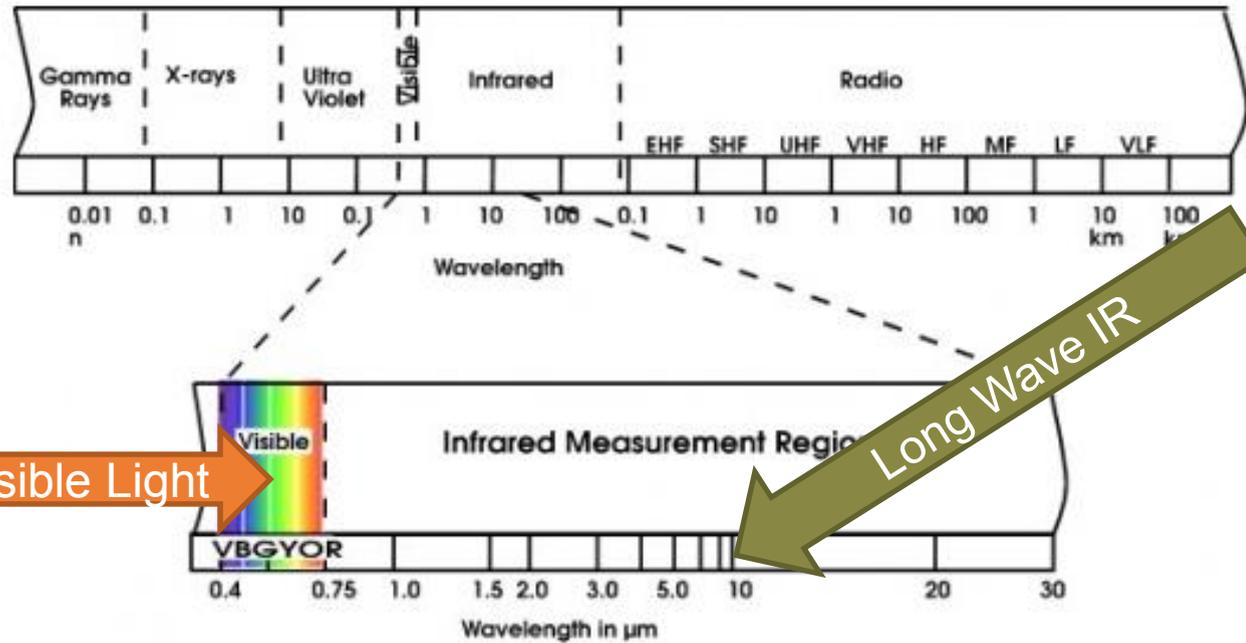
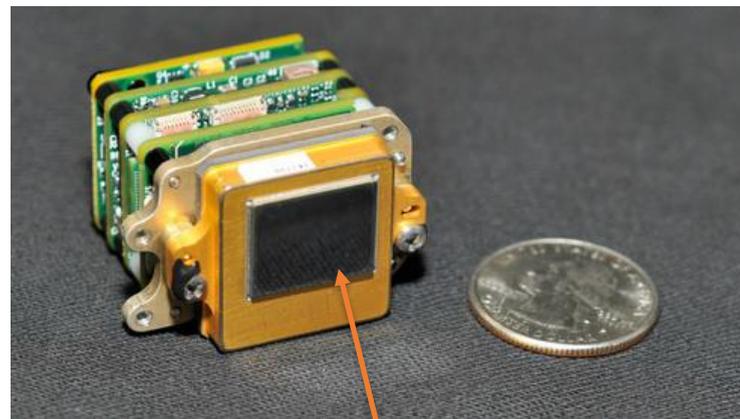
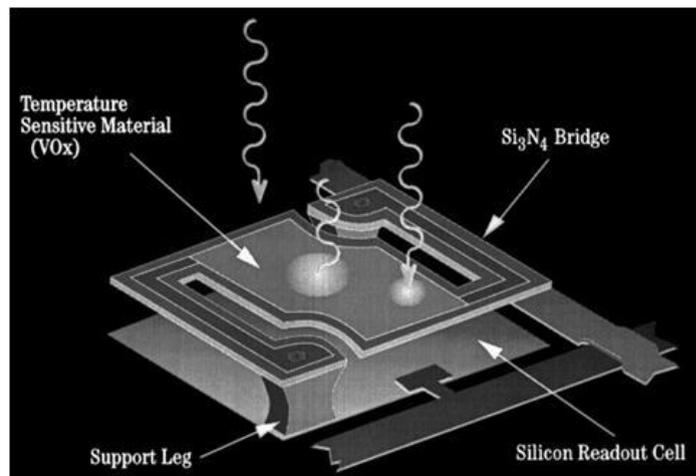


The Technology

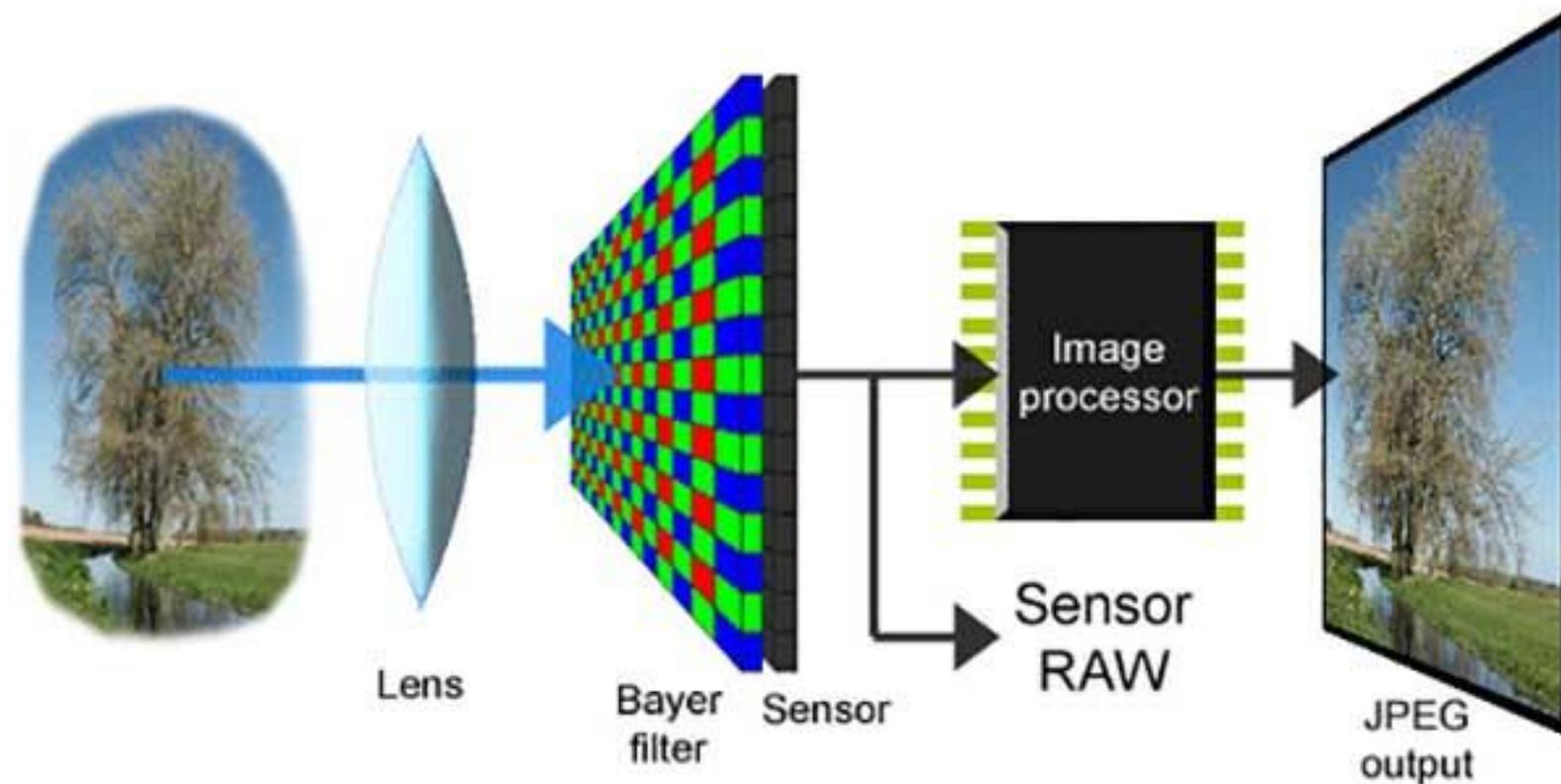


- » These cores are essentially digital cameras that “see” heat instead of reflected light.
- » They’re all built around a thermal image sensor called a micro-bolometer.
- » They differ from “night vision” technology in that they don’t rely on visible light – objects can be detected in ***complete darkness***.

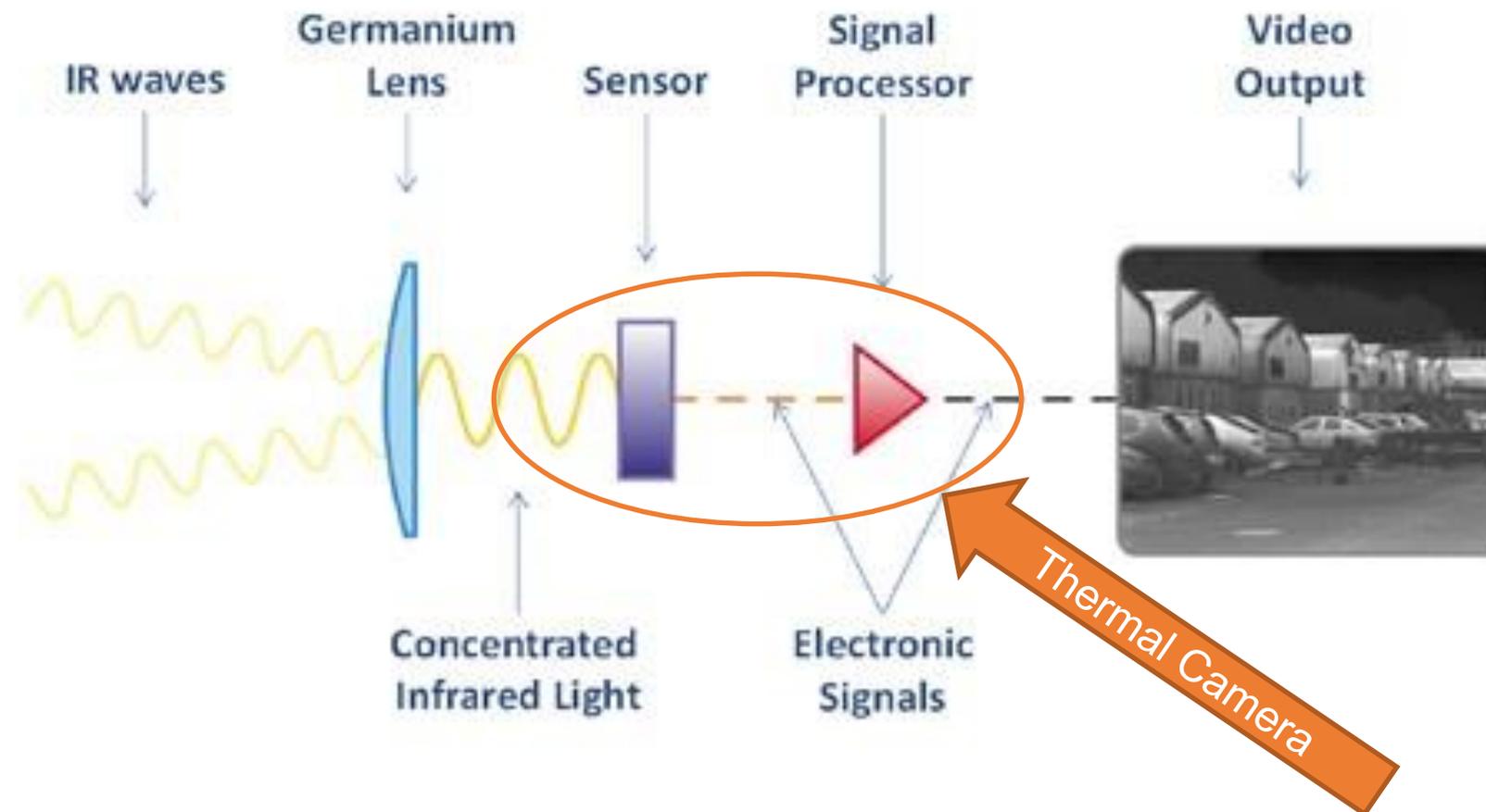


Micro-bolometer

- » Digital Cameras work by capturing reflected light from a scene and focusing that light on a “focal plane array” or FPA.
- » The FPA voltages are converted to a viewable image by a micro-processor



- » In the case of a thermal camera, the incoming energy is emitted radiation due to the thermal energy (heat) of the target.

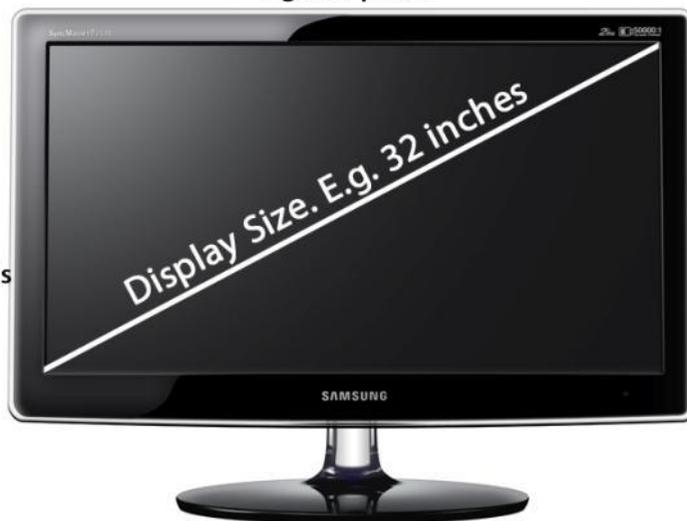


- » A bit of jargon used throughout the industry
 - Sensor Resolution – how many pixels there are
 - State of the art for consumer market is 640x480 (0.3 megapixel)
 - Pixel Pitch – distance between pixels
 - Most competition is still at 17 micron – we're using 12 micron cores

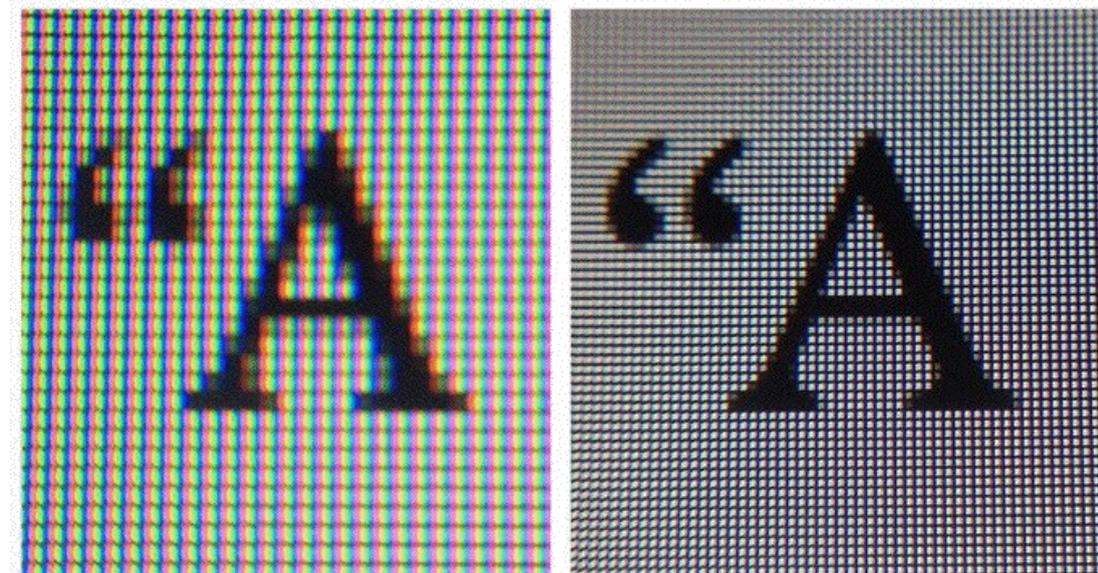
Resolution = Number
of Pixels

Number of Pixels in Horizontal
E.g. 800 pixels

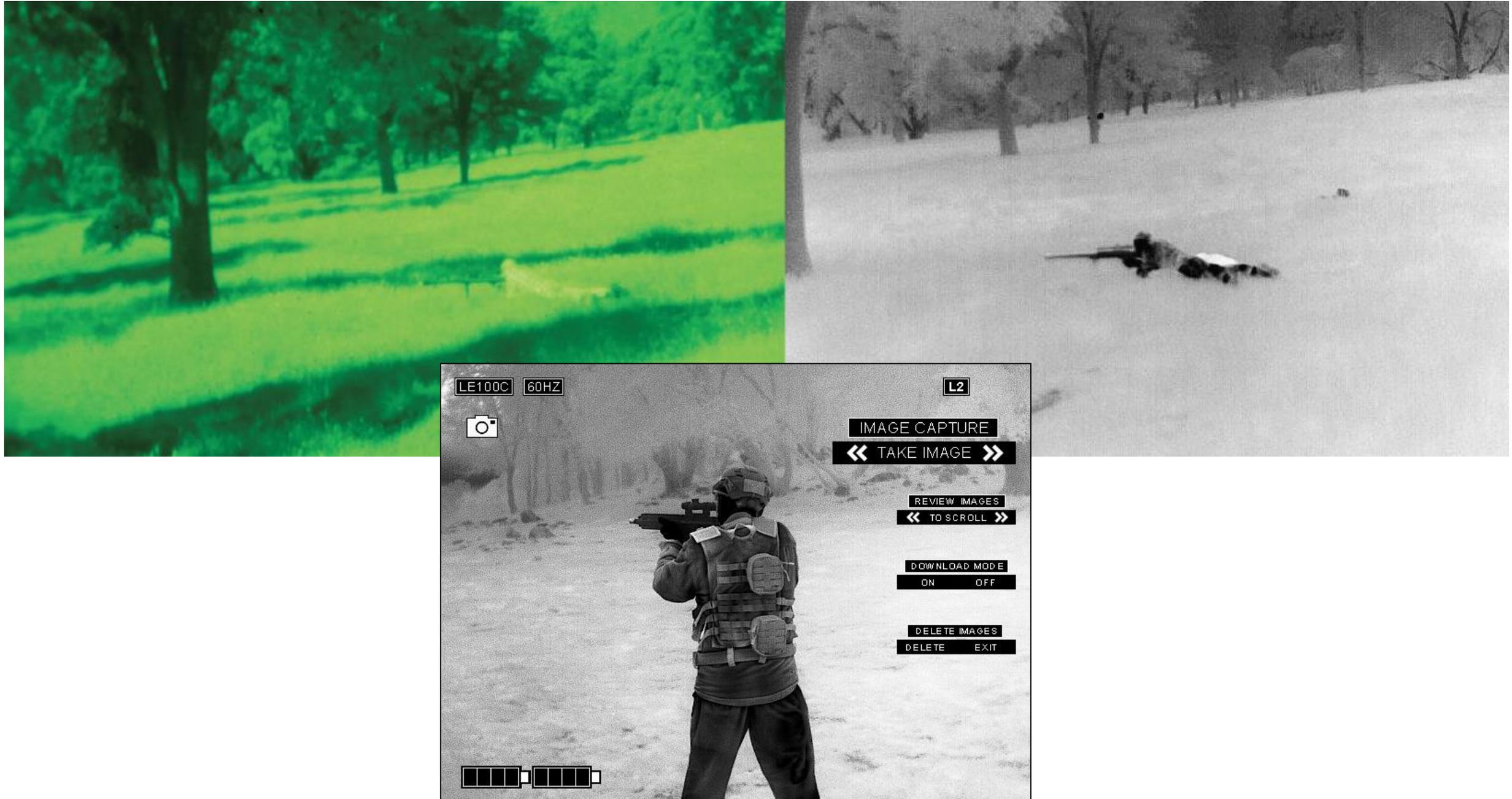
Number of
Pixels
in Vertical
E.g. 600 Pixels



Pixel Pitch = Distance
Between Pixels



The End Result



Trijicon EO Right to Win

**Resolution = Pixel
Count**

**More Pixels = More
Information**

160 x 120 Sensor
Man Holding a Stick



320 x 240 Sensor
Man Holding a Stick



640 x 480 Sensor
Man Holding a Stick



160 x 120 Sensor
Man Holding a Gun



320 x 240 Sensor
Man Holding a Gun



640 x 480 Sensor
Man Holding a Gun

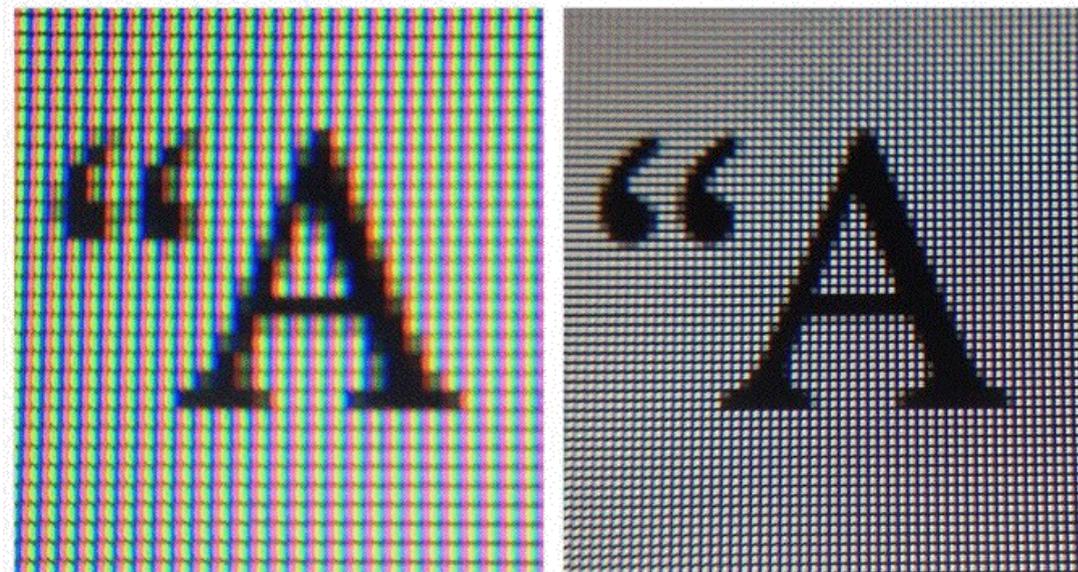


Trijicon is here

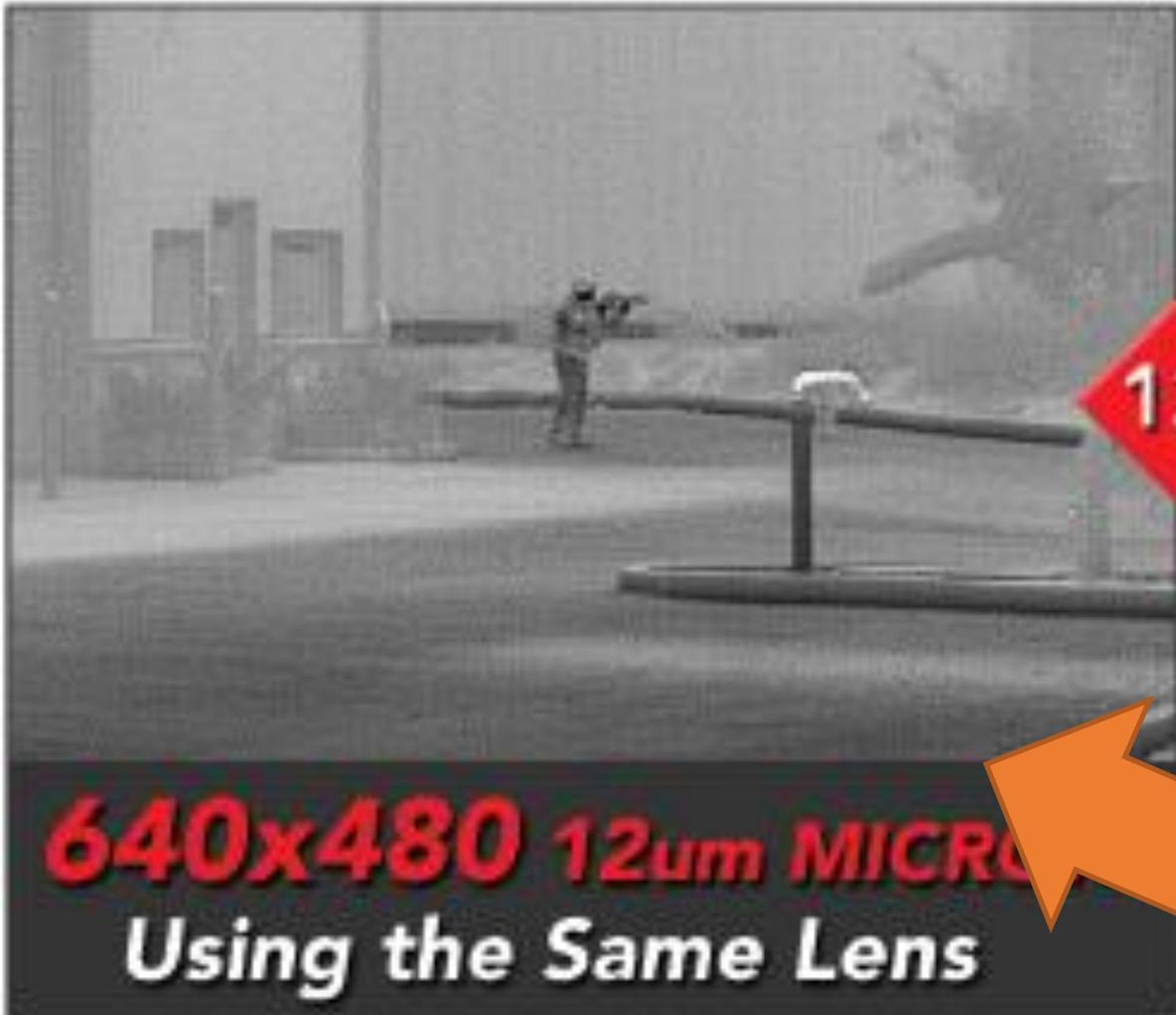
Please Note - All Images are 100% taken with the IR Hunter System and are actual images and not touched up.

- » 12 micron Pixel Pitch:
 - Better image quality – more edge detail
 - Smaller sensor = smaller scope. 12 micron systems have ~30% reduction in optic size over 17 micron systems => Lighter systems are achievable

Pixel Pitch = Distance
Between Pixels

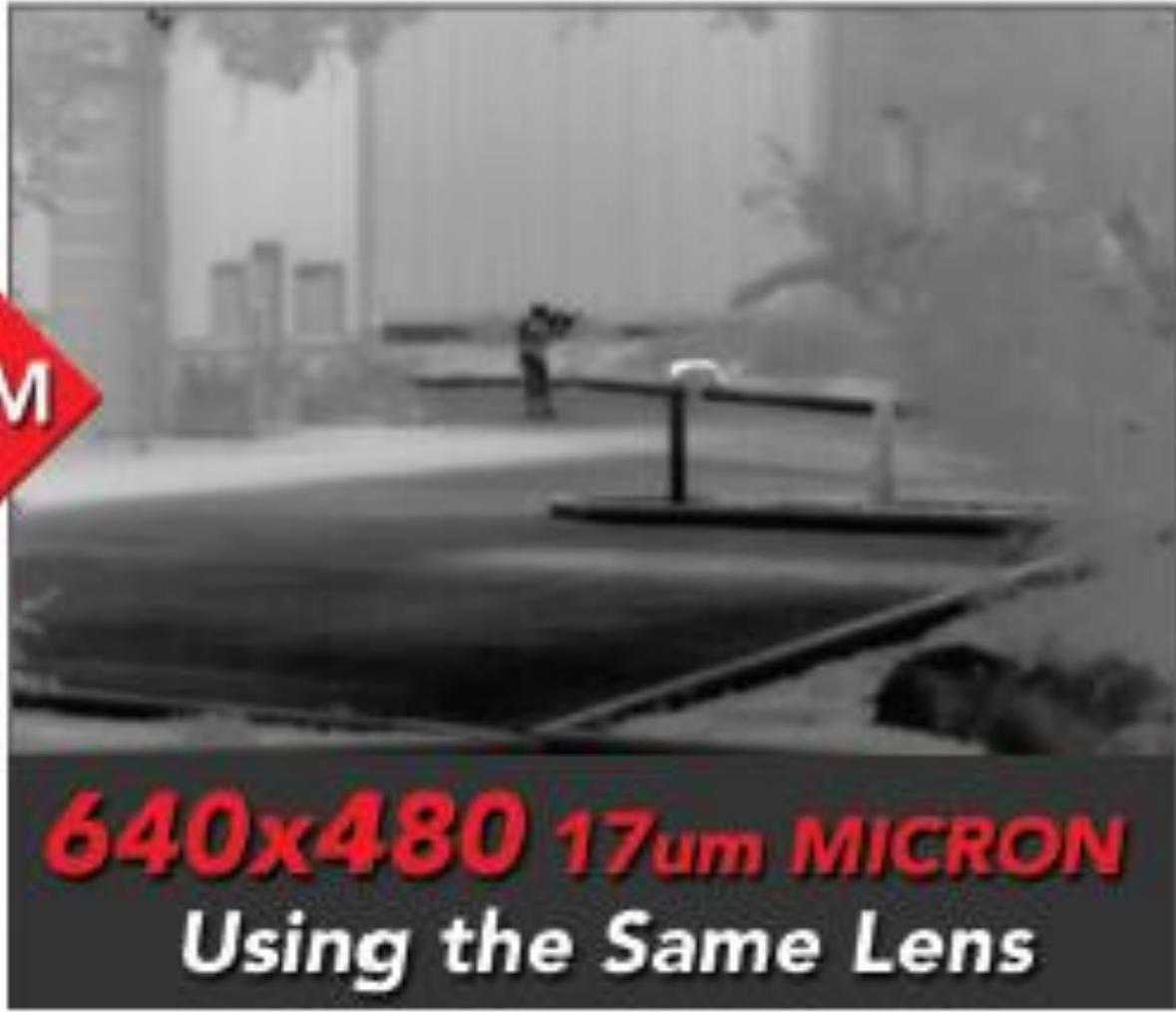


Trijicon EO Right to Win



12UM

17UM



» GASIR Objective – better clarity compared to Germanium



Trijicon EO Right to Win

- » Made in Auburn, CA
 - Design
 - Machining
 - Assembly
- » US Made thermal core, micro-display and thermal optics
- » Tested to MIL-STD-810G
- » Strong Warranty
 - Limited Lifetime on optic
 - 3 years on electronics



» MADE IN AMERICA. WITH PRIDE.

It's not always convenient or financially beneficial to build such technologically advanced optics in America. But we're an American company, and our products are built by shooters, for shooters right here in the U.S. (Auburn, California, and Wixom, Michigan, to be specific.) We wouldn't have it any other way.

CONSTRUCTED TO MIL-STD-810G RATINGS

Every Trijicon thermal system is built rugged, tough and with MIL-STD-810G standards. They're built to withstand low temperatures, high temperatures, rain, humidity, sand, dust, vibrations and shock.

» The DOD manual for how to run tests

- 800 page cookbook of all types of tests
- You pick the tests that best match the intended use of the product
- Methods and Procedures are detailed in the manual

» “MIL-SPEC” needs to be defined based on end use considerations

NOT MEASUREMENT
SENSITIVE

MIL-STD-810G
31 October 2008

SUPERSEDING
MIL-STD-810F
1 January 2000

DEPARTMENT OF DEFENSE
TEST METHOD STANDARD



ENVIRONMENTAL ENGINEERING CONSIDERATIONS
AND LABORATORY TESTS

AMSC N/A

AREA ENVR

DISTRIBUTION STATEMENT A. Approved for public release; distribution is unlimited.

Product Overview



REAP-IR™

- Dedicated thermal rifle scope with clip-on mode
- Highest selling optic
- Primarily a rifle optic – mainly hunting but lots of potential for MIL and LE



IR-HUNTER®

- Dedicated thermal rifle scope
- Was their first offering
- Primarily a hunting optic
- Organized around MK2 and MK3 variants



IR-PATROL™

- Thermal Monocular with handheld, helmet mounted, and rifle mounted configurations
- Most versatile optic
- Pricing ladder built around menu functionality and kits



SNIPE-IR™

- Thermal Clip-On
- Eyepiece configured for 4x32
- Menu system optimized for 3-4x day optic
- Lots of potential for MIL and LE

IR-PATROL™

THERMAL MONOCULAR

LE100 M300W
LE100C M250XR
M250

IR-HUNTER®

THERMAL RIFLESCOPE

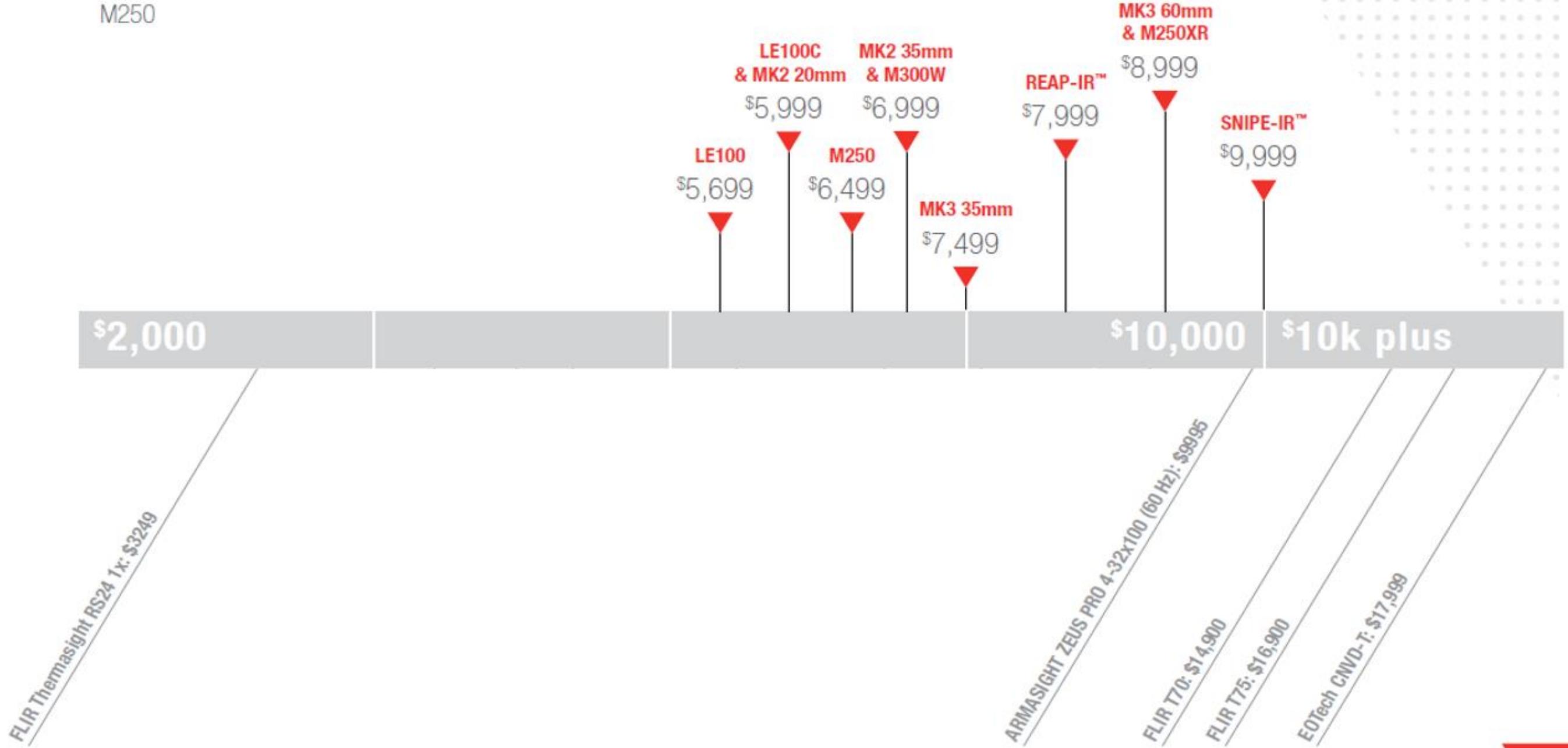
MK2 20mm MK3 35mm
MK2 35mm MK3 60mm

REAP-IR™

MINI THERMAL RIFLESCOPE

SHIPE-IR™

THERMAL CLIP-ON

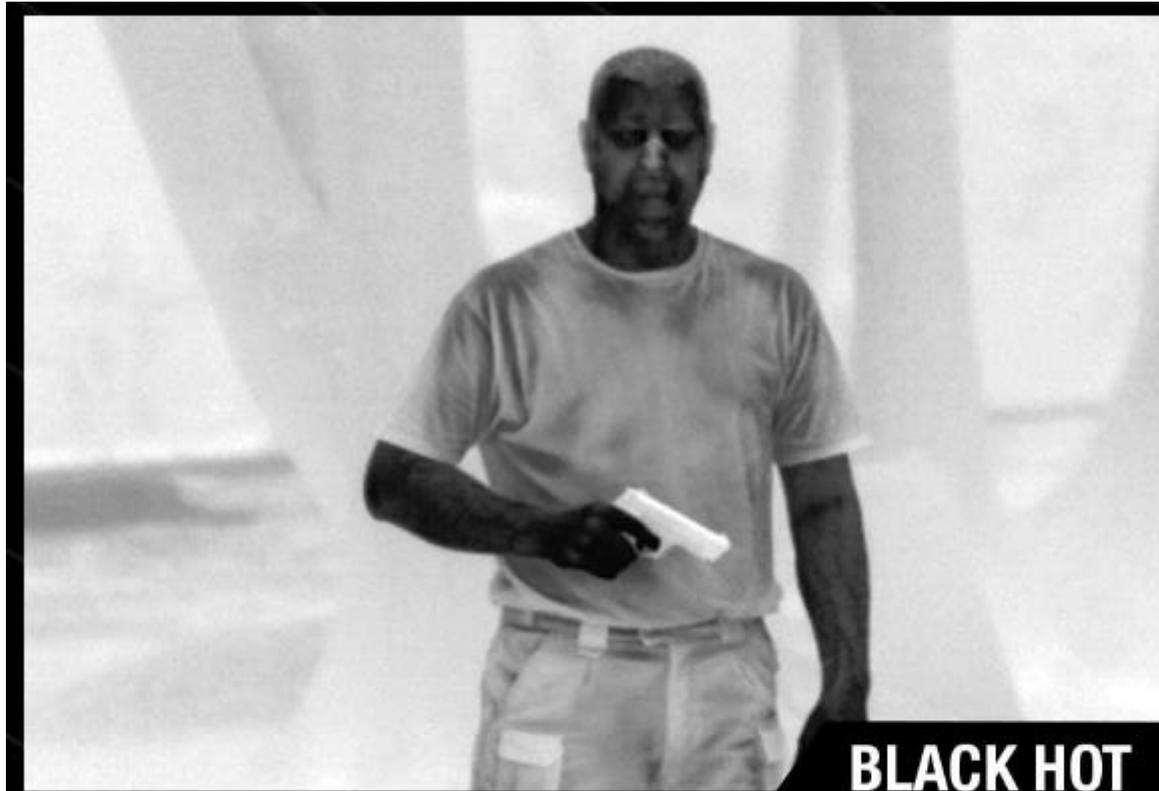


- » Digital Zoom
- » Polarity Control
- » Reticles
- » NUC

- » Digital Zoom
 - 1x, 2x, 4x, 8x

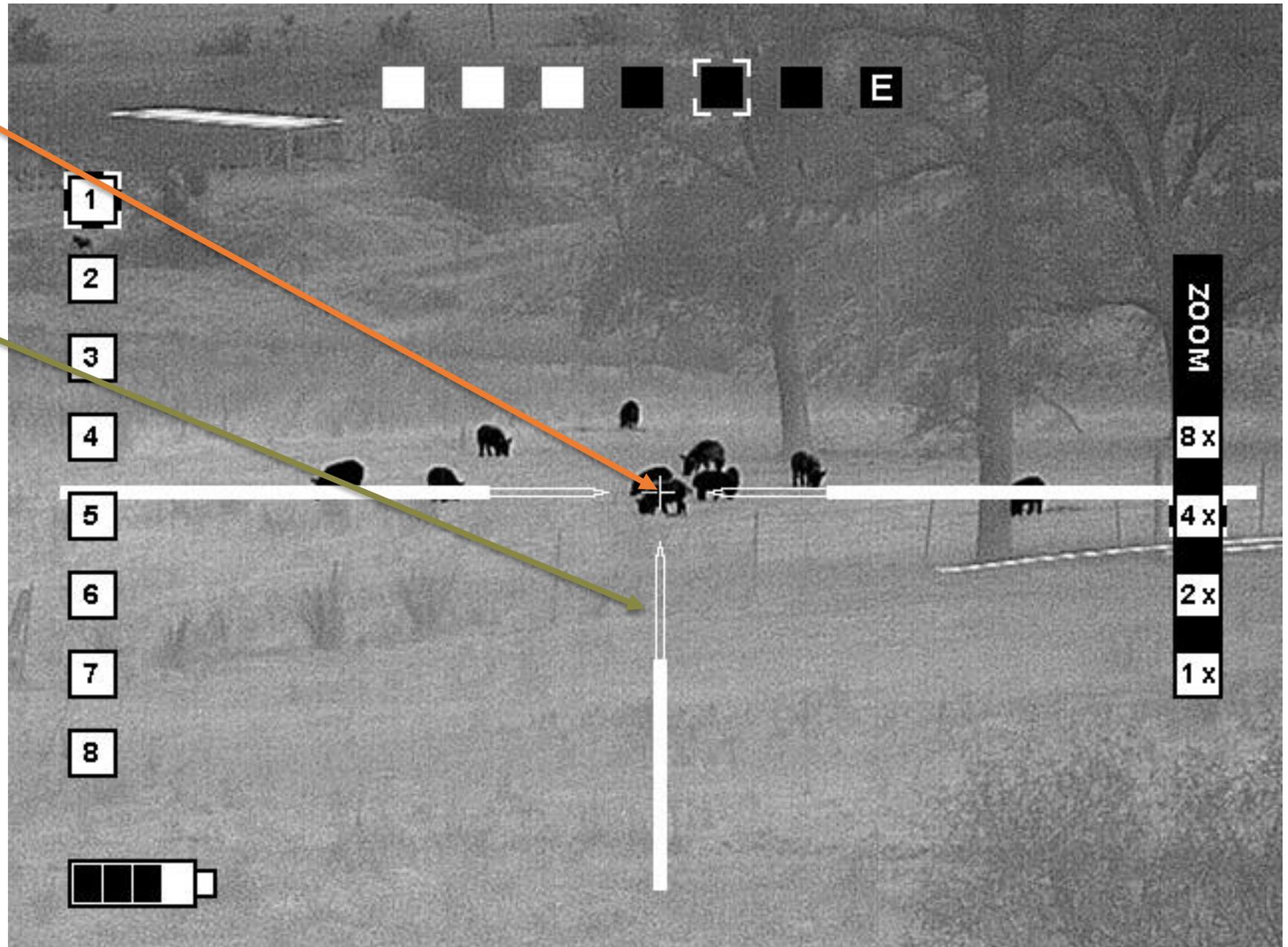


» MaxPol



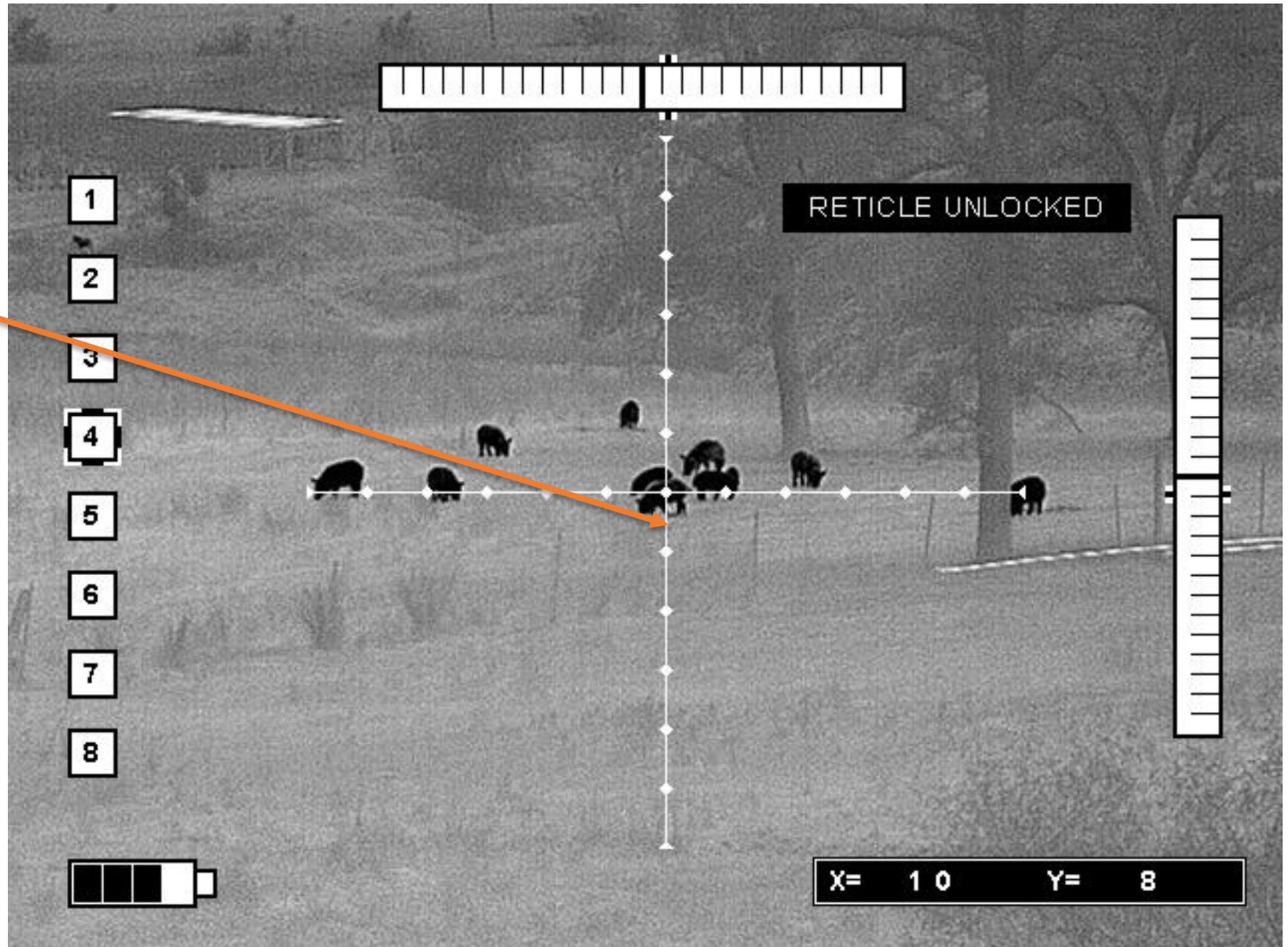
» TCR Reticle

- Center crosshair is 36 MOA
- The outline portion of the post reticle is 72 MOA
- HUNTERS and REAP



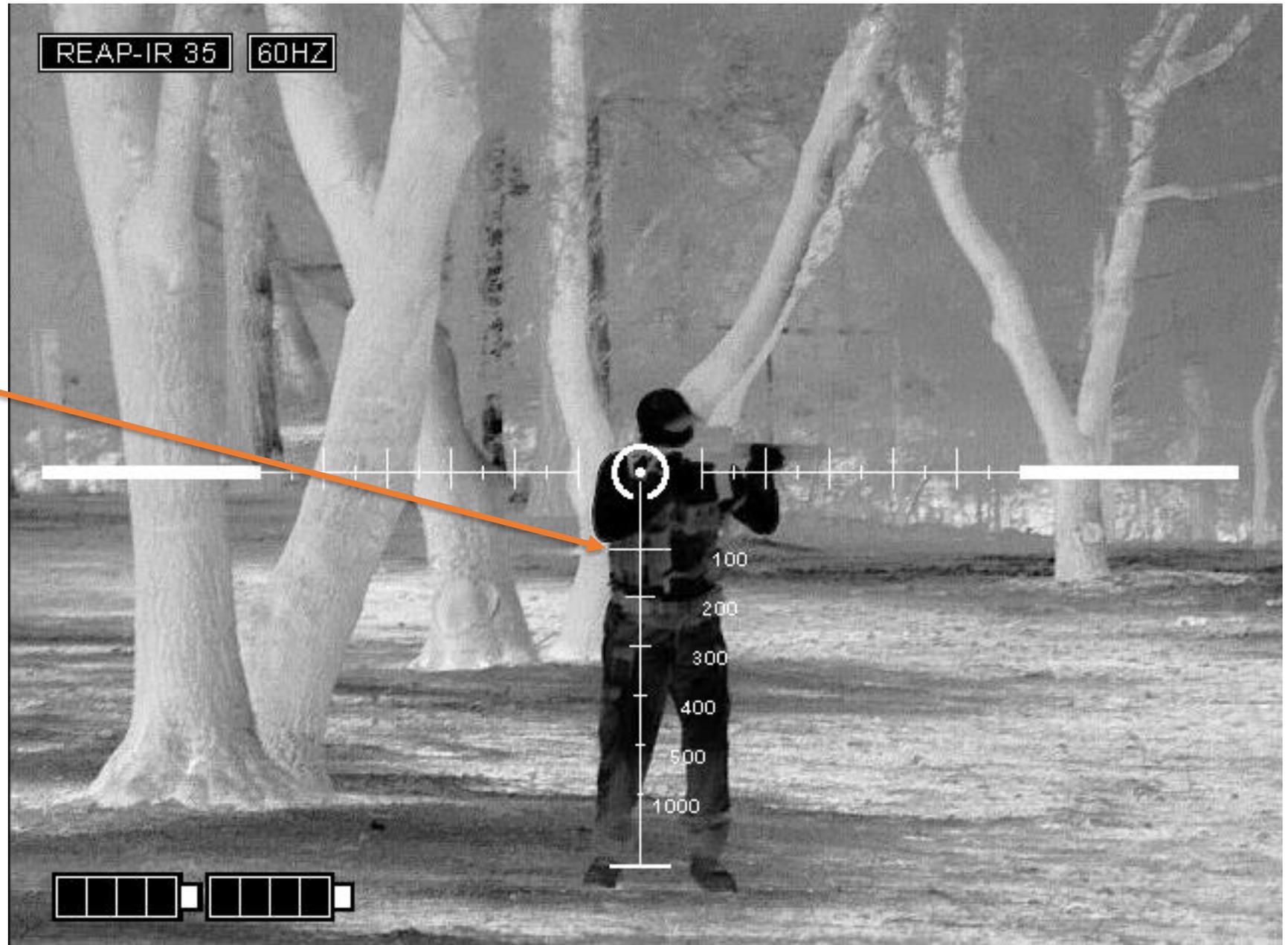
» TDR Reticle

- HUNTERS and REAPS
- Distance between dots is 36 MOA



» TSR Reticle

- Horizontal Stadia Lines for range estimation
- Each stadia line is 36 MOA wide



» TTR Reticle

- Clear open center with small dot
- Graduation marks are 36 MOA



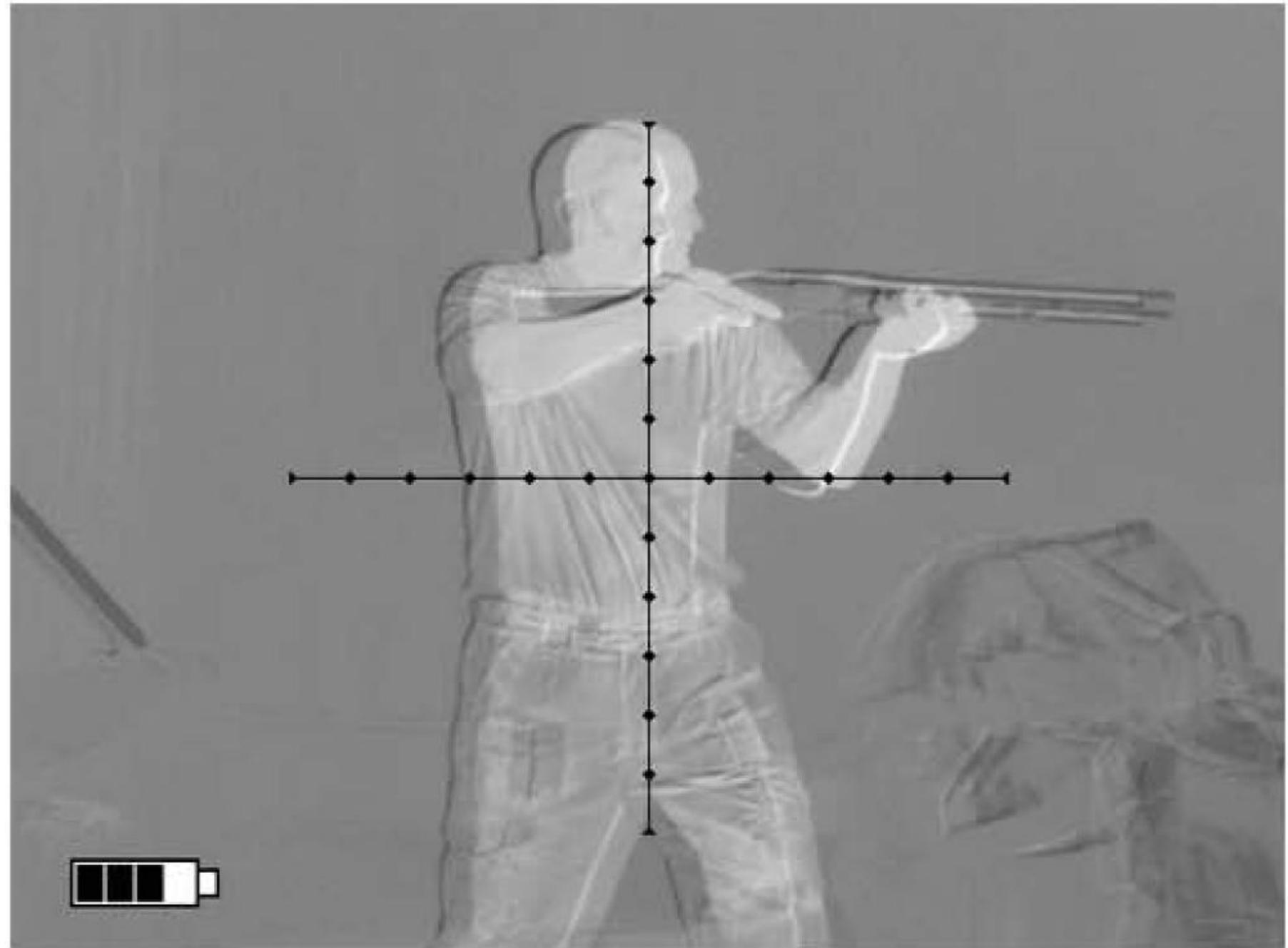
» TMR Reticle

- Small, precise mark for uncluttered FOV
- MK3 HUNTERS, REAP, M300W

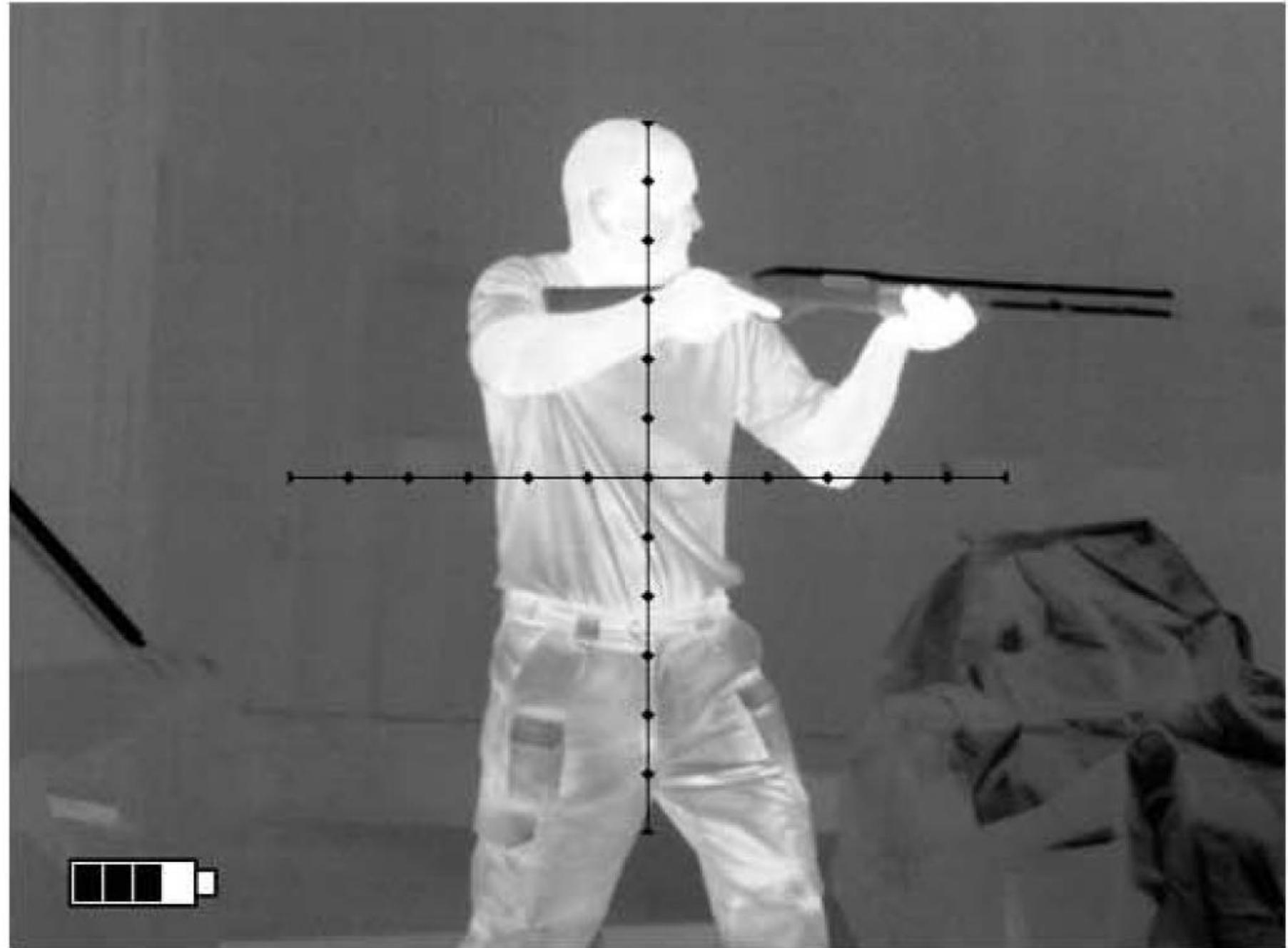


» NUC

- Non-Uniformity Correction
- Also called Flat Field Correction (FFC)



- » Cover the Lens and NUC the system



IR-PATROL Thermal Monocular

» Models

- LE100 - \$5699
- LE100C - \$5999
- M250 - \$6499
- M250XR - \$8999
- M300W - \$6999

» Kits available

- M250K - \$6999
- M300K - \$7499
- M300TK - \$7999



IR-PATROL Comparison Chart

IR-PATROL™ THERMAL MONOCULAR

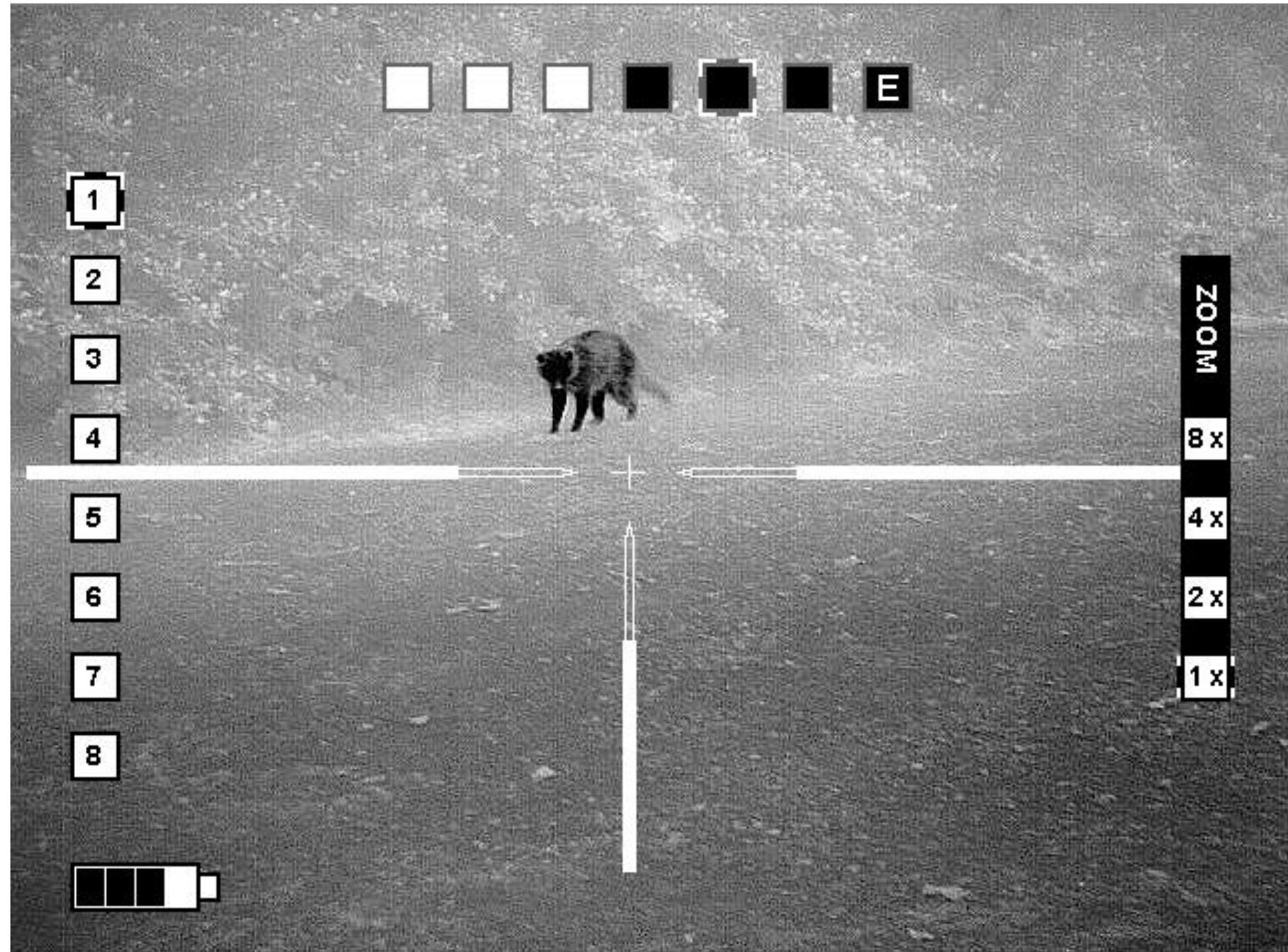


SYSTEM	IR-PATROL™ LE100	IR-PATROL™ LE100C	IR-PATROL™ M250XR	IR-PATROL™ M250	IR-PATROL™ M250 Kit
SENSOR RESOLUTION	640x480	640x480	640x480	640x480	640x480
SENSOR MICRON	MicroIR 12	MicroIR 12	MicroIR 12	MicroIR 12	MicroIR 12
SENSOR TYPE	VOx Vanadium-Oxide	VOx Vanadium-Oxide	VOx Vanadium-Oxide	VOx Vanadium-Oxide	VOx Vanadium-Oxide
FIELD OF VIEW	22°	22°	7°	22°	22°
MAGNIFICATION E-ZOOM	1x Optical/8x Digital	1x Optical/8x Digital	4.5x Optical/36x Digital	1x Optical/8x Digital	1x Optical/8x Digital
OBJECTIVE LENS	19mm f/1.1	19mm f/1.1	60mm f/1.25	19mm f/1.1	19mm f/1.1
DISPLAY TYPE	Digital OLED	Digital OLED	Digital OLED	Digital OLED	Digital OLED
BATTERY TYPE	CR123 Lithium	CR123 Lithium	CR123 Lithium	CR123 Lithium	CR123 Lithium
BATTERY LIFE	2 hr. @ 30 Hz	2 hr. @ 30 Hz	1.5 hr. @ 60 Hz	1.5 hr. @ 60 Hz	1.5 hr. @ 60 Hz
FRAME RATE	30 Hz	30 Hz	60 Hz	60 Hz	60 Hz
USER INTERFACE	Thumbstick	Thumbstick	Thumbstick	Thumbstick	Thumbstick
POLARITY/ZOOM/DFC	Yes	Yes	Yes	Yes	Yes
IMAGE CAPTURE	No	Yes	Yes	Yes	Yes
EDGE DETECT	No	No	Yes	Yes	Yes
SHOE INTERFACE	No	No	Yes	Yes	Yes
CONFIGURATION LEVEL	No	No	Yes	Yes	Yes
VIDEO OUT	No	No	Yes	Yes	Yes
RETICLE FEATURE	No	No	No	No	No
HELMET MOUNT KIT	No	No	No	No	Yes
WEAPON FLIP MOUNT KIT	No	No	No	No	No

IR-PATROL™ M300W	IR-PATROL™ M300W Kit	IR-PATROL™ M300W-TK
640x480	640x480	640x480
MicroIR 12	MicroIR 12	MicroIR 12
VOx Vanadium-Oxide	VOx Vanadium-Oxide	VOx Vanadium-Oxide
22°	22°	22°
1x Optical/8x Digital	1x Optical/8x Digital	1x Optical/8x Digital
19mm f/1.1	19mm f/1.1	19mm f/1.1
Digital OLED	Digital OLED	Digital OLED
CR123 Lithium	CR123 Lithium	CR123 Lithium
1.5 hr. @ 60 Hz	1.5 hr. @ 60 Hz	1.5 hr. @ 60 Hz
60 Hz	60 Hz	60 Hz
Thumbstick	Thumbstick	Thumbstick
Yes	Yes	Yes
No	No	Yes
No	Yes	Yes

» 20mm EFL
▪ \$5999

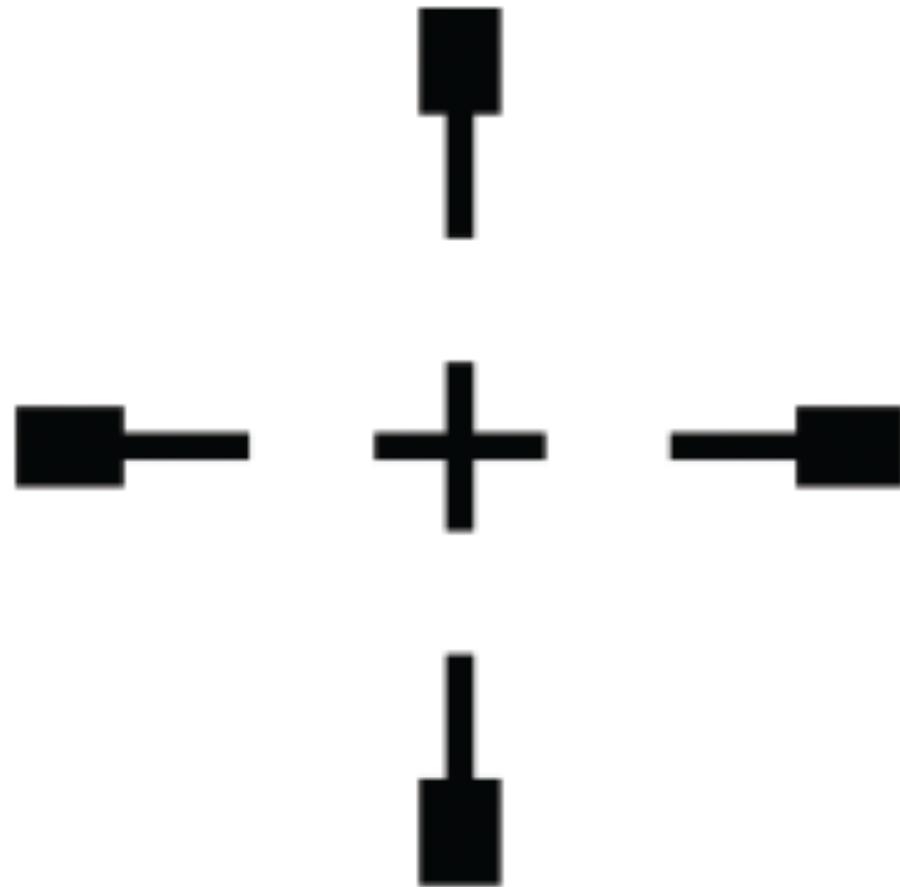
» 35mm EFL
▪ \$6999



- » 35mm EFL
 - \$7499
- » 60mm EFL
 - \$8999



- » MK3 vs. MK2 – what's the difference
 - Two more reticles



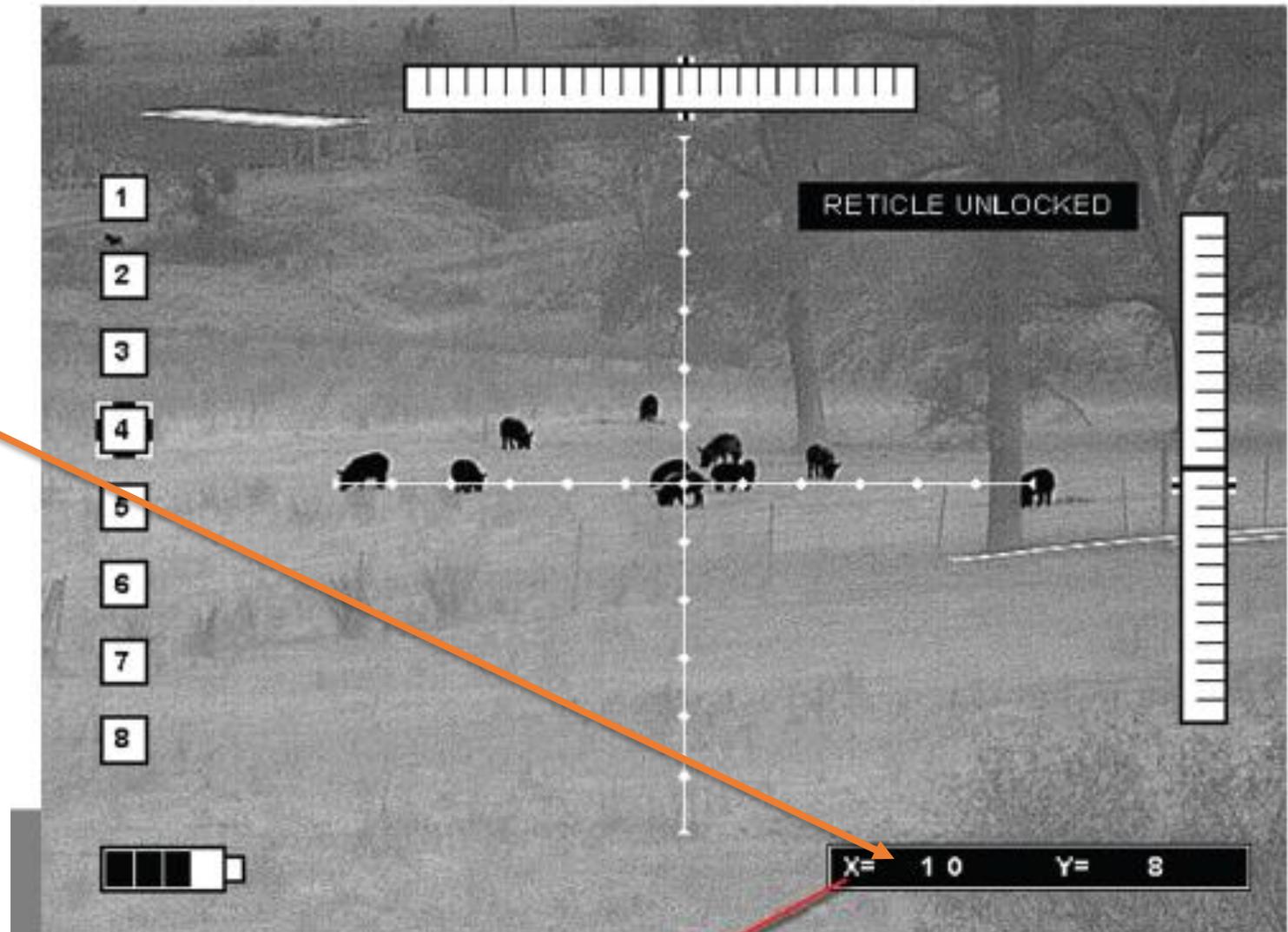
» Stadiametric Rangefinder

- User can program known target size in the menu
- User then turns the knob to “bracket” the target to get a range estimation



» Reticle Position Readouts

- X and Y coordinates that show reticle distance from center



RETICLE POSITION READ-OUT

This box will display the current reticle position from the center of the screen which is X 0 and Y 0. In the image above the reticle has been adjusted 10 clicks to the right and down 8 clicks.

- » Battery Extender
- » Dual Lever LaRue



» 5 Upgrade SKUs

- Re-use existing parts to max extent
- ~30 day lead time
- Requires RMA
- Pricing Levels apply

SKU	DESCRIPTION	MSRP/MAP
U-M2620-M2635	IR HUNTER® MK2 20MM UPGRADE TO IR HUNTER MK2 35MM	\$ 995
U-M2620-M3635K	IR HUNTER® MK2 20MM UPGRADE TO IR HUNTER MK3 35MM	\$ 1,995
U-M2620-M3660K	IR HUNTER® MK2 20MM UPGRADE TO IR HUNTER MK3 60MM	\$ 3,495
U-M2635-M3635K	IR HUNTER® MK2 35MM UPGRADE TO IR HUNTER MK3 35MM	\$ 995
U-M2635-M3660K	IR HUNTER® MK2 35MM UPGRADE TO IR HUNTER MK3 60MM	\$ 2,495

- » 35mm EFL
 - \$7999
- » Best Selling SKU



- » Has all 5 Reticles
- » Has Stadiametric Range Finder



- » 35mm EFL (unity sight)
 - \$9999
- » Clip-On Sight
 - Optimized for 4x32

