# KAHLES K3181 3.5-18X50

# TACTICAL ADVANTAGE WHERE YOU NEED IT MOST



The Kahles K318i, a hard-hitting optical sighting system featuring cutting edge optical designs at your fingertips

A new mid - to long-range contender in the sports and military optics market has been released in the form of the Kahles K318i. Designed specifically for the tactical oriented shooter, albeit a military/police or sports competitor, this ultra-short optic has taken the world by storm.

Kahles introduced its new tactical flagship at ShotShow 2018. The K318i was designed to be effective in any application where a shooter needs to engage both stationary or moving targets at speed. One of the most prominent design elements of the K318i is its ability to allow the shooter to engage targets at variable distances with minimal effort. Join us as we take a closer look at this combat master, and put it through its paces in its natural habitat on the range.

### REWRITING HISTORY WITH LESSONS LEARNT FROM THE PAST

Kahles was established in 1898 when two of the top Viennese optics powerhouses, the Simon Plőssl Company and Opto-Mechanical Workshop, joined forces. Kahles flourished under the leadership of Karl Robert Kahles, a true visionary in the optics field.

## A NEW MID- TO LONG-RANGE CONTENDER IN THE SPORTS AND MILITARY OPTICS MARKET

Kahles designed and produced the first-ever optic featuring ballistic drop compensation in 1904. The company pioneered the first variable power scope in 1949, followed by the first waterproof optic sealed with O-rings in 1960. However, this was not the last of the company's innovations. Kahles introduced the first multi-coated rifle optics capable of more than 90% light transmission in 1972.

Johann Peternal took over from Frederick Kahles as CEO in the late 1980s, pushing the envelope for innovative optic designs, and introducing its 100-year anniversary Helia C series. Robert Artwohl was tasked with the monumental task of establishing the new Kahles production facility in Guntramsdorf, thus moving the company away from its base in Vienna.



The K318i features class-leading windage and elevation adjustment ranges with 0.1 mrad adjustment increments



▲ The compact design of the K318i makes the Kahles a real competitor in the ultra-short market segment whist still packing a serious punch

The new state-of-the-art, world-class facility not only increased production capacity, but allowed for further optical advancements. In 2005, Kahles introduced its innovative multi-zero TM ballistics elevation adjustment, hailing a new era in precision shooting. However, Kahles did not stop there, and developed the Automatic Light – the first intelligent on-off mechanism for illuminated rifle scope reticles.

#### TRANSFORMING A DESIGN CONCEPT INTO A PRODUCTION MASTERPIECE

We have seen that some competition shooters want/need an ultrashort compact masterpiece on their specialised competition rifle with no compromise in optical quality and reliability of engaging targets at variable distances with pinpoint accuracy.

# KAHLES IDENTIFIED THE NEED FOR A COMPACT, ULTRA-VERSATILE OPTIC

When looking at the K318i, one cannot help but get a sense of déjà vu. You would not be wrong to a certain extent, as the optic does bear some visual similarities to its stablemate, the K624i. But that is where any similarity ends, and the K318i comes into its own. It was designed from the ground up as a dynamic DMR optic that gives the end user the ability to range their target, factor in critical data such as wind speed, holdovers and leads, and thus engaging their target with perfect accuracy, whether it is on the move or stationary.

The K318i introduces a 3.5-18 variable magnification optic with a 50 mm objective lens, making it perfect for either close - to mediumrange target engagements, whether it is on competition shooting events across the globe or needed somewhere else .It features a 34 mm main tube that is CNC-machined from a single block of aluminium that bolsters the strength, rigidity and durability of the optic, as well as maximising alignment for improved accuracy and optimum visual performance. The optic is finished with a matte black hard anodised coating that not only protects the optic against field abuse, but ensures it keeps its visual lustre.

The K318i is fitted with heavy-duty O-ring seals to prevent moisture as well as dirt and debris from penetrating, ensuring that the optic functions flawlessly in all environments around the globe. The optic is nitrogen-purged, preventing internal fogging over a wide range of temperatures, allowing the user to employ the optic in almost any weather condition.

The K318i employs a first focal plane reticle design (the reticle is placed in front of the magnification adjustment. The size of the reticle increases or decreases as magnification is applied or reduced. Trajectory/bullet drop compensation marks are accurate at any magnification level). The MSR/Ki reticle features a 0.035 mil centre dot in the primary crosshair that allows the shooter to engage targets at a rapid rate of knots with pinpoint accuracy.

The MSR/Ki reticle design features a built-in range finder in the lower right quadrant of the reticle that assists the end user to

determine the exact distances to their intended targets. The MSR reticle also includes a vertical and horizontal measuring tool in the lower left quadrant. These sub-tensions can be utilised as a measuring tool to establish the size of various objects on the battlefield, or as a spotting tool to assist a fellow shooter in dialling in their optics in the field.

The optic is available in three reticle option/configurations, namely MSR/Ki, SKMR3, and a MOA derivative with the MOAK reticle, thus catering for all market segments. The MSR/Ki reticles are milliradian reticles (mil). Therefore any correction can be applied utilising metric units (1 mil = 100 mm at 100 m). The reticles correspond with click values of one click equal to 0.1 mil (10 mm). The K318i's reticle features an illuminated centre dot and crosshair that proves invaluable in low- or no-light target identification and engagements.

# DESIGN OVERVIEW AND SPECIFICATIONS

Make: Kahles Model: K318i

 $\textbf{Magnification:}\ 3.5\times18$ 

Objective lens diameter: 50 mm

Reticle: MSR/Ki

Illuminated reticle: Yes (red)

**Diopter compensation:** +2.5/-3.5 dpt

Battery: CR2032

**Body:** Single-piece anodised 6061 T6 aluminium

Lens coatings: Fully multi-coated

Focal plane: First
Eye relief: 92 mm
Length: 313 mm
Weight: 940 g
Tube size: 34 mm
Turret style: Tactical mil

Adjustment graduation: 0.1 mrad

Maximum windage adjustment: 15 mil

Maximum elevation adjustment: 30 mil

Lateral parallax correction: 25 m to infinity

Applications: Sports shooting (3GN, IPSC, IDPA

DMG, PRS, and hunting)

# **KAHLES** >

The lenses throughout the optic are fully multi-coated. This proprietary lens coating's increases light transmission with multiple anti-reflective coatings on all air-to-glass surfaces. When cycling through the magnification range, I could not find any vignetting or signs of blurred edges – just sharp, flat, vivid images. The colour retention and fidelity in bright sunlight was also exceptional, while the multi-coated layers allowed for excellent contrast between objects.

## I QUICKLY IDENTIFIED THE NUMBER OF ADULT GUINEA FOWL IN THE FLOCK FROM A STAGGERING 300 M AWAY WITH EASE

During our range evaluation, we spotted a flock of guinea fowl darting across an open plain to seek cover behind some dead grass. I instinctively panned the optic to the right, and adjusted the power/ quick focus ring to the maximum magnification. The top-mounted parallax dialled accordingly. Needless to say, the clarity and vividness of the image of the guinea fowl was exceptional. I could quickly identify the number of adult guinea fowl in the flock, as well as distinguish the males from the females (the males have more prominent wattles as well as a larger helmet) from a staggering 300 m away with ease.

#### FLOAT LIKE A BUTTERFLY, STING LIKE A BEE

Looking at the K318i, one cannot help but think of heavyweight boxing champion Muhammad Ali. Just like Ali, or 'The Greatest' as he was commonly referred to in boxing circles, the K318i looks stocky, brutal, ominous and, most importantly, downright menacing when it is ready to get to work. The K318i is by no means a featherweight, tipping the scale at 940 g, but this is all muscle with 0% fat, and it is ready for a fight.

If I had to describe the optic in only three words, 'built for competition' would be the most appropriate phrase to describe this brawler. The 318i might be classified as an ultra-short optic, but it features superb balance, and is not front-heavy like most of the larger optics on the market today. The optic features oversized tactical turrets for both windage and elevation adjustments. The windage turret features Kahles's patented Twist Guard® protection system.

The K318i was designed for deliberate hands-on or gloved use. The large exposed tactical turrets and power ring features bristly-type knurling to assist the shooter in adjusting the optic on the fly with ease. Both the windage and elevation turrets have exceptionally positive clicks, with a crisp auditable click with every adjustment, and feature Kahles's zero-stop functionality on the elevation turret.

Kahles has incorporated a red pop-up indicator as a visual reference to indicate that the elevation turret has completed one full rotation (16 mil). We found this visual indicator invaluable during our testing and evaluation session when cycling through the elevation adjustments for different distance target engagements.

Kahles's Twist Guard® system is designed to aid shooters in high-stress tactical situations where circumstances require the user to change firing positions during a target engagement or course of fire during a sports-shooting match. The Twist Guard® system features a free-floating protection bezel on the right/outer side of the windage turret. The bezel provides a rotary protective barrier between the windage turret and objects such as barricades and branches, ensuring that the turret is not inadvertently knocked and adjusted as is the norm with standard tactical turrets in high-stress dynamic shooting scenarios.

Kahles has yet again brought innovation to the optics industry with the location of its parallax adjustment ring. Traditionally, the parallax turret is located on the left side of the main tube, which necessitates some shooters to utilise both left and right hands to adjust the optic to engage targets at variable distances.

## THE PATENTED PARALLAX ADJUSTMENT RING DESIGN IS GROUNDBREAKING

Kahles's groundbreaking and patented parallax adjustment ring design is located directly under the elevation turret. It only requires the shooter to utilise a single hand when adjusting the parallax and elevation turret for different distances. It is suitable for both left- and right-handed shooters, and is superior to the side-mounted systems



The K318i features Kahles patented top mounted parallax adjustment ring

seen on most other optic brands. The optic features an illuminated reticle powered by a single CR2032 battery on the left side of the main tube in the illumination rheostat.

The shooter can easily manipulate the illumination controls with their support hand, thus allowing the shooter to keep his fire control hand on the rifle while changing the illumination settings according to the ambient lighting conditions. The K318i features an impressive 15 mil lateral (side-to-side) and 30 mil horizontal adjustment, thus ensuring that zeroing the optic is an absolute breeze. Once zero has been established, the shooter only needs to remove two torques screws on either side of the elevation turret, resetting the turret so that the zero symbols correlate with the marking on the main tube, and lock it down again.

### **CONCLUDING THOUGHTS**

The name Kahles is synonymous with innovative, high-quality optical designs. The K318i affirms its commitment to the emerging tactical competition shooting market segment. The K318i is a rugged, no-frills tactical monster designed to perform perfectly in the sports-shooting arena. It incorporates all of the groundbreaking design elements and features of Kahles's legendary long-range optic stable in a compact sighting system, capable of pinpoint accuracy under the most extreme conditions.

The MSR/Ki reticle is undoubtedly one of the most versatile reticle options on the market today, and it is clear as to why Kahles chose it as its primary reticle for the K318i. The reticle design is divided into three main parts:

- 1. Primary reticle
- 2. Fine milling scale
- 3. Rapid ranging scale

This versatility allows the shooter to range their intended target and work out leads as well as holdovers, or adjust for the appropriate elevation without taking their cheek off their rifle chassis. If you are in the market for a tough-as-nails high-grade precision optic, then look no further than the K318i. •



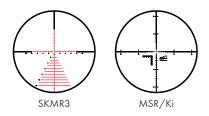


# ULTRASHORT MASTERPIECE

The K318i means noticeable optical and mechanical perfection packed in ultrashort design. With precise illuminated reticles in FFP, sharply defined throughout the entire magnification range and the unique patented TWIST GUARD windage. A true masterpiece in engineering.



K318i 3,5 – 18 x 50i





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