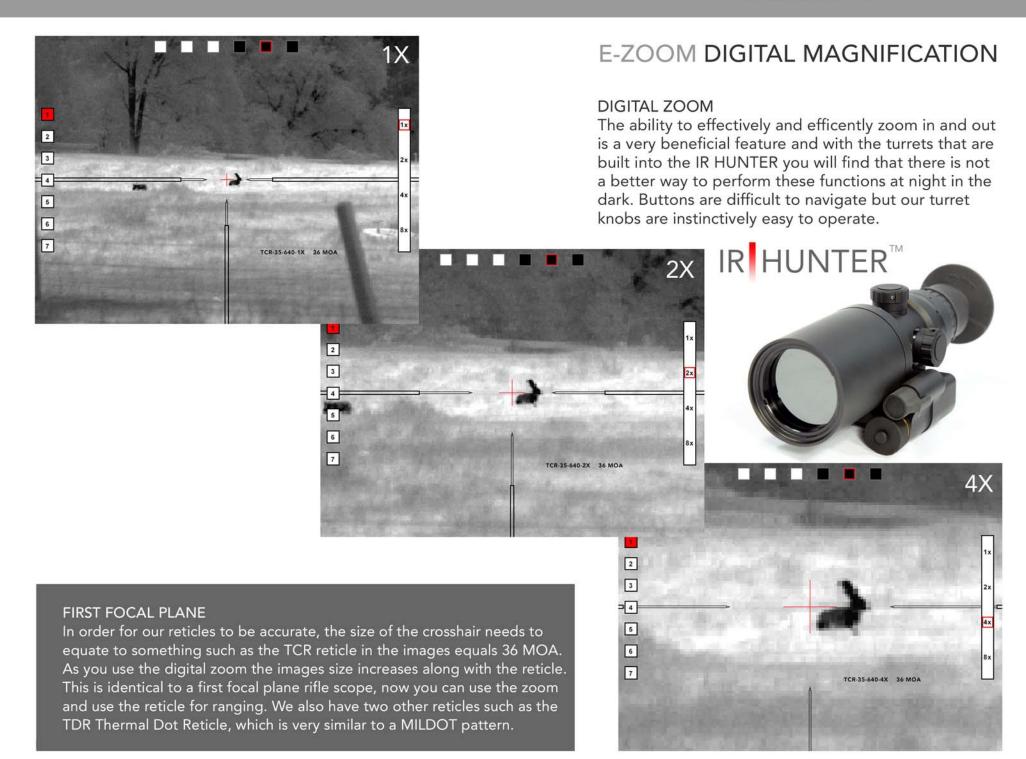
Enhanced Target Recognition is a capital feature of the IR HUNTER! While using other thermal scopes, important imagery is often washed out against the sky and horizon even with the use of frequent recalibrations. The IR HUNTERs ETR focuses it's processing power on your target, resulting with enhanced precisely detailed target images. This mean more hits for the shooter.

LEARN MORE - ETR

Scene wash out occurs when the horizon has a lot of sky behind the target resulting in a large difference in temperature. The thermal system has to divide this difference into shades of gray and there are only so many available. The ETR tells the sensor to perform its auto calibration within the yellow brackets which will have a smaller temperature difference giving you more detail on the target area.







MODELS SYSTEM FEATURES COMPARISON FEATURES MAXPOL

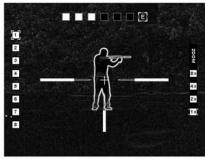
MAXPOL MULTI POLARITY CONTROL

ADVANCED POLARITY MODE

With most thermal sights you have a white hot and black hot polarity mode which you switch back and forth to find which is the best image. With the IR HUNTER we have the new MaxPol Multiple Polarity Control mode that gives you 3 levels of black hot and 3 levels of white hot so you can get the best image.

EDGE DETECT - Only availble in the IR HUNTER MK II

This added feature is a real tactical tool by keeping most of the entire screen black your eye does not get blown out so you can quickly adjust to your eyes night vision if needed.





















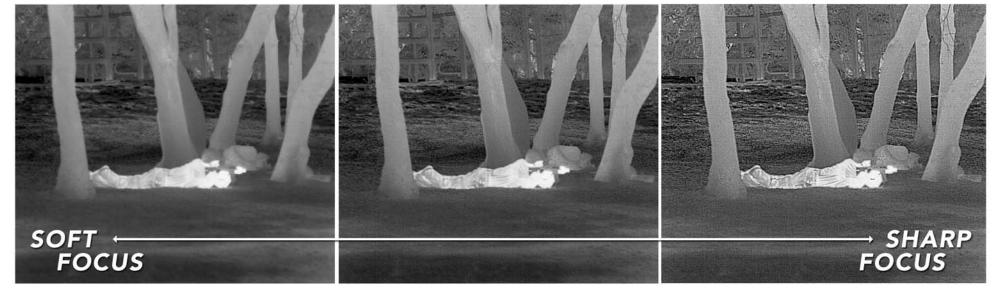
Please Note - All Images are 100% taken with the IR Hunter System and are actual images.



DEC DIGITAL FOCUS CONTROL

DIGITAL IMAGE ENHANCEMENT

In order to increase performance we needed to add a fixed focus Athermalized diamond turned Germanium optic. This gave us superior detection and to accomadate for the focus we did this through our electronics. The silver lining is that it also makes the system appear to be higher resolution and that is an added advantage.



Please Note - All Images are 100% taken with the IR Hunter System and are actual images.

You must see you target in order to hit it. The IR HUNTERS DFC - Digital Focus Control will allow you to quickly focus in on the target, achieving the sight picture you need to make the shot. The DFC works so well, it delivers unsurpassed clarity and crispness of image. Your 320x240 system will perform like the higher price 640, saving you money and increasing you accuracy.

INTELLIGENT RETICLES

The IR Hunter uses its processing power to deliver precion sighting reticles.

MOA Calibrated

Works the Same as First Focal Plane

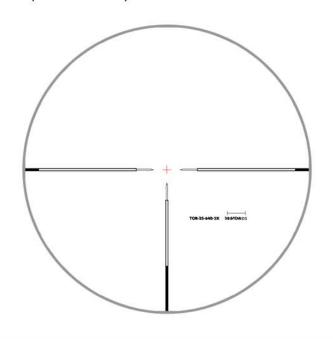
Selectable Reticles

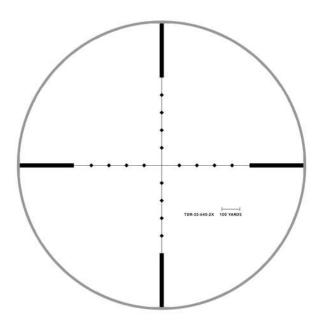
Optional Multiple Colors (GREEN, RED and AUTO)

LEARN MORE - HD Looking Reticles

We generate our reticles so that they are 1:1 to the pixels in the display so our reticles are ultra crisp and detailed. Many companies generate the reticles using the processor of the thermal engine and you will notice that when the image is sent to the display it is not a 1:1 pixel ration so the reticles will appear blurred.

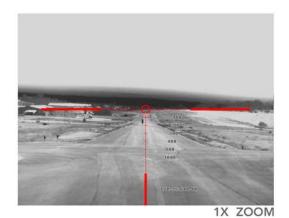
OUR WEAPON RECOIL MACHINE

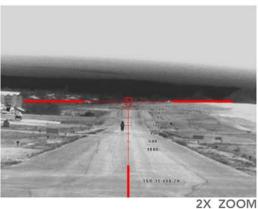




Model No.	Lens Size	Zoom Level	Sensor	Field of View	Pixel Per MOA	MOA Per Pixel
IRH640-19-SBL	19mm	1x	640×480	33°	0.4	2.5
IRH320-35-SBL	35mm	1x	320×240	8.7°	1.5	0.7
IRH640-35-SBL	35mm	4x	640×480	4.3°	3.0	0.3
IRH320-35-SBL	35mm	4x	320×240	2.2°	6.1	0.2
IRHM2-640-19	19mm	1x	640×480	22.4°	0.5	2.1
IRHM2-640-35	35mm	2x	640×480	6.2°	1.7	0.6





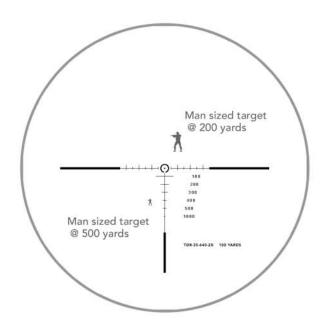




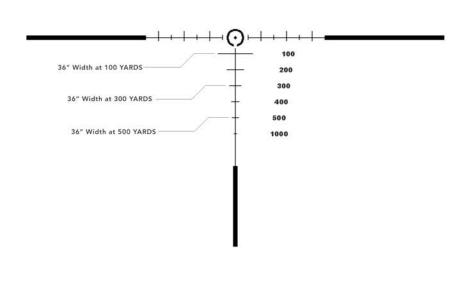
4X ZOOM

TSR - THERMAL SUBTENSION RETICLE

For shooting at extended distances the TSR reticle provides some basic ranging data for the user. The width for each of the elevation marks is based at 36" wide for the distance readout in yards to the right of the mark. As you zoom in the reticle works the same as a first focal plane sight where the reticle scales as you zoom. It is just that easy.



RETICLE SUBTENSIONS



Please Note - All Images are 100% taken with the IR Hunter System and are actual images.





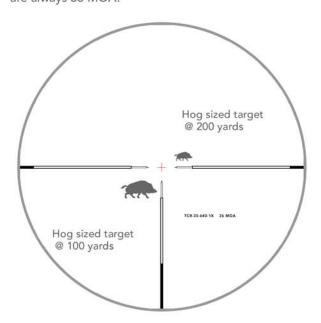


2X ZOOM

4X ZOOM

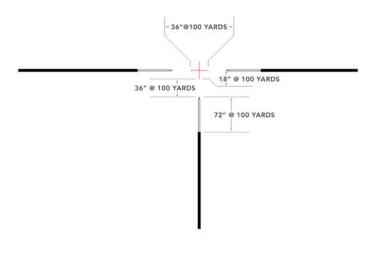
TCR - THERMAL COMBAT RETICLE

One of the easiest reticles to use is our TCR Thermal Combat Reticle that is a simple crosshair in the center. The width of the crosshair is always 36 MOA or 36" at 100 yards. Half of the crosshair is 18 MOA which is the width of a man at 100 yards. If a man sized target is the height of the crosshair then he will be 200 yards out. As you zoom the reticle also zooms so you are always 36 MOA.

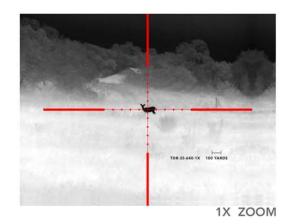




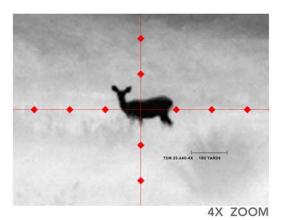
RETICLE SUBTENSIONS



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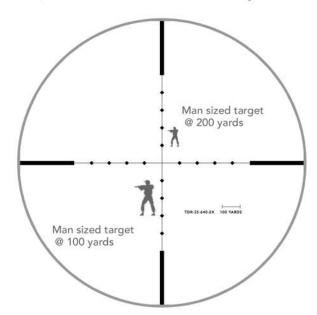


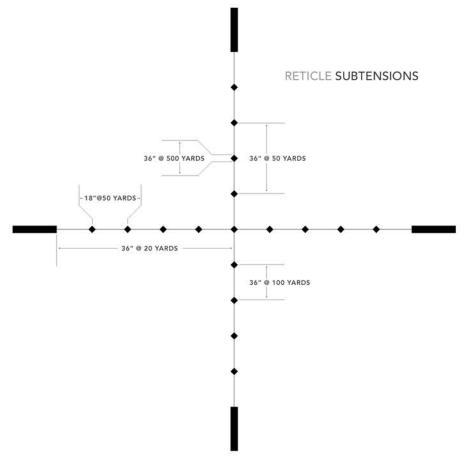




TDR - THERMAL DOT RETICLE

The IR HUNTER along with other thermal wepaon sights is primarily used at night and with lower magnifications then standard day optics. Becasue of this the engagment ranges at night are much shorter. To deal with this the IR HUNTER uses a DOT reticle system similar to the MII DOT but instead of each dot representing 1000:1 our system is calibrated at 100:1, so the distance between dots is 100 yards.





Please Note - All Images are 100% taken with the IR Hunter System and are actual images.



IR HUNTERMARK II IR HUNTERMARK II



IR HUNTER™

IR HUNTER™











MODEL NO.
PRICE
SENSOR RESOLUTION
SENSOR MICRON
SENSOR TYPE
FIELD of VIEW
MAGNIFICATION E-ZOOM
OBJECTIVE LENS
ATHERMALIZED
FRAME RATE
DISPLAY TYPE
HD GRAPHICS
DISPLAY SIZE
BATTERY TYPE
BATTERY LIFE
ETR ENHANCEMENT
DFC DIGITAL FOCUS
USER CONTRAST
USER INTERFACE
IMAGE CAPTURE
VIDEO OUTPUT
WARRANTY

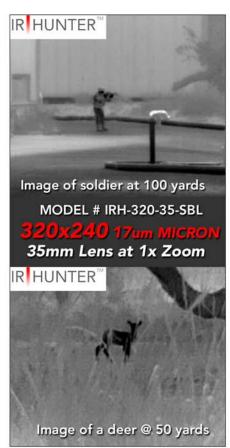
IRHM2-640-20	IRHM2-640-35		
\$5,495.00	\$6,495.00		
640x480	640x480		
307,200 PIXELS	307,200 PIXELS		
BAE MicroIR	BAE MicroIR		
12um	12um		
VOx VANADIUM-OXIDE	VOx VANADIUM-OXIDE		
22° FOV	12° FOV		
1.5x OPTICAL	2.5x OPTICAL		
12x DIGITAL	20x DIGITAL		
19MM	35MM		
F/1.1	F/1.2		
✓	✓		
60HZ	60HZ		
EMAGIN	EMAGIN		
OLED	OLED		
640×480	640×480		
/	/		
123 LITHIUM	123 LITHIUM		
2 EACH	2 EACH		
5 HOURS @ 30hz	5 HOURS @ 30hz		
/	/		
/	/		
/	/		
TURRET KNOBS	TURRET KNOBS		
/	/		
/	/		
3 YEARS	3 YEARS		

IRH160-20	IRH320-20	IRH320-35
\$3,995.00	\$4,495.00	\$4,995.00
168x128	336x256	336x256
21,504 PIXELS	86,016 PIXELS	86,016 PIXELS
FLIR TAU 2	FLIR TAU 2	FLIR TAU 2
17um	17um	17um
VOx VANADIUM-OXIDE	VOx VANADIUM-OXIDE	VOx VANADIUM-OXIDE
17° FOV	17° FOV	9° FOV
2x OPTICAL	2x OPTICAL	3x optical
4x DIGITAL	8x DIGITAL	12x DIGITAL
19MM	19MM	35MM
F/1.1	F/1.1	F/1.2
/	✓	✓
30HZ	30HZ	30HZ
KOPIN	KOPIN	KOPIN
AMLCD	AMLCD	AMLCD
800×600	800×600	800x600
/	✓	/
123 LITHIUM	123 LITHIUM	123 LITHIUM
2 EACH	2 EACH	2 EACH
3.5 HOURS	3.5 HOURS	3.5 HOURS
✓	✓	✓
/	✓	✓
×	×	×
TURRET KNOBS	TURRET KNOBS	TURRET KNOBS
/	/	/
/	/	/
3 YEARS	3 YEARS	3 YEARS









Images taken together at the same time with IR HUNTER and IR HUNTER MK II.



READY FOR DEPLOYMENT

EXPORT WARNING

Export of the commodities described herein is strictly prohibited without a valid export license issued by the U.S. Department of State, Directorate of Defense Trade Controls as proscribed in the International Traffic in Arms Regulations (ITAR), Title 22 Code of Federal Regulation, Parts 120-130





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