

# NIGHT MOVES



# LOW-COST, MADE IN THE USA AND QUITE CAPABLE

By Brian McCombie

## The Angry Stag AS-256-15 TriMode Thermal serves triple duty for under a grand.

Thermal manufacturers keep refining and improving thermal technology, a reality frequently stressed when the subject is a new, higher-end model. But somewhat under the market “radar” is this reality: improvements in thermal tech are raising the quality and usefulness of those units on the lower end of thermal price scale, too.

Angry Stag is one of those companies making much improved thermals for the under-\$1,000-market, and their new AS-256-15 TriMode unit is a solid example of the functionality possible in a thermal featuring a smaller sensor.

### Just a Grand?

Traditionally, prices for thermals started at many thousands of dollars. When I began using these optics over a dozen years ago, \$3,500 was the minimum paid for a thermal. And the unit might not even be that good.

For years, I found a price tag of \$4,000 signaled good thermal technology. Those units breaking into and above the \$6K range were top of the line. But as technology and manufacturing improved, thermals got better and were generally less expensive. Lately, I’ve reviewed \$2,500 thermal riflescopes that are equal to units that cost twice as much just three or four years ago.

Still, a thermal for under \$1,000 struck me as questionable. I assumed it would be a unit with blurry, indistinct images for all but the very closest of objects, coupled with difficult controls. Admittedly, I was apprehensive about trying out this Angry Stag.

### Entry Level

I need not have worried.

The AS-256-15 TriMode features a suggested retail of \$899.00 and is built with a 256x192 thermal sensor. The unit I ran worked well enough to bring home the bacon from a night hog hunt out to 125 yards. And, it actually has most of the features of more expensive thermals, too, like Wi-Fi streaming and USB-C charging of an internal battery.

Is it the equivalent of a \$5,000 thermal with 640x480 sensor and a 50mm objective lens? Hell no. But for many potential customers, the AS-256-15 TriMode may be just the thing to introduce them to thermals and night hunting.

Frankly, in years of thermal night hunting, most of the animals I’ve taken have occurred at under 100 yards. Yes, it’s nice to have a thermal able to reach out many hundreds of yards, with a detection range of a quarter mile or better.

Yet, many people who would like to try night hunting can’t plunk down the equivalent of two or three mortgage payments for such a unit.

### Features

In addition to the 256x192 thermal sensor, this Angry Stag unit has a frame refresh rate of 50 HZ, a 15mm front lens and 2 to 8 digital magnification.

It’s svelte, too, at just 7 inches long and 2 inches wide. Weight? Only a couple ounces over a pound.

The AS-256-15 TriMode also features palette and reticle choices, the ability to take and store photos and videos, and a one-shot FREEZE zeroing system.

The “Tri-Mode” tag refers to the three use options the thermal presents. It operates as a handheld thermal, a riflescope or a clip-on mounted forward of a day scope. For use on a rifle, a Picatinny quick detach mount is included, as well as the hardware for a clip-on conversion.

### At The Range

To test out the Angry Stag, I mounted it on a Bear Creek Arsenal AR-15 Complete 7.62x39 rifle. The rifle’s a real hybrid, an AR-15 platform rifle featuring a side-charging handle and chambered in the popular “AK-round.” I’d used the rifle in a recent review, and it was very accurate.

For ammunition, I relied on Hornady 7.62x39mm loaded with the ammo maker’s SST poly-tipped bullets weighing in at 123-grains.





McCombie used a Bear Creek Arsenal AR-15 Complete 7.62x39 rifle to test out the thermal.

The thermals I've run built with 384 and 640 sensors work very well in the daytime. The AS-256-15 TriMode? Decently, but far from great. Yet, that's the simple reality of the other 256 sensor units I've tried recently. And, really, a thermal is all about the night.

I run my test thermals during the day at my outdoor range because it's convenient and an easy way to evaluate functions like one-shot zeroing systems. Daytime shooting is also a quick way to determine how accurate a thermal may be out to 100 yards.

When I tried out the AS-256-15 TriMode at my range, the images at 50 yards were acceptable but became blurry at 100 yards. Of course, 200-pound wild boars did not provide my heat signatures. Those were generated by 3x5-inch heat pads taped to cardboard.

At 50 yards, I zeroed the unit using the FREEZE one-shot function, which worked fine. Then I shot for accuracy and pegged a number of 1.0-inch groups of three shots. Best group here, .50 inches.

At 100 yards, I first manipulated the various image settings including palettes and contrast and was able to sharpen up the heat pad signatures. They still bloomed, though. My five-shot groups at this distance came in at 2.0 to 2.5-inches, with a best grouping of 1.75-inches.

All of which was more than accurate enough for night hunting at these distances.

## Nighttime

Last, I took the Angry Stag out to various areas at night where I knew the landmarks and their various distances, using the unit as a handheld. With the dark, the quality of images improved substantially. From 100 yards, I easily made out the outlines of geese and ducks paddling circles in a pond.

In a different area, I spotted several white-tailed deer. The heat the Angry Stag picked up suggested that the thermal will function well for shooting out to 125 yards.

The digital magnification zoomed up to 8x, but I found that 4x to 5x was the preferred setting. With higher magnification the images blurred noticeably. At least, that was the case this night, with the temperature at 52 degrees Fahrenheit and the humidity at 60%.

## The Company

Angry Stag is the shooting sports and military market spin off the high-tech parent company Outcome Drive Innovation or ODI, based in Palo Alto, California. Angry Stag introduced itself and its thermals at SHOT Show 2025.

"We are a 32-year engineering technology company and have produced over 600 high tech products, mostly first to market and virtually all market disruptive," said Rich Slevin, ODI's CEO. "Some examples are: we are the developer of the first PC camera, the Quickcam, now owned by Logitech (1995), first LCD photo album (1998), and first wearable Police camera (2002)."

ODI began delving into thermal technology in 2020.

"When we looked at this market, it was clear thermal scopes were too expensive, image quality was poor at best and needed features were lacking," Slevin added. "To us, value means lowest price, best image quality and loaded with all the high-end features. And we wanted to make them in the USA, not China as most were and are today."

In addition to the AS-256-15 TriMode, Angry Stag produces thermals with 320, 384, and 640 sensors, with objective lenses up to 50mm in the 640 model. The company also makes hearing protection and magazine loaders.

## Sales

As with any thermal, a basic sales technique for this Angry Stag model starts with fully charging the battery. Turn on the unit for a customer and let him or her scan within the store. Then, walk the potential buyer through some palette and reticle changes, and go over the FREEZE function for zeroing the unit.



↑ The thermal isn't at its best during the day but will still do the job.



Slevin also recommends pointing out some of the unique features of the AS-256-15 TriMode and other Angry Stag thermals, starting with the TriMode, the company's patent-pending eyepiece that allows the scope to work as a riflescope, a handheld or clip-on.

"ThermaLoc is another of our patent-pending features," he noted. "This feature allows the user to hunt during the day. ThermaLoc allows the user to color the target red (or other color) with all background, hot or cold shown in greyscale. So, no matter the ambient temperature or lighting, you never lose your target."

In the Menu, find ThermaLoc within "Image Settings."

Slevin added that all Angry Stag thermal scopes are shutterless and require no user intervention or freeze frames. The shutterless feature is usually found only on thermals costing \$3,000 and more, he said.

"Most thermal scopes use a shutter on board that can be set to NUC periodically or manually," Slevin explained. "A shutter event creates a freeze of the image for typically 4-6 seconds and makes some amount of noise that can be disturbing to animals the hunter may be stalking."

NUCs refers to Non-Uniform Correction. Thermal sensors are subject to thermal drift. This means that if each pixel of the array is not Normalized (shown the same temperature periodically), images become very "noisy" and distorted. An NUC resets the pixels and restores the thermal to provide better images.



↑ A QD Picatinny mount included with the unit.

## In-Store

"We are just starting to roll out products and have not created point of sale marketing collateral yet," Slevin said. "We do have brochures, essentially the data sheets."

Co-op funding is available from the company.

"Our sales reps have some flexibility to do what they need to do," Slevin added. "Mainstream Marketing covers the lower states. Sokol Associates covers the mid and northern states. We have not found the right reps for the East Coast yet."

If requested, these sales reps will train store personnel in selling Angry Stag thermals.

## Dealer Info

At this time, Angry Stag was still working to develop connections with distributors.

Retailers can buy directly from Angry Stag as long as they have solid credit or can prepay. Slevin added that retailers can expect up to a 30% profit margin selling his thermals.

There's a simple application to become an Angry Stag dealer. To request the application, go to: [angrystag.com/contact/](http://angrystag.com/contact/).



## Overall

With its high-tech foundation and the fact its products are made in America, I expect Angry Stag to make a significant footprint in the thermal market. I'm interested to see what sorts of marketing the company will do in the remainder of 2025 and beyond to get out the word on their products, including their thermal units with larger sensors.

The latter, according to Slevin, includes a very high resolution 1280x1080 thermal scope which should drop before the end of 2025.

With so many companies like Angry Stag pushing the tech envelope, it's an amazing time to be a thermal fan! **SSR**

## SPECS: AS-256-15 TRIMODE THERMAL SCOPE

**Sensor:** 256x192

**Display:** 720P OLED

**Frame Rate:** 50Hz

**Obj. Lens:** 15mm lens

**Digital Mag.:** 2-8x

**Battery:** Internal, Re-Chargeable Lithium Polymer

**Battery Life:** 8 Hours

**Reticles:** 6, 3 Color Options

**Palettes:** 7

**Media:** Photo and Video Recording

**Wi-Fi Streaming:** Yes

**Housing:** Aircraft Aluminum

**Dimensions:** 7.0 inches L x 2.2 H x 2.0 W

**Weight:** 18.1 ounces

**INC:** USB-C Battery Charging Cord, Clip-on Mount, Picatinny Rail Mount, 2A USB-C Battery Charger, thermal target and hot pads, lanyard, rifle and clip-on eyecups, lens cloth, Quick Start Guide, Detailed User Guide

**MSRP:** \$899.00

**For more information please visit:**  
[angrystag.com](http://angrystag.com)