PRIMARY ARMS®

Platinum Series 6-30x56 First Focal Plane Scope

with Athena™ BPR MIL Reticle

Platinum Series

For Patent Information go to: goo.gl/2z62aS

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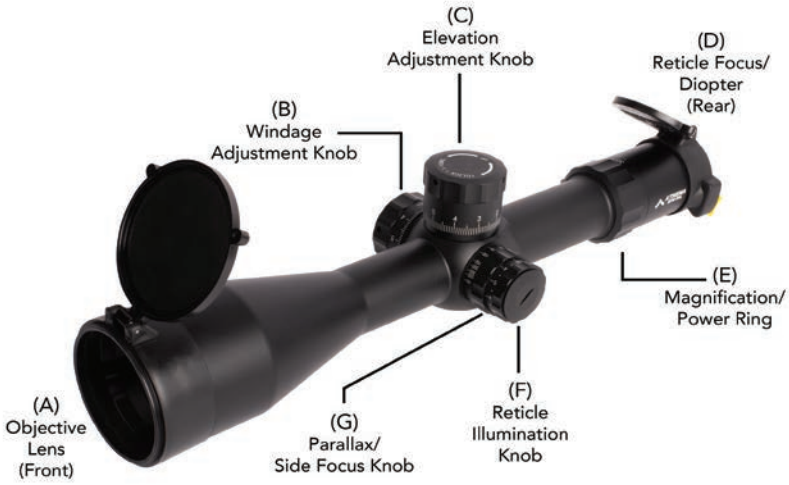


INTRODUCING THE PLATINUM 6-30X56 FIRST FOCAL PLANE SCOPE

The Primary Arms Platinum 6-30X56 First Focal Plane Scope is designed from the ground up with uncompromised craftsmanship and optical clarity in mind. Engineered and fully manufactured in Japan for durability and reliability, this scope is capable of handling heavy recoil and abuse. It is fast at 6X and extremely accurate at 30X, remaining true at all magnifications due to its first focal plane configuration.

The Athena Ballistic Precision MIL reticle includes very fine subtensions for accurate ranging and fire correction at extended ranges and high magnification. Combined with the enhanced glass clarity and high magnification of the 6-30x56 FFP scope, Athena BPR enables users to quickly and precisely range estimate targets exceeding 1,000 yards distance, and then engage them with confidence.

ACHIEVING A CLEAR RETICLE PICTURE

Your Platinum 6-30X56 FFP scope comes with an adjustable Diopter Ring (D) that must be set to match your eye. Located at the rear of the eyepiece, it is marked simply **[+ 0 -]**. The diopter ring changes the focus of the reticle as you see it inside the scope. It does not change the focus of objects that you look at through the scope. Setting the diopter is a **critical first step** to successful precision shooting. You can set the diopter before you have even mounted the scope in its rings.

1. Turn the Magnification / Power Ring (E) to a high magnification setting, beyond 15x, and point the scope at a bright, featureless background such as blue sky or a blank white wall.
2. Turn the Parallax / Side Focus Knob (G) to infinity [∞].
3. With your head in position behind the scope, look at the wall or sky instead. If you look through prescription glasses when shooting, wear them now too. After 5 or 6 seconds, close your eyes.
4. Now open your eye, glance through the scope and immediately see if the reticle is sharp or blurry. If you notice that the reticle seems blurry at first and then suddenly sharpens, your eyes have focused on the reticle itself instead of looking **through** the scope. You must adjust the diopter ring (D) and try again.
5. If the reticle was blurry, turn the diopter ring (D) and repeat the process again. The process will take multiple adjustments. Each time you repeat the process, ask yourself if the reticle was sharper or more blurry than before. The final adjustments may be very fine. If your eyes get watery or tired, walk away for a bit and come back to this later.
6. Once the reticle appears sharp as soon as you glance through the scope, the diopter is set for your eyes. Everyone's eyes are slightly different, so the ideal adjustment changes from person to person. Many shooters will mark their correct diopter position with a little dab of paint or fingernail polish next to the 0 mark, in case the ring gets turned accidentally later on. Others will apply electrical tape around the diameter of the ring to hold it in place.

This is a one-time adjustment. Reticle details may appear small when not looking at medium or long range targets, especially at low magnification. Shooting at those ranges is best done from a well-supported position using a bipod or sandbags.

ADJUSTING PARALLAX

The Parallax/Side Focus Knob (G) is located on the left side of the scope, marked with ranges from 35 yards to infinity. Although it is often referred to as a "side focus" knob, parallax and focus are not the same thing. Parallax error occurs when the target's image and the reticle are not aligned on the same focal plane inside the scope. To visualize this, pick a picture on the wall of a room as your "target", and stick your thumb up in front of it like you are a hitch-hiker. Your thumb represents the reticle of the scope. Closing one eye and using your thumb to "aim" at the picture on the wall, you will notice that moving your head around changes where your thumb appears to be aimed. This is because your thumb is not located in the same focal plane as the picture on the wall. Any slight change in your head position will change your point of aim, and your point of impact. Adjusting the Parallax/Side Focus Knob (G) eliminates parallax error at different ranges by bringing the reticle into the same

focal plane as the target, like having a friend place their thumb directly against the picture on the wall. Parallax error is most noticeable at high magnifications. Adjustment is much easier with your rifle secured by sandbags or a bipod.

1. Turn the Parallax/Side Focus Knob (G) until the target appears to be in focus. This will get you close to the correct adjustment.
2. Looking through the scope at the target, move your head just slightly from side to side. If you lose the sight picture you are moving too much. Go slowly, and see if the reticle appears to move relative to your target. A target that appears to be floating around the reticle as you move your head indicates parallax error.
3. If the target appears to move in the opposite direction of your head, turn the Parallax/Side Focus Knob (G) counterclockwise. If the target appears to move in the same direction as your head, turn the Parallax/Side Focus Knob (G) clockwise. These adjustments are very small. Move the Parallax/Side Focus Knob (G) just a little bit at a time and re-check.
4. Once the reticle and target hold their positions as you move your head from side to side, parallax error is eliminated for targets at this range. Normally this adjustment will also keep the target nicely in focus. However, to gain the most consistent hits on target, it is more important to eliminate parallax error than to have the target perfectly in focus.

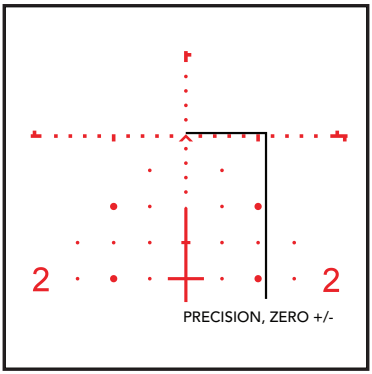
RETICLE ILLUMINATION

The Reticle Illumination Knob (F) on the left side of the scope is marked with numbers of increasing brightness from 1 to 11. Between each number is an OFF setting. The cap unscrews counter-clockwise, holding a CR2032 battery with the positive (+) side facing towards the cap. Reticle illumination is most useful in low light situations like sunrise and sunset, or indoors. The lowest two settings are compatible with night vision devices and cannot be seen by the naked eye. Reticle “bleed out”, abnormalities and small imperfections may be visible when viewed indoors or in low light conditions at the brightest settings. This is a normal result of the reticle etching process. Abnormalities at these settings will not be visible when viewed in daylight conditions. Using the brightest settings in low light situations will overpower your eye’s ability to see the target and make the reticle appear distorted. The right amount of illumination creates a clear contrast between the reticle and your intended target, without straining the eye.

Illumination Knob/ Battery Compartment

ESTABLISHING ZERO

Using a bipod or sandbags, preferably on a bench or in the prone position, turn the Power Ring (E) to a high magnification to see your target as easily as possible. Dial in point of impact to coincide with the tip of the chevron. When sighting in your rifle, if your shots are hitting low, turn the Elevation Knob (C) counterclockwise to bring the point of impact up. If your shots are hitting to the left, turn the Windage Knob (B) counterclockwise to bring the point of impact right.



SETTING THE ZERO STOP ELEVATION KNOB

The zero-stop mechanically prevents the Elevation Knob (C) from dialing below a point the user chooses. When shooting at extended ranges where the elevation turret might be hundreds of clicks away from zero, simply spin the Elevation Knob (C) back down without counting clicks to stop at the rifle's original zero. This saves precious time so you can begin counting clicks back up to the next firing solution more quickly or transition to using the holdovers built into the Athena BPR reticle.

Before Zeroing Your Rifle

Loosen the 3 set screws positioned around the Elevation Knob (C) using the included 1.5mm Allen wrench. The set screws do not need to be entirely removed, just back them out enough to release all tension against the central shaft. Remove the knob by pulling it straight up. Loosen the three set screws holding the black metal zero-stop ring in position around the central shaft and remove it by pulling straight up. Replace the Elevation Knob (C) on the central shaft by pressing straight down, and secure it using its 3 set screws. Do not overtighten these tiny set screws!

RESETTING ZERO STOP

Zero Your Rifle

Zero your rifle at the desired distance. The position of the numbers on the Elevation Knob (C) is totally irrelevant at this stage; just get the point of aim and point of impact to coincide at the distance you have chosen (traditionally 100 yards).

After Zeroing Your Rifle

Remove the Elevation Knob (C) as before by loosening the 3 set screws and pulling straight up. Replace the zero-stop ring on the central shaft as before and turn it clockwise until it stops. You can see two tiny protruding screws touching each other between the zero-stop ring and the turret base. With the zero-stop ring in this position, secure it in place using its 3 set screws. Now replace the knob by pressing it straight down on the central shaft, being careful to align the “0” marking on the knob with the centerline mark on the scope body. Secure the Elevation Knob (C) using its 3 set screws. Remember, do not over-torque them! Now the zero is marked “0” on the Elevation Knob (C) and the zero-stop ring will physically halt the central shaft from turning past that point.

You can also reset zero on the Windage Adjustment Knob (B) similarly, by loosening the set screws, pulling the external knob straight off, and replacing it with the “0” aligned with the centerline mark on the scope body. The Windage Adjustment Knob (B) does not offer a zero-stop feature.

THE ATHENA BALLISTIC PRECISION MIL RETICLE

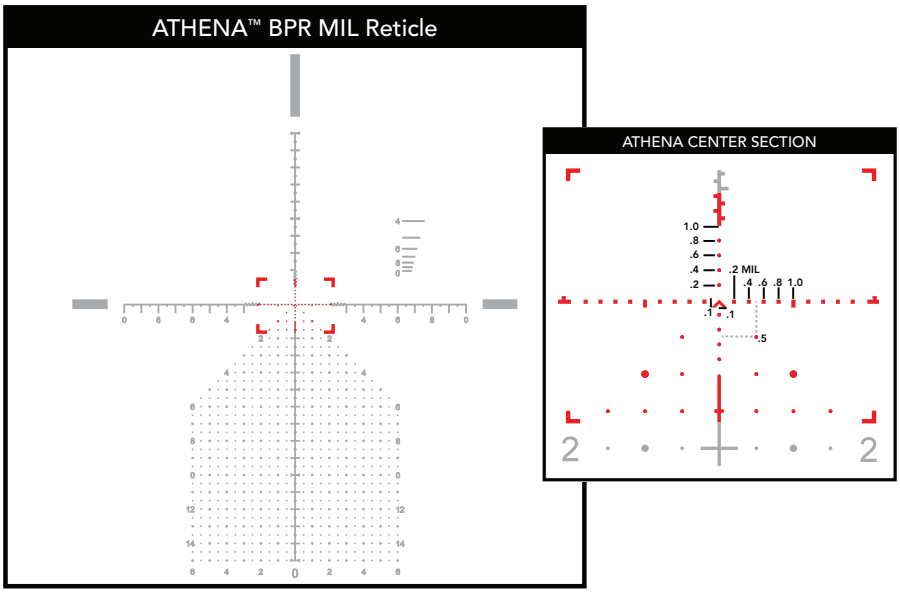
Athena BPR includes very fine subtensions for accurate ranging and fire correction at extended ranges and high magnification. Overall, the reticle extends 10 MIL up, left, and right of the center chevron, and 15 MIL down. Large hash marks are found in 1.0 MIL increments, with smaller marks between them at 0.5 MIL increments.

The Chevron Tip

Athena BPR uses a chevron as the center aiming point of the reticle. Adjust your Windage (B) and Elevation (C) knob positions so that the point of impact coincides with the tip of the chevron. Using the chevron tip allows for an infinitely small point of aim that never covers up the part of the target you want to hit, giving the chevron tip a precision advantage over traditional crosshairs or a center aiming dot.

The Athena BPR Center Section

Athena BPR uses a chevron as the center aiming point of the reticle. The tip of a very small chevron occupies the center. The chevron measures just 0.1 MIL down from center and 0.1 MIL to the left and right of center. Thus, the outer tips of the chevron legs are located 0.1 MIL from center, and 0.2 MIL apart from each other.

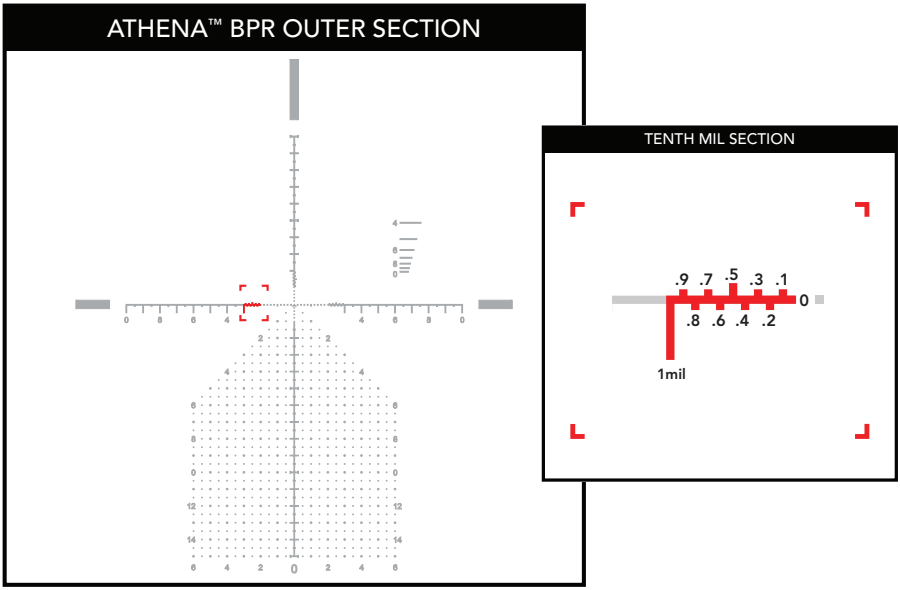


To the left and right of center, boxes are located at 0.2 MIL intervals with a slightly larger rectangle at 1.0 MIL from center for easy navigation. Small dots (0.05 MIL thick) are spaced at 0.2 MIL intervals above and below center for a total of 1.0 MIL distance. The first of the grid pattern dots are located 0.5 MIL down and left/right of center.

The Athena BPR Outer Section

At 2 MIL distance left/right from center, the solid crosshair line begins, using alternating upper and lower marks forming a MIL ranging section. These can be used to range targets using extremely fine 0.1 MIL increments. At 3.0 MIL from center, the 0.5 MIL hash marks begin.

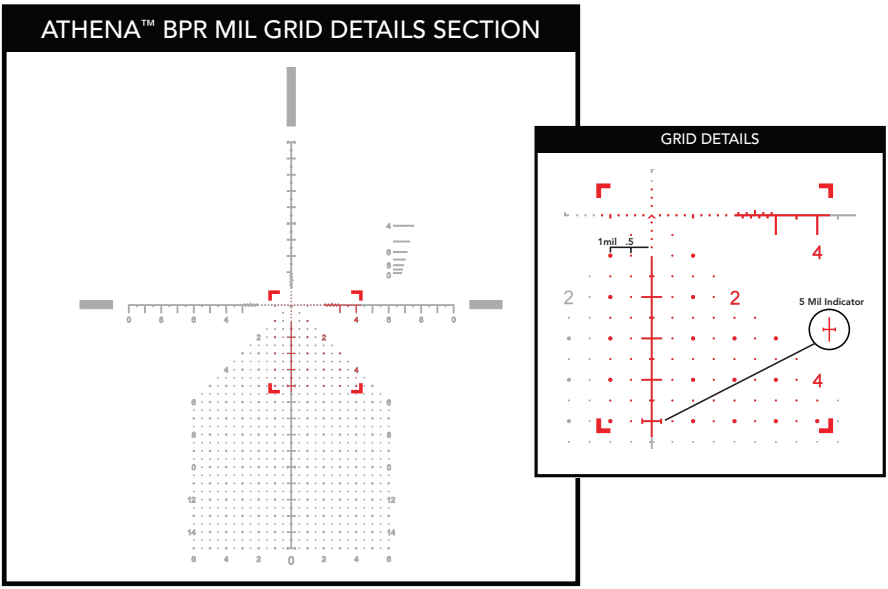
Above the chevron, dots are located at 0.2 MIL intervals before giving way to another 0.1 MIL ranging section beginning 1.0 MIL above center. Below center, more dots are repeated at 0.2 MIL intervals. At 1.0 MIL below center, the standard 0.5 MIL hash marks begin.



THE MIL GRID SYSTEM AND SHOOTING WITH HOLDOVERS

The Athena MIL grid consists of small 0.05 MIL thick dots located at intervals of 0.5 MIL below center and 0.5 MIL left/right of center. The grid continues downwards adding a dot or number every 0.5 MIL. The full grid reaches 15 MIL down and 6 MIL left and right of center. To help with navigation, at 1.0 MIL intervals the dot size grows to 0.1 MIL thickness. Numbers 2, 4, and 6 located on the outer edges of the grid represent total MIL both down from center and left or right from center. Numbers 8 through 14 represent total MIL down from center, but the grid stops expanding to the left and right at 6 MIL.

Beginning 1.0 MIL below center, the centerline “backbone” crosshair features small hash marks that extend just 0.05 MIL left and right from center, alternating with large hash marks measuring 0.25 MIL left and right of center. To help with navigation, every 5.0 MIL the large hash marks are embellished with indicator bars on the ends, giving them a distinctive barbell shape. While the first focal plane design of the scope ensures that the reticle’s features are “true” at all magnifications, the MIL grid is easiest to see and use at high magnifications exceeding 12x power.



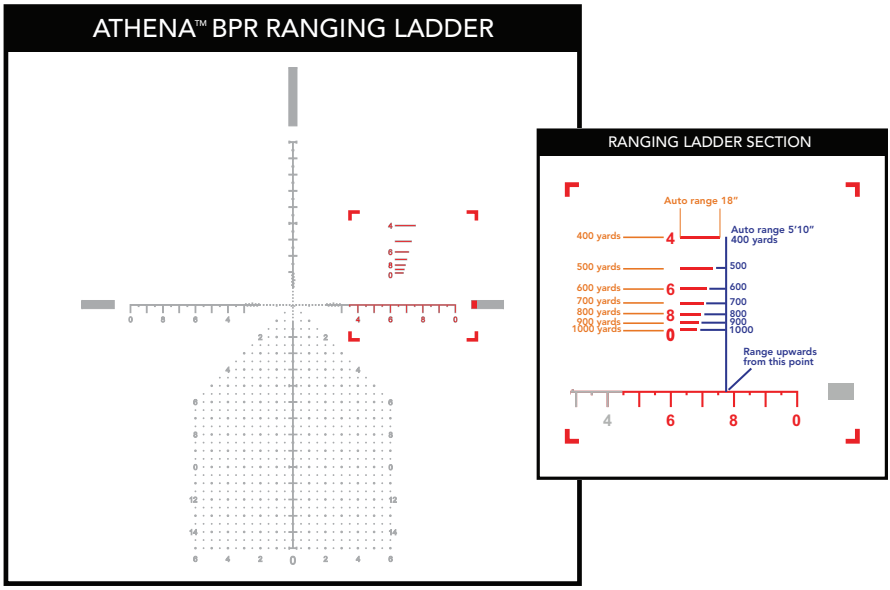
The 6-30x56 FFP Platinum Scope can be used as a traditional optic, where wind calls and range adjustments are “dialed in” using the adjustment knobs at 0.1 MIL per click, and the chevron tip always used as the point of aim. However, the Athena reticle offers a faster method, using the MIL grid as a precise holdover system to quickly adjust your point of aim without manually adjusting the scope at all. To shoot with high precision at medium to extended range with any caliber, utilize a ballistic calculator program to calculate your bullet’s drop in milliradians as distance to target increases. Phone apps like Strelok Pro or Ballistic AE allow calculations to be run out in the field. The JBM Trajectory calculator is free at http://www.jbmballistics.com/cgi-bin/jbmtraj-5.1.cgi. Shooters will often create a small chart of bullet drop values in MIL to utilize, even attaching the chart to their rifle stock for easy reference. Check the bullet drop chart’s values to apply the correct holdover aiming point for the range to target.

For example, a theoretical target is located at 700 yards distance. A ballistic calculator estimates that the bullet will drop approximately 6.0 MIL at 700 yards as it travels to the target. An ordinary scope would require counting 60 clicks of elevation to adjust the crosshair’s position physically. Using Athena, ignore the adjustment

knobs and utilize the MIL grid. Instead of aiming using the center chevron, count 6.0 MIL down to compensate for bullet drop and hold that point on the reticle over the target. That holdover point, 6.0 MIL down, becomes the new point of aim and the target can be hit without counting clicks at all. In this way Athena's MIL grid may be used like a bullet drop compensating reticle for any caliber. Ballistic calculator programs can also help calculate a custom "zero offset" that helps line up the bullet's drop with the 0.5 MIL hash marks at longer ranges.

THE RANGING LADDER

Located high and right of center is the ranging ladder. Vertical ranging is calibrated for a 5'10" tall target. Looking through the scope at the target, line up the bottom of the target with the horizontal crosshair. The line that coincides with the top of the target indicates the distance to the target. For example, if the top of the target touches the line with a "4" next to it, the target is 400 yards distant. The ranging lines may be used as reference points to make more precise, yet quick ranging determinations. For example, a 5'10" target with its top midway between the "4" line and the "5" line will be approximately 450 yards away.



Horizontal ranging is calibrated for an 18" wide target. Simply line up the target's width with the appropriate line to determine range to target. For example, an 18" wide target that appears to be the same width as the ranging line with a "6" next to it will be 600 yards away. This method is useful when the target's height is partially obscured, as with a target in tall grass.

HOW TO RANGE ESTIMATE USING THE 0.1 MIL RANGING SECTION

The 0.1 MIL ranging sections are displayed starting 1.0 MIL vertically and 2.0 MIL horizontally from the center chevron. Due to the first focal plane design of this scope, you can perform ranging at any magnification, but using high magnification gives the best results. Starting at the edge of the section, marked “0” in the diagram, each bar and gap are exactly .1 MIL apart.

To range estimate a target in yards using the milliradian system, take the following steps:

1. Know the target’s height or width in inches. For example, this target is 18" wide.
2. Multiply the 18" target size by the MIL conversion number 27.78.

   18 x 27.78 = 500.04

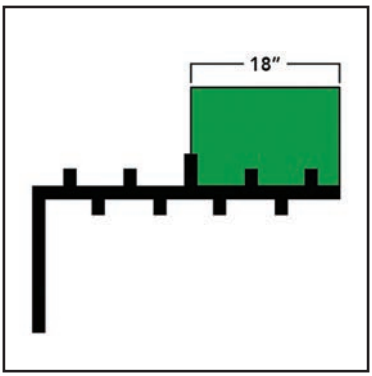
Therefore an 18 inch wide target, converted, equals approximately 500.

3. With the target downrange, look through the scope at high magnification and measure the target using the 0.1 MIL section. In this example, the target measures only 0.5 MIL wide.
4. Take the converted 18" target number (500), and divide it by the 0.5 MIL measurement observed through the scope.

   500 / 0.5 = 1000

This target is 1000 yards away. You can take any target’s known size in inches and multiply it by the conversion number 27.78. Observe the target’s measurement in MIL, and divide it by that measurement to determine range in yards. The general formula is:

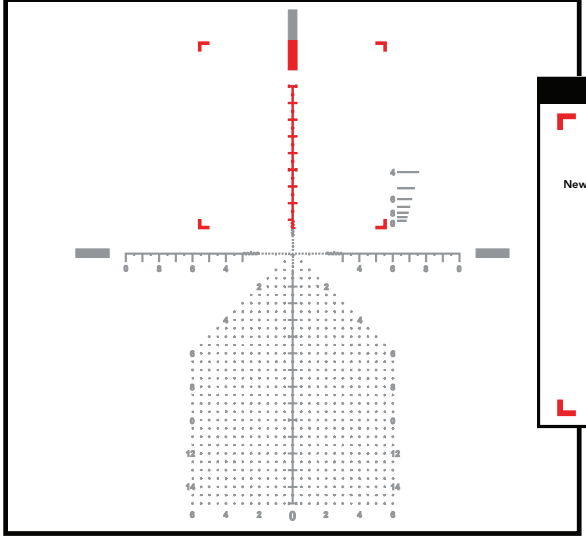
(Target size in inches) x (27.78) / Target measurement in MIL = Distance in yards



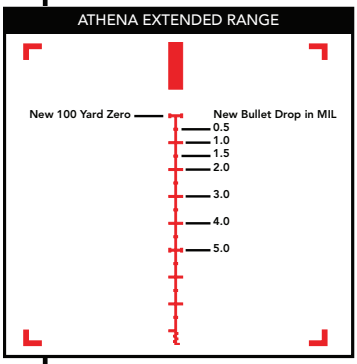
EXTREME LONG DISTANCE SHOOTING USING ATHENA

To engage targets beyond 15 MIL of bullet drop using Athena BPR, employ a ballistic calculator program and use the vertical crosshair hashmarks to your advantage. Abandon using the 100 yard zero at the chevron, and instead dial in a higher zero using one of the 0.5 MIL hash marks on the vertical crosshair. For example, dialing in your rifle using the “barbell” hash mark located at 10 MIL above center as your point of aim creates a total 20 MIL of drop available in the reticle. The horizontal crosshairs or MIL Grid can still be utilized for wind call holdovers.

ATHENA™ EXTENDED RANGE ALTERNATE ZERO



ATHENA EXTENDED RANGE



SPECIFICATIONS

Magnification: 6-30X	Field of View:
First focal plane	16.6 feet @ 100 yards at 6X
Objective lens diameter: 56 mm	3.3 feet @ 100 yards at 30X
Eye Relief: 3.3" – 4.0"	Total elevation adjustment:
Ocular lens diameter: 34.5 mm	95 MOA / 26.18 MIL
Exit Pupil: 8.2 - 1.9 mm	Total windage adjustment:
Click Value: 0.1 MIL	45 MOA / 13.09 MIL

FEATURES

Tube diameter: 34 mm	High quality flip-up lens covers included
Red reticle Illumination	Length (w/o lens covers): 14.3"
Night vision compatible	Weight (w/ battery,
Fast focus eyepiece	w/o lens covers): 38.2 oz.
Waterproof: Meets IP67 standard	A6061-T6 aluminum, anodized matte black
Fog resistant	Uses one CR2032 battery (included)
Fully multi-coated lenses	Made in Japan
Nitrogen purged	Lifetime warranty (see website for details)

Specifications may vary and are subject to change without notice.

LENS CARE

Please do not use any organic solvent such as alcohol or acetone on your scope. First, blow dust or any foreign objects off of the lens. Then, use a soft cotton or microfiber lens cloth to clean any fingerprints or smears off the lens. Alternatively, you may use a piece of professional lens paper for further cleaning, if necessary.

⚠ WARNING: Always ensure your firearm is unloaded (chamber empty and magazine removed) before installing optics or accessories.

⚠ WARNING: Improper installation of firearm parts or accessories may result in death or serious personal injury. If you are not properly trained in the installation of these parts, have them installed by a gunsmith or armorer.

REMEMBER: THE FOUR RULES OF FIREARMS SAFETY

1. Treat every firearm as if it were loaded
2. Never let your muzzle cover anything you are not willing to destroy
3. Keep your finger off the trigger until your sights are on target
4. Be sure of your target and what is behind it

PRIMARY ARMS®

WARRANTY

Your Platinum Series scope is covered by the Primary Arms Lifetime Warranty. If a defect due to materials or workmanship, or even normal wear and tear, has caused your product to malfunction, Primary Arms will either repair or replace your product. You can find out more details at www.primaryarmsoptics.com.

Email: info@primaryarmsoptics.com
Phone: 713-570-1910
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