Riflescopes and Other Weapon Scopes (used for Magnification or Improving Aim)

General Scope Rules

1) In general, scopes have a rather narrow field of view. This is equivalent to 1/10th of a degree at long range, multiplied the focal length.
2) The shooter may, at the discretion of the GM, use bonuses and Maximum Obs Range from a scope which has the same multiplier of range. (This is essentially what I'm doing, though I freely admit I've probably made a lot of mistakes.) I would be interested in the figures that you have come up with; my email is on the home page.

Azerbaijan

MSN PK-A Collimator Sight

Notes: This is a collimator sight as one would use in CQB; as Azerbaijan uses the AK as it's primary personal weapon, the PK-A is designed for use on that assault rifle, though it can also be used on the RPK and even the PK. It is of modern design, light and handy, and providing a military-standard (in that part of the world) reticule. The reticule is illuminated, and the sight is designed for use in varying degrees of light and dark. It is also designed for use with Eastern/Russian/Chinese-type night vision goggles. The reticle is battery-powered, and can be adjusted from zero illumination to a level of 10 in brightness. A typical battery works for 150 hours before recharging is required. The sight is constructed primarily of aluminum alloy, and hermetically sealed and the tube filled with nitrogen to prevent condensation inside the tube. The sight mark on the reticule is fully adjustable.

Scope	Magnification & Length	Weight	Short	Medium	Long	Extreme	Max Obs Range	Price
PK-A	1x30	0.26 kg	+4	+0	-4	-6	864	$77

Belarus

BelOMO PK-A

Notes: The PK-A, though one of the oldest CQB optics on the market, is also still comparable to newer Western red dot sights. It is longer than most Western red dot sights, however, though the aperture is wide, and it is designed to be used with both eyes open and with a long eye relief if necessary. The PK-A has an illuminated reticle powered by the Russian equivalent of a CR357 watch battery or a AA battery which powers it for 96 hours. It uses variable illumination, ranging from no illumination to a night setting that is very bright (though not bright enough to ruin night vision). The PK-A is designed to be mounted on the standard Russian left-side mount, and when mounted, sits off to the left somewhat, so extra zeroing is needed for effective use. (Western companies have devised mounts that have a variety of interfaces, from scope rings to Weaver and Picatinny rails.) The standard mount attaches the scope with screws, and windage and elevation can be adjusted by POSP-type turrets used by most Russian scopes, which are black (in contrast to the dark gray of the scope and mount) and marked with numbers. (Older version of the PK-A use smaller turrets, also black but without numbers to help set the scope; they also do not have lock down turrets.) The PK-A's turrets lock the setting by pushing down on the turret when the desired setting is reached. The scope tube is nitrogen-filled. The PK-A is designed to be used by most Russian small arms that have the holes on the left side for a mount, including the AK-series, SKS, RPK-series, PK-series, and Pechneg and SVD, and including the Saiga, Vepr, and Medved.

The PK-AS is an improved PK-A. It uses a short tube and a standard Russian (or Western) scope mount. The PK-AS borrows from the PKS-07 used on the SVD and SV-98, but does not magnify nearly as much and has no fine adjustments. Powered by the same batteries as the PK-A, they give 120 hours of illumination. Light-gathering quality is good and optical quality is very clear. With no illumination, the PK-AS has a reticle with a black dot in the center inside a black oval. With illumination, the dot and oval become red, but the oval is not illuminated nearly as much as the dot. The on/off knob controls the illumination level. The PK-AS has a reputation, however, for being difficult to zero. Cheekweld is also difficult as the PK-AS has a large leftward mounting. The PK-AS has an elevation cam wheel that is graduated in 2 MOA increments and be used to calculate ballistic drop for most military rifle rounds. The PK-AS comes with an Allen Wrench to tighten the screws for the scope and mount. The windage and elevation are controlled by knobs on the screws, but still require the Allen Wrench to tighten and adjust. The PK-AS also has a range wheel, used when the range to target is known. The PK-AS is used by police and special operations units, but is not in general Russian military use.

The PK-ASM is a minor upgrade from the PK-AS. The body of the scope is made from light alloy. The reticle used a chevron in the center instead of a dot. It has a rubber objective cover. It otherwise has the features of a PK-AS, with the exception of the range wheel, elevation, and windage adjustments, which are adjusted for the longer observation and engagement range of the PK-ASM. The PK-ASM is perhaps most commonly seen as the sight Nikonov chose for AN-94.

The PK-A is used by the Venezuelan Army; however, their version has a number of differences from the standard PK-A. Perhaps the most immediately noticed differences is the body and shape of the scope – it appears not to be based on the PSO series, like the PK-A, but more like the PK01-Vi, a scope designed more as a telescopic sight. The tube is more barrel-shaped and has a rubber objective and eye lens cover, and the eye lens cover is padded. It uses a different locking system than the PK-A (not that used by almost all Russian scopes, but still designed by BelOMO). The Venezuelan PK-A does have a minor amount of magnifications, not really enough for extreme range shots but enough to help with medium and some long range shooting out to about 400 meters. The batteries used are a single AA battery, with a life in the scope of 100 hours. The Venezuelan PK-A can be used in conjunction with night vision scopes. Reputedly, some Russian units would kill to get their hands on the Venezuelan PK-As. It should be noted that while BelOMO calls the Venezuelan scope the PK-AA, the scopes themselves are marked "PK-A."

Scope	Magnification & Length	Weight	Short	Medium	Long	Extreme	Max Obs Range	Price
PK-A (Older)	1x20mm	0.43 kg	+3*	+1	-3	-5	400	$130
PK-A (Newer)	1x20mm	0.43 kg	+4**	+2	-3	-5	400	$143
PK-AS	1-3x20mm	0.48 kg	+4**	+2	+3	+1	684	$245
PK-ASM	1-3.5x20mm	0.35 kg	+4**	+2	+2	+1	742	$269
PK-AA	1-2x20mm	0.65 kg	+4**	+3	+1	-1	600	$218

*If within point-blank range (one-half short range), bonus is +4.
**If within point-blank range, bonus is +5

Britain

BSA Tactical Weapon Scopes

Notes: BSA scopes are bargain-level scopes. The reviews are all over the map – some say that they are cheap crap, while others feel they got an excellent scope at a bargain price. Some say that they don't hold a zero, while others say that the models they had were banged up at the factory and still shipped to them. Some say the turrets are easily adjustable and stay where they are put, while others say that they drift out of focus and that the crosshairs are not straight. There are literally dozens of such reviews on various sites, pro and con. I'll just run the numbers. If you buy one, let me know of your experiences with it.

At their base, the specs on the BSA are good, but simple. The Tactical Weapon Scopes are fogproof, waterproof, and shockproof, as well as having haze filters. They have multi-coated optics, and use a Mil-Dot reticle. They have a 100-meter parallax setting. They ship with scope rings that allow the mounting on a drilled and tapped receiver/barrel if they are designated 30WRCP), on a Picatinny or Weaver Rail, and one for mounting on Russian/Chinese AK-type and SKS-type weapons. This last mount seems to be one of the things that all the reviews have in common – the SKS/AK mount is a cheap piece of garbage that doesn't line up with the mount holes on all versions of the AK/SKS, even quality examples. It also seems to bend easily, and tends to come from the factory (in China) warped.

The reviews are about 50/50 pro and con. Your experience may vary, and the quality of BSA's products seems to vary wildly. The GM may want to keep this in mind. BSA may have bad quality control.

Scope	Magnification & Length	Weight	Short	Medium	Long	Extreme	Max Obs Range	Price
TW1-4x24/30WRCP	1-4x24	0.43 kg	+4	+3	-2	-3	705	$481
TW2.5-8x36/30WRCP	2.5-8x36	0.48 kg	+2	+2	+2	+1	1009	$688
TW3-16x44 & TW3-16x44/30WRCP	3-16x44	0.43 kg	+1	+2	+3	+2	1251	$853
TW3.5-10x40 & TW3.5-10x40/30WRCP	3.5-10x40	0.4 kg	+1	+2	+2	+1	1175	$801
TW4x30	4x30 (Fixed Power)	0.48 kg	+1	+2	-1	-2	896	$612
TW8x32	8x32 (Fixed Power)	0.37 kg	-1	+1	+2	+1	953	$650

Czech Republic

Meopta MeoPro

Notes: The MeoPro series is a line of primarily riflescopes that, at the lower magnifications, have good utility when used on hunting handguns, though their length limits some applications on handguns. The company has a US outlet, Meopta USA; though their scopes are all essentially hand-assembled in the Czech Republic, some components, such as lenses, are made in the US where the technology level is higher for certain components. The manufacturing of some components in the US, along with assembly in the Czech Republic, keeps RL prices down, while keeping quality high. Common features include MeoBright, which ion-coats the interior of the lens with a surface to help eliminate glare and reflections and increases light transmission. MeoShield is used for the exterior lens coatings and gives resistance to scratching and abrasion. (It meets the military specifications of many countries, including the US military.) MeoQuick is a fast-focusing technology that also adjusts for the eye peculiarities of the shooter. The Erector System provides resistance to heavy recoil and backlash, as well as general knocking around. Scope tubes are one piece and filled with inert nitrogen after being purged of air. They are waterproof, fogproof, shockproof (to an extent), and generally dirt and dust-resistant. The turrets have 0.25 MOA clicks, and when lifted, may be set or quickly re-zeroed. Unlike most non-illuminated scopes, the MeoPro does well at longer ranges in low-light conditions, due to the TO2 (Twilight Optimized Optics) system that lets through almost 97% of available light (most scopes let through 85-93% of the available light).

The MeoPro 1 and 2 are basic scopes of the line. The MeoPro 2 R/M is identical for game purposes, but is specifically designed for rimfire and muzzleloading weapons.

The MeoPro 3 is also essentially the same as the MeoPro 1, but has a longer focal length and has the MeoTrak Elevation and Windage Control, in which the turrets may be clicked at the push of a finger instead of having to get a hold of them with a finger and thumb; this throws off aim less. The scope tube is ELOX hard anodized for extra toughness and resistance to shock and general knocking around. The MeoPro 3 is essentially the same as the MeoPro 2, but has a longer focal length.

The MeoPro 5 R/D is a slightly different creature, having an illuminated red dot reticule. The scope may have up to seven magnifications preset by the user, and accessed through a button on the top turret. It also has a click choice of seven illumination levels. Turrets are low profile.

The MeoPro 6 is the first in the range of long-range scopes, and will provide little benefit at short range. It is otherwise like the MeoPro 1. The MeoPro 7 is like the MeoPro 6 for game purposes, but gives the user a choice of reticules instead of two. The MeoPro 8 is the same as the MeoPro 7 for game purposes for most features, but IRL is designed to be a budget long-range scope; it also has an illuminated reticle, with a choice of three reticles to choose from. The MeoPro 9 is like the MeoPro 7 for game purposes, except for the greater magnification. It is designed especially for long-range shooting at dawn or dusk conditions, and comes in a choice of four reticles. Again, the MeoPro 10 is like the MeoPro 9 for game purposes, except for magnification.

The MeoPro 11 is a classic fixed-power scope with an illuminated reticle and a choice of three reticles. It is not of variable power, but is good enough for most long-range shots, and the RL cost is much less than most MeoPro scopes of a similar power. It is variable for illumination, including seven presets.

Scope	Magnification & Length	Weight	Short	Medium	Long	Extreme	Max Obs Range	Price
MeoPro 1	3-9x40	0.43 kg	0	+1	+2	+4	1157	$216
MeoPro 2	3-9x42	0.45 kg	0	+1	+2	+4	1215	$227
MeoPro 3	3-9x50	0.49 kg	0	+1	+2	+4	1446	$271
MeoPro 4	3.5-10x44	0.47 kg	0	+1	+2	+4	1273	$238
MeoPro 5 R/D	3.5-10x44	0.47 kg	+1	0	+2	+4	1273	$262
MeoPro 6	4.5-14x44	0.49 kg	0	+1	+3	+5	1273	$293
MeoPro 7	4.5-14x50	0.56 kg	0	+1	+3	+5	1447	$333
MeoPro 8	4-12x50	0.52 kg	0	+1	+3	+5	1447	$337
MeoPro 9	6-18x50	0.62 kg	0	+1	+4	+5	1534	$325
MeoPro 10	6.5-20x50	0.62 kg	-1	0	+4	+5	1632	$346
MeoPro 11	6x42	0.43 kg	0	+1	+2	+3	1289	$301

Germany

Burris Eliminator

Notes: The Eliminator combines a scope, a laser rangefinder, and a low-power ballistic computer in one device. It is designed for all sorts of rifles, from rimfire to blackpowder muzzleloaders. Before a shot, one can quickly and easily input the type of round used (and weight of propellant if necessary). Though the effective range is short, it can provide data at that range, including range, hold-off, velocity of ammunition, and works with a Mil-Dot reticule if desired. Designed for ranged shots, the short range modifiers are small to detrimental. Note while the Eliminator can provide data at 800 meters, practical data range is 550 meters.

The Eliminator III is billed by the company as "the most advanced riflescope on the planet. It comes in two sizes and

specifications, and it uses a laser target interrogator similar to the one on the Eliminator. The aiming point and crosshairs are illuminated. The X96 reticule compensates for wind.

Scope	Magnification & Length	Weight	Short	Medium	Long	Extreme	Max Obs Range	Price
Eliminator	3.5-30x40	0.74 kg	-1	+1	+2	+4	800	$363
Eliminator III	3-12x44	0.86 kg	0	+1	+3	+5	800	$227
Eliminator III	4-16x50	0.82 kg	-1	0	+3	+5	800	$288

Burris Handgun Scope Series

Notes: This series is designed specifically for use with hunting handguns; some are capable of taking the stress of some powerful rounds indeed. Their salient feature is a long eye relief and wide eye lenses, allowing for sighting from a long distance through the scope. They use index-matched, multicoated lenses that maximize contrast in low-light settings. They also help eliminate glare. The lenses are larger than normal – again, to facilitate handgun sighting. They have a double internal spring-tension system to allow the scope to hold zero through the shock or firing and normal banging around. The scope tubes are purged and nitrogen filled, and the outer tube in one-piece. They have been made to be proof against weather, dust, and dirt. Finishes are matte black hard anodized or satin nickel-plated; construction is of aluminum. The reticle is a Plex reticle, which is essentially crosshairs thickening towards the edges of the scope. Some shooters say, as it comes from the factory, that some of the windage controls are off a bit.

The 2x20 is a short-ranged fixed-magnification handgun scope designed for short to medium-range hunting, though it is affective across all range bands. It has no more than fine magnification adjustments, but is also adjustable for windage and elevation, with finger turrets. Eye relief is long, usable from 25-61 centimeters.

The 2-7x32 is designed for medium-long-range handgun hunting. It has the option of the Ballistic Plex reticle, which differs only in the thickness of the crosshairs and that it is etched on the interior lens. The turrets allow, amongst other things, to match the scope to the round being used to sight in. It uses the PosiLock system, which uses special mounting to keep the scope stable and zeroed regardless of shocks.

The 3-12x32 is the most powerful of the Handgun Scope Series, and is useful across the bands of ranges. It has the same features of the 2-7x32, but uses only the Ballistic Plex reticle. It has positive steel on steel adjustments with positive, tactile clicks. The reticle is not illuminated, but the scope actively gathers light to the reticle, helping in low light.

Scope	Magnification & Length	Weight	Short	Medium	Long	Extreme	Max Obs Range	Price
Handgun Scope 2x20	2x20	0.2 kg	+3*	+2	-3	-5	552	$84
Handgun Scope 2-7x32	2-7x30	0.37 kg	+3	+2	+2	+2	1104	$168
Handgun Scope 3-12x32	3-12x32	0.45 kg	+2	+2	+3	+3	1324	$202

Burris XTR II

Notes: This will be an incomplete entry for the time – there are several versions of the XTR II family, but I am only doing one here for now. This family of scopes was designed for competition shooters and tactical operators alike. The XTR II has sight walls five times thicker than the XTR. It has dimensionally-matched precision adjustment knobs and Zero Click Stop technology. The optics feature Hi-Lume multi-coated lenses which optimize target resolution, contrast, and low-light performance. Internals are hand-fitted, and triple spring-tensioned for shockproofing and hard recoil, and are vibration resistant. The scope uses a ballistic circle dot reticle. Since the reticle is difficult to see at 1x magnification, the large circle around the crosshairs can be used at short range like a red-dot sight. At larger magnifications, the opposite happens – the reticule becomes crisp and the large circle slowly blurs into unusability. The 1x setting is designed to be used with both eyes open. Internal assemblies are hand-fitted. The windage and elevation knobs are click-adjustable with a 0.1 mil click value adjustment and zero click stop. It provides an 11-level illumination level, with battery-savings features at each one. The knobs have 1/10-mil click adjustment and a Zero Click Stop. These are the same on all of these scopes.

The 1-5x24 features the Ballistic 5.56 Gen 3 illuminated focal plane reticle which is designed for .223/5.56mm ammunition. They also have the Ballistic CQ Mil which does the same for other ammunition. It has a FastFire III 3-MOA red dot sight for quick close range shots.

The1-8x24 is the newest of the XTR II family. The 8x magnification produces accurate shots out to several hundred meters. The 5x and 8x wide zoom gives a wider field of view than is normal at 5x or 8x range. This is thumbed in by a button. It features the MAD (Modular Adjustment Dial) System providing more accessibility to windage and elevation knobs and settings. The 1.5-8x28 has a 5x Zoom Feature. The Dual Focal Plane Array allows the crosshairs to change size with magnification, while maintaining the size of the Mil-dot circle. It has precision dimensionally-matched adjustment knobs and Zero Click Stop technology. It has Hi-Lume-coated lenses, and is shockproof and vibration resistant. It has a Ballistic 5.56 Gen 3 Focal Plane Array, and is designed for quick engagements at short ranges, while still making that long shot.

The 2-10x42 has the choice of the combat-proven G2B Mil-Dot front focal plane reticle or the competition-proven SCR reticle. One is good for close-range engagements, while the other allows for quick changes in targets. Both allow for the long shot. This scope has

the XT-100 click adjustment knob; with 100 clicks per rotation, it can take most tactical calibers out past 1000 meters in a single turn. The vertical crosshair has 1-MOA for distance holdover; the horizontal crosshair has 0.5 MOA and 1-MOA lines for windage hold-off. It has 0.25-MOA brackets at the edges of the crosshair for precise ranging.

Designed for mid-to-long-range shooting, the 3-15x50 has a choice of G2B Mil-Dot, the SCR, and SCR-MOA, which is a special reticle for competition use. The scope has an extended illumination area to engage targets in low-light conditions. It has the XT-100 click adjustment knob, and the ranging brackets of the 2-10x42 XTR II.

Shooting out to those long-range shots now, the XTR II 4-20x50 is designed primarily for those long and extreme-range shots, with some utility at medium range. Its reticles may be the G2B, SCR, or SCR-MOA. Another available reticle pattern is the Horus H591, which has crosshairs superimposed over a ladder-like pattern of 0.25, 0.5, and 1-MOA hash marks for a detailed milradian pattern, allow one to shoot at moving targets, and the use of Rapid Range Bars.

The XTR II 5-25x50 is for shooting out to those long range shots, with some utility at medium range, and almost no utility at short range and point blank. It may have SCR, G2B, and SCR-MOA reticles. It features an XT-100 Click Adjustment Knob, which in this case, goes out to 12 meters per full turn. It has an extended illumination area. It has the hash marks for hold-off and hold-over that the 2-10x42 has. It is a combat-proven device, used by military snipers in Iraq, Afghanistan, and Libya. The knobs have a 0.1 mil click adjustment and feature Zero Click Stop.

The XTR II 8-40x50 uses an F-Class MOA and has seen some military use. It features an XT-80 click adjustment knob, with 80 clicks for a full rotation. It is used for long range shots and is not much use for short and medium-range shots.

Scope	Magnification & Length	Weight	Short	Medium	Long	Extreme	Max Obs Range	Price
XTR II 1-5x24	1-5x24	0.6 kg	+4*	+3	-1	-2	729	$517
XTR II 1-8x24	1-8x24	0.69 kg	+3**	+2	0	-2	1166	$826
XTR II 1.5-8x28	1.5-8x28	0.67 kg	+3	+3	0	-2	1295	$917
XTR II 2-10x42	2-10x42	0.64 kg	+3	+2	+1	-1	1528	$1083
XTR II 3-15x50	3-15x50	0.88 kg	+2	+2	+2	0	1834	$1300
XTR II 4-20x50	4-20x50	0.88 kg	+1	+1	+2	+1	2017	$1430
XTR II 5-25x50	5-25x50	0.94 kg	-1	+1	+3	+2	2179	$1545
XTR II 8-40x50	8-40x50	0.89 kg	-3	-1	+3	+3	2615	$1854

*At point-blank (half short range), this bonus is +5.
*At point-blank (half short range), this bonus is +4.

Swarovski Optik Z3

Notes: This is a 1-inch rifle scope being used by a rising number of hunters for their rifles. It is a compact scope, but offers great magnification. The Z3 3-9x may have a 4A or Plex reticule; the 4A uses three crosshairs and the Plex four crosshairs. The 3-10x may have ML reticule, which has three crosshairs and a small ladder in the center; the BRX-Heavy, which has four bright crosshairs and a large bright ladder in the center that stops at center; or the 4A or Plex. The 4-12x uses a 4A, BRX-Heavy, BRX (like the BRX-Heavy, but with lighter illumination), or the Plex. The Z3 3-9x is 308 millimeters long, and the central tube is 25.4 millimeters. The 3.3-10x is 360 millimeters long, and the 4-12x is 350 millimeters long.

Scope	Magnification & Length	Weight	Short	Medium	Long	Extreme	Max Obs Range	Price
Z3	3-9x36	0.34 kg	0	+1	+2	+4	852	$852
Z3	3.3-10x42	0.36 kg	0	+1	+2	+4	861	$861
Z3	4-12x50	0.41 kg	-1	+1	+3	+4	946	$946

Japan

Nikon Monarch VSD

Notes: The Monarch is a CQB-type red-dot sight designed for use by military and police forces. They are useful not only on assault rifles and submachineguns, but rifles, shotguns, pistols, blackpowder rifles and pistols, and crossbows. The Monarch features a variable-size dot that lets the user choose from one of five dot sizes, from 1, 4, 6, 8, and 10 MOA. The Monarch is designed to minimize parallax. The Monarch has multicoated lenses to protect against the environment and fogging and the tube inside is filled with nitrogen at slightly higher than air pressure. The scope is also waterproof. The Monarch is battery-powered (with a flat lithium ion battery) and may be illuminated at one of ten illumination levels or zero. The Monarch comes with both sight bases and an interface that allows attachment to Weaver or Picatinny rails. Finishes include matte black, silver, matte black/silver, and Realtree Hardwoods Green. Some users find the screw on/off lens caps a handicap, as they are slow to remove and can get lost. Some shooters have

also had problems with the scope coming loose when firing full-power rifle of heavy-caliber pistol rounds.

Scope	Magnification & Length	Weight	Short	Medium	Long	Extreme	Max Obs Range	Price
Monarch VSD	1x30	0.22 kg	+4	+1	-4	-6	864	$87

Nikon P-223 BDC 600

Notes: These scopes are designed specifically for use on ARs, whether on a Picatinny Rail or Weaver Rail, or on the carrying handle of some models. They are universally well thought of by their buyers, and are used by a wide variety of shooters ranging from hunters to target shooters. They are designed to be fast and light scopes that can fire at a several different range bands, ranging from the short-medium-range 1.5-4.5x to the long-range 4-12x. Nikon gives each one a lifetime warranty, so they must be confident of construction and of their being like by their users.

The 1.5-4.5x scope is designed for short to medium-range targets, the 3-9x for medium-long-range targets, and the 4-12x for long-range shots. Parallax is eliminated by autocorrections of the scope at 100 meters or less. The mount is able to take repeated shots without losing zero or damaging the scope.

The P-223 BDC 600 features the unique BDC 600 reticle. The 1.5-4.5x has a black crosshair with darker lines at 3, 6, and 9 o'clock, open-circle aiming points and hash marks at hash marks for every 50 meters between 200 and 600 meters. (The scope is capable of much shorter-range shots, and 600 meters is pushing most hunters' skills and the capability of their rifles.)

The lenses have a full set of coatings, from anti-moisture to anti-fogging to anti-reflective and dust-resistant. The turrets are click adjustable and spring-loaded, so that they can return to zero on a lift of the turret. There are turrets for elevation, windage, and fine adjustments of windage.

Scope	Magnification & Length	Weight	Short	Medium	Long	Extreme	Max Obs Range	Price
P-223 BDC 600	1.5-4.5x20mm	0.39 kg	+3	+2	+2	+1	818	$568
P-223 BDC-600	3-9x40mm	0.49 kg	+2	+1	+3	+2	852	$852
P-223 BDC-600	4-12x40mm	0.5 kg	-1	+1	+3	+4	946	$946

Romania

IOR Hunting Riflescopes

Notes: The Romanian Company of IOR sells optics throughout most of the world, though most sales are done through the export company Valdosta. The Hunting Riflescope line is, as the same suggests, designed for use by hunters, and as such are neither fancy nor crude devices. The IOR Hunting Riflescope will satisfy most civilian shooters' needs; they are not remarkable, but solid.

The FPS is designed to be light and simple but effective over the ranges most North American or European hunts are done; the Romanian-designed FPS has almost none of the bells and whistles found on its Western counterparts. It is designed to present the basic features needed for mid-to-long-range hunting. The 4x32 does not have variable resolution or variable objective features, or even variable reticles. It is adjustable for elevation and windage, and is environmentally hard-sealed for temperatures from -40 degrees C to +140 degrees C. Though they are not variable focus, they can be fine-focused rather quickly to sharpen the sight picture. It can be had with the following reticles: German #4A or #7A/Duplex, or German #1A. The 4x32 is known for it's ability to function in low-light conditions, despite not having an illuminated reticle. They have wide FOVs, though this is easily seen by the width of the objective lenses.

Like the FPS, the VPS is a set of scopes designed primarily for civilian hunting use. The VPS, however, has a number of other features, such as all-illuminated reticules, click-adjustable settings for the range and windage and elevation. They otherwise have the positive features of the VPS series.

The Bulldog is designed generally for medium-to-long-range hunting, but with the ability to switch quickly to a 1x both-eyes-open close-range engagement setting. A simple switch changes the lens arrangement to the 1x mode, requiring little or no time. When switched back to magnification mode, the previous "dope on the scope" is resumed. The reticle is illuminated, and the Bulldog has positive clicks to ensure positive scope engagement. The reticule is designed to be exceptionally sharp and crisp.

Scope	Magnification & Length	Weight	Short	Medium	Long	Extreme	Max Obs Range	Price
FPS 4x32	4x32	0.45 kg	+0	+1	+2	+1	1832	$207
FPS 6x42	6x42	0.62 kg	-1	+2	+2	+1	2290	$259
FPS 10x56	10x56	0.74 kg	-3	-1	+2	+3	3893	$440

VPS 1.1-4x26	1.1x4x26	0.65 kg	+4	+2	+3	+1	1271	$144
VPS 1.5-8x26	1.5-8x26	0.62 kg	+3	+3	+3	+2	1872	$209
VPS 2-12x36	2-12x36	0.8 kg	+2	+1	+3	+2	1966	$220
VPS 2.5-10x50	2.5-10x50	0.69 kg	+1	+1	+3	+2	2281	$256
VPS 2.5-10x56	2.5-10x56	0.8 kg	+1	+1	+3	+2	2372	$267
VPS 4-14x50	4-14x50	0.86 kg	-2	-1	+3	+2	3084	$342
VPS 4-14x56	4-14x56	0.9 kg	-2	-1	+3	+2	3208	$356
Bulldog	1/4x32	0.62 kg	+2	+1	+2	+1	1832	$310

Russia

Kalinka PK-01VS

Notes: The PK-01VS is a red-dot-type non-magnifying sight designed for close assaults and other CQB combat. It goes off the PK-ASM design, but the mount and the scope's position on the mount makes cheekweld and use of both eyes open much easier. It is a lightweight scope, simple in design and construction. Though designed primarily for military use, but is also sold on the civilian market. It is designed specifically for use with NODs, and the first three brightness settings are for use with night vision goggles. It uses a 1 MOA dot. It is designed to take the strongest of recoils, and can be used with machineguns such as the PK series or Pecheneg. The windage and elevation knobs adjust in 0.5 MOA clicks. The knobs are adjustable by a finger, rather than having to use two fingers to adjust the knobs.

Scope	Magnification & Length	Weight	Short	Medium	Long	Extreme	Max Obs Range	Price
PK-01VS	1x20	0.35 kg	+4**	+2	-3	-5	500	$170

Kalinka PO Pilade

Notes: This is a mostly a straightforward variable-magnification scope meant primarily for sale to Western civilians, and therefore adaptable to mounts of just about any kind. It uses for the most part a standard Russian reticle. It is precision-machined and has a good light-gathering objective, as well as nitrogen purging, multicoated lenses, and weather sealing. The center of the tube is 30mm in diameter, a common size for Western scope rings. The scope is designed so that lateral and angular adjustments, one set, can be maintained if the same mount is used, even if the Pilade is removed in the meantime. The tube body is, as many modern scopes are, made from magnesium alloy. The illuminated reticule is powered by a 3V CR-2032 battery, with a life of 100 hours. The turrets and diopter wheel are designed to be used with finger pushes instead of two fingers.

Scope	Magnification & Length	Weight	Short	Medium	Long	Extreme	Max Obs Range	Price
PK-01VS	3-9x42	0.54 kg	+2	+1	+3	+2	1245	$605

LOMO PKS-07

Notes: The PKS-07 is the current issue telescopic sight for Russian, some Eastern European countries who are still using Russian-type weapons, the Chinese, and a few other assorted weapons. It is designed for short, medium, and long-range shots, and has some utility at extreme range. It used the same stadiametric rangefinder as on the PSO-1, but there have been complaints that the reticle is not accurately scaled and elevation, windage, and Kentucky windage-type adjustments have to be made for accurate shooting as long and extreme range. The eye opening is lower than the rest of the scope, to allow a positive cheek weld for the shooter, mirrors and righting lenses carry the targets and observations to the eye opening; this obviates the complaint that the standard Russian mount puts the scope too high. The mount is in fact high, but connected only to the main tube of the scope, in addition to the tube that holds two AA batteries. Like the PK-AS, the reticle is black with no illumination, the reticle is black, but with illumination, it is red, and there are eight illumination levels. (In the case if battery failure, the reticle returns to it's off setting, making the reticle black.) The reticle, including the stadiametric marking, has a crosshairs with a dot surrounded by a circle. Every click of the elevation knob changes the point of impact by 4.5 centimeters at 100 meters; each windage click moves the POI by 2.5 centimeters at 100 meters. The PKO-07 uses POSP-type knobs with click adjustments. The PKO-07 has automatic brightness control, so it does not blind the shooter if flares, flashlights and other lights, and other bright sources enter its field of view. The PKO-07 is colored black, though of course the standard mount is dark charcoal gray. The PKO-07 is suitable for AK-family weapons and is the standard scope for the SVD, SV-98, VSS, and Vylchop rifles.

Scope	Magnification & Length	Weight	Short	Medium	Long	Extreme	Max Obs Range	Price
PKS-07	3.4-7x38	0.45 kg	+2	+2	+3	+1	1140	$540

NPZ Optics PSO Series

Notes: The PSO-1 (Pritsel Snaipersky Opticheskiy, or Optical Sniper Sight) was one of the most successful Cold War scope designs by the Soviet Union, introduced in 1964, and meant especially for service with the SVD Dragunov sniper rifle/DMR. The scope was, in fact, designed with designated marksmen in mind, as the SVD was for most of its Soviet career employed as a DMR, with just a few traditional sniper teams. At the time, the PSO-1 was considered one of the premier military telescopic sights in the world, and examples captured in Vietnam by US forces were used in designing some Western military scopes. Though most of the PSO series was (and in some cases, still is) made by NPZ, Belarussian POSPs are made by BelOMO, Chinese copies are made by JJJ, and a few rare early-model PSO-1s were made by Izhmash.

For lightness, the metal body, tube, and interface of the PSO-1 is made from a magnesium/steel alloy, coated with a baked enamel finish for scratch protection and weatherproofing. The tube is filled with nitrogen to stop fogging of the lenses. The PSO-1 is illuminated for light use, powered by a single RTS-63 battery, and producing a red reticle that may be illuminated from off to one of eight brightness levels. The PSO-1 has no caps for the eye or objective lenses. It does have a rubber eye lens side with a sun shade.

The reticle can be adjusted by windage and elevation knobs, in increments of 5 centimeters at 100 meters (about 0.5 Mils or 1.72 MOA). The PSO-1 does not have a parallax compensation control, nor does it have anything more than a crude focus capability, which tends to focus in jumps rather than making fine adjustments. (To be fair, many Western military scopes, such as first-generation ACOGs, the C-79, and the SUSAT also had these shortcomings.) The PSO-1 has a bullet drop compensation elevation turret in 50 or 100-meter increments; beyond 1000 meters, the shooter must make further adjustments manually using chevrons on the reticle that would shift trajectory by 100 meters per chevron, but involved a good degree of Kentucky windage and a shooter with good skills. Using a good shooter, the SVD can hit at 1300 meters or more, even though the rifle has a maximum effective range of 1000 meters. To the left of the reticle is a stadiametric rangefinder that can be used for quick shots at a target (based on a 1.7-meter-tall man standing straight up) from 100 to 1000 meters. The crosshairs are used for short-range, snap shots and the stadiametric scale is used most of the time, for longer-ranged shots. There are ten hashmarks across the reticle which can be used to correct for wind or use Kentucky windage. An almost unique feature was the IR detector, allowing the shooter to aim as a source of IR energy. It proved to be ineffective, and with the use of Passive IR, Starlight Scopes, and Thermal Imaging, was increasingly obsolete. The detector was charged by unscrewing a castle nut to open a channel to the detector; a full charge took 20 minutes, which gave it a maximum use length of 48 hours,

The mount interface is used by pressing in on the spring-loaded interface rail, then tightening it into place with a castle nut. Dovetails are also employed to lock the scope down onto the mount. Many shooters had difficulty with the somewhat off-left mount of the scope, and with the high mounting of the PSO-1 (and most rifles using this kind of mount for their scopes). Zeroing could be difficult, and shooting from a prone position problematic as well. An attempt to overcome this is to keep the specific scope with the rifle and registered in the arms room to the shooter to which the rifle and scope were assigned; the PSO-1s were also kept mounted on the rifle as much as possible. In addition, the buttplate was engraved with the serial number of the PSO-1 assigned for it. Still, due to the interfaces' spring-loaded design, PSO-1s could drift out of zero.

The PSO-1 is still used, both in some of the lesser countries of Eastern Europe, the Balkans, and several other former Soviet client states, including some of the new countries formed by the breakup of the Soviet Union (though they are quickly re-equipping). The current version is the PSO-1M2. Only a few changes were made; one is that the ineffective and obsolete IR detector of the PSO-1 has been removed. (The PSO-1M2 still has the IR detector switch port, but it is covered over.) The eye and objective lenses have attached caps. The PSO-1M2 uses a standard AA battery for power.

The PSO-3 is designed for longer-range shooting, and in most armies who have them are used by dedicated sniper teams. The PSO-3 has a simpler reticle, as it was felt that the plethora of information on the PSO-1 was not necessary or of little use to a trained sniper. The mount is designed especially for the PSO-3; it was at first used only on the SVD, but this was later extended to the SV-99 and then sold on the civilian market for use with hunting rifles like the Saiga and Tigr. It can also be used with the SKS; many of these have also been sold on the civilian market. The PSO-3 at first looks very much like the PSO-1, but the PSO-3 is a less chunky scope, especially in the rear half, and the turrets are white. The rest of the scope is black, including the mount. The front half flares out, fitting the larger objective lenses. The reticle retains the stadiametric rangefinder, but it is modified for longer shots. The crosshairs are T-shaped, with the vertical line having chevrons to where it meets the horizontal line. It has a bullet drop compensator that is adjustable for the ammunition being used, and diopter wheels for fine adjustments. The reticle is illuminated in red, and can be set from barely illuminated to quite bright, in eight steps. The illuminated reticle is powered by a AA battery, good for 500 hours. It is rather heavy, but is designed to be rugged and is a scope for experts.

The PSO-6 is an upgrade of the PSO-1, used for some time in the late-1970s to mid-1980s. It had most of the features of the PSO-1 and -1M2, and is also sealed against sand and dust. It can also remain effective up to 49 degrees Celsius. The rubber eyepiece is removable, and the PSO-6 has some utility as a CQB optic when the eyepiece is removed. The focusing knob and reticle are made effective out to 1200 meters. The PSO-6 can be had with one of two reticles; which scope is used depends on whether the PSO-6 is used on a sniper rifle or hunting rifle or an assault rifle or automatic rifle. Turrets have 20 settings instead of ten, and each click changes POI by 0.5 MOA. (This is not a standard military set-up.) The PSO-6 also uses an AA battery, but there are several

other informational elements and finer brightness adjustments, so two batteries are necessary and they last only 50 hours. The LED bulb which illuminates the reticule can be had in red, green, white, and yellow; standard issue for most countries is red, and the other colors are more common amongst civilians. In normal use, the scope will wear out before the LED does. A constant criticism is that every few shots (about 30 shots), the PSO-6 tends to go off zero and needs adjustments. (This is also a problem with the entire PSO series.) The PSO-6 also comes in a PSO-6D version, which has diopter wheels for elevation and windage and allows for fine adjustments during zeroing and firing.

The PSO-9 is primarily designed for the military SVD Dragunov, SKS, NDM-96, SSG-97, and PSL rifles, and the civilian Tigr and Romak-3 rifles, but with a change of mounting bracket and a few other tweaks, can be used on the AK-series and Saiga. It is primarily a medium-long-range optic, though it is still somewhat useful as short range and a little more useful at extreme range. Unlike most of the PSO series, the PSO-9's reticle is powered by two AA batteries; these are small and light and many can be carried by a soldier, but it powers the PSO-9 for only 25 hours. Windage and Elevation are changed by clicks on the knobs and use more conventional 0.5 MOA adjustments. Since the MOA adjustments are conventional and regular, the PSO-9's bullet drop compensator can be conceivably used with any caliber rifle. The scope is colored all in black, except for the turrets; the mount may be one of many colors, depending upon supply, including black. It has a rangefinding laser under the scope, one reason the battery does not last so long. The range shows in the lens with the reticle. Adjustments may be made to the angle and lateral lay of the scope. Alternate-color LED bulbs are available in red, green, white, and yellow, and the reticle does not glow, producing sharp lines only. The tube is of lightweight magnesium alloy, and the lenses are multi-coated as well as being sealed against dirt, dust, and water, and the tube is nitrogen-purged. The objective lens is wide for improved light gathering ability.

PSO scopes are now made primarily in Belarus, as the facilities to make these scopes were in Belarus when the Soviet Union broke up. The call the series the POSP. POSP scopes are generally hardier and more robust, though they are heavier. They are otherwise like their Russian counterparts, all are able to use red, green, white, or yellow LEDs. They are powered by two AA batteries, regardless of model. The reticles are designed to be free of glow. They generally come in zippered waterproof pouches, which will fit the mount and scope. The POSP-9 is Russian issue for their snipers, under the designation of 1P21.

The POSP-8 is Belarus' equivalent of the PSO-3; however, it also has an independent fine focusing ring and the FOV is wider at 5.2 MOA (versus 3.6 for the PSO-3).

Scope	Magnification & Length	Weight	Short	Medium	Long	Extreme	Max Obs Range	Price
PSO-1	1-4x24	0.6 kg	+4	+3	+1	0	804	$400
PSO-1M2	1-4x24	0.55 kg	+4	+3	+1	0	804	$384
PSO-3	3-8x42	0.85 kg	+2	+2	+3	+2	1927	$844
PSO-6	1-6x36	0.68 kg	+3	+4	+3	+1	1053	$500
PSO-6D	1-5x36	0.68 kg	+3	+4	+3	+1	1053	$505
PSO-9	3-9x24	0.68 kg	+2	+3	+3	+2	1727	$932
POSP-4	1-4x24	0.75 kg	+4	+3	+1	0	804	$425
POSP-6	2-6x42	0.85 kg	+3	+4	+3	+2	1407	$680
POSP-8	3-8x42	0.85 kg	+2	+2	+3	+2	1927	$844
POSP-9	3-9x42	0.85 kg	+2	+2	+4	+3	2008	$871
POSP-12	4-12x42	0.9 kg	0	+1	+3	+3	2450	$1028

NPZ Optics PSU Kashtan-2

Notes: The Kashtan-2 is very much like the Romanian IAR Bulldog in concept; it is normally used in low magnification mode for general observation of the target area, then when a possible target is found, it may be switched to a higher-magnification mode. It is thus useful for military, police, and civilian use, in roles from CQB to hunting. The reticle is a combination of center-finding reticles, bullet-drop compensators, and stadiametric rangefinders. (Optionally, the Kashtan-2 can be had with Mil-Dot or BDC reticles.) The mounting interface can use an add-on Weaver or Picatinny rail, some scope rings, or a Russian-style mount. The Kashtan-2 uses a sliding lens to achieve it's 4x magnification. The tube is quite wide, and when set on 1x, the FOV is 26 degrees. The reticle is illuminated in red, or black if no power is on; seven illumination settings are available. Manufacture is from aluminum alloy.

Scope	Magnification & Length	Weight	Short	Medium	Long	Extreme	Max Obs Range	Price
PSU Kashtan-2	1x/4x32	0.69 kg	+3	+2	+3	+1	1832	$310

RusOpticalSystem CTS Series

Notes: These two scopes are similar in some respects to some members of the PSO series; one is a short-range/CQB optic and the other for medium-extreme-range shots. They are both collimator sights, also known as occluded eye gunsights, used with both eyes open. Both use wide objective lenses for their light gathering abilities. They are designed for recon teams, and have abilities at

observation as well as shot placement. Their FOV is wider than most similar scopes. Turret movement is by clicks, but is very smooth.

The CTS 1-4x30 has an illuminated reticle in red, green, yellow, or white, depending on the color of the LED used. The reticle does not glow, keeping sharp lines. If the LED power is off, the reticle is black. Eleven levels of illumination are available. The 1-4x30 uses a 3V CR-2032 flat battery. The scope is finished entirely in black, and can be used with Eastern or Western mounts, mounting with rings on Western rifles or by attachment to a Picatinny rail (which ROS also sells). The turrets are click-adjustable. The tube is nitrogen-purged and the lenses are multi-coated; it is also sealed against dirt, mud, dust, and dampness and rain. The multiple lenses inside eliminate parallax. The reticle is a standard Russian design, with a stadiametric rangefinder and a crosshair with rising chevrons and a thicker chevron at the center. There are rubber caps for each end of the tube.

The CTS 3-12x50 is much larger than the 1-4x30, but of a similar design, though the objective lens is much wider on the 3-12x50. The reticle is similar, modified for the greater range of the 3-12x50. In fact, many of the features are the same as on the smaller scope, except what is necessary to accommodate the higher power of the 3-12x50.

Scope	Magnification & Length	Weight	Short	Medium	Long	Extreme	Max Obs Range	Price
CTS 1-4x30	1-4x30	0.54 kg	+4	+3	+1	0	871	$446
CTS 3-12x50	3-12x50	0.91 kg	0	+1	+3	+3	2230	$1044

RusOpticalSystem Eagle Eye Series

Notes: The Eagle Eye system is a new-for-2016 system sold primarily in the West to hunters, and almost totally panned by actual sharpshooters, designated marksmen, and snipers. The scopes present one main optic strength, then an upper third of the scope in a semigibbous shape which has a higher optical strength, done by using a higher digital focus. ROS says it is “similar to picture-in-picture TV viewing.” One sees the target in the crosshairs, then on top of the field, one sees the higher-magnified picture of the target at the crosshair. The Eagle Eye is designed to be attached to Picatinny or Weaver rails (note that some Russian-type mounts have Weaver or Picatinny rails on them). The Eagle Eyes have all the ancillary features of most medium and high-end scopes, such as nitrogen purging, sealing against dust, dirt, mud, and water/dampness, and multicoating of lenses. The anchor pins of the scope are used to refine parallax.

I can’t help but think the Eagle Eye is basically a gimmick. It just seems overly-complicated and confusing to use, though I’ll admit I have little actual time on a scope. It’s just another way to view the target with both eyes open, in a more complicated way.

The Eagle Eye 1/3.5x14 is a base non-magnifying scope with aiming reticles one might expect from Western sights. At the top third of the lens is section digitally-magnified to 3.5x, centered on where the crosshairs of the scope are located. Another crosshair shows where the main crosshairs would appear on the digitally-magnified section. These crosshairs are thicker than the main crosshairs. Though it may be difficult, to one who is used to the sight, it can be used as a CQB optic. Elevation and windage clicks are at 1/8 mil.

The Eagle Eye 3/9x30 is similar to its smaller scope in capability. The magnified area, however is at the bottom, in sort of a half-oval shape. Elevation and windage clicks are in 1/10th mil.

Scope	Magnification & Length	Weight	Short	Medium	Long	Extreme	Max Obs Range	Price
Eagle Eye 1/3.5x14	1/3.5x14	0.54 kg	+3	+3	+0	-1	614	$560
Eagle Eye 3/9x30	3.6/9.2x30	0.91 kg	+1	+1	+3	+3	1714	$1311

Switzerland

SiG-Sauer TANGO6

Notes: This scope is designed specifically for MSR and the AR platforms, and especially snipers and DMRs, this scope has a secondary role as an optic for most bolt-action rifles today. It uses a second focal plane array as well as the HellFire Triplex illuminated reticle, illuminated by fiberoptics during the day and by LED at night. With MOTAC (Motion-Activated Illumination), at night the scope senses movement and a person behind the scope and powers up, then powers down when not using it to aim. Two are most useful at mid to long-range, two others are suitable for short-range work, and one is useful in CQB. The LockDown turrets are click adjustable, can be locked down to hold their focus despite movement and jarring, and have a zero stop and reset. It has an intuitive rotation counter. The 5-30x44 has a LevelPles anti-cant system, which levels the sight and rifle better than traditional bubble levels; this system is used by looking through the scope and then adjusting a turret. The TANGO6 is waterproof down to 1 meter immersion, and fog-proof. They use HDX optics with low-dispersion glass combined with high-transmittance glass.

Scope	Magnification & Length	Weight	Short	Medium	Long	Extreme	Max Obs Range	Price
TANGO6	1-6x24mm	0.72 kg	+5	+4	+2	-1	1145	$796

TANGO6	2-12x40mm	0.86 kg	+3	+3	+3	0	1400	$974
TANGO6	3-18x44mm	0.9 kg	+1	+2	+4	+1	1526	$1062
TANGO6	5-30x56mm	1.19 kg	-1	+1	+5	+3	2037	$1418

SiG-Sauer Whiskey3

Notes: The Whikey3 is an entry-lever scope meant to also be used by Squad Designated Marksmen. Scopes are a new venture for SiG, but they have employed experts from all over the industry. The Whiskey3 has a 25mm maintube, widening in the rear to the focusing knobs. (Fine elevation is done with the turrets.) The front swell gathers light and carries the reticule. The turrets always return the scope to zero.

Scope	Magnification & Length	Weight	Short	Medium	Long	Extreme	Max Obs Range	Price
Whiskey3	3-9x40mm	0.86 kg	+1	+2	+3	+3	852	$852

United States

Aimpoint 3xMAG

Notes: A combination of a low-power telescopic sight and a red dot sight, the 3xMAG is designed to be used with both eyes open and for point-blank to medium range. It is appropriate for MOUT fighting as well as for designated marksmen. It is recommended that the 3xMag be mounted using Aimpoint's TwistMount, on a MIL-STD-1913 rail, which allows for quick and easy mounting, dismounting, and switching weapons. Aimpoint says that the 3xMAG does not need re-zeroing when moving the sight from weapon to weapon (I'm always a bit skeptical about such a claim).

Scope	Magnification & Length	Weight	Short	Medium	Long	Extreme	Max Obs Range	Price
3xMAG	3x55	0.2 kg	+3	+2	-2	-4	1964	$174

Aimpoint 6xMAG-1

Notes: This compact optic is based on the 3xMAG above. It is designed for short-range to medium-range engagements. The mount allows the magnifier of the 6xMAG-1 to be rotated 90 degrees to the side to allow the use of the 3-dot sights alone when firing at point-blank or short range (though it will help at medium or long range). This 6x optic is so far the highest magnification that Aimpoint currently makes. The red dots used are those of the finer resolution used by the Micro T-2 and H-2. The 6xMAG-1 uses a battery, which lights up to sharp focus the 3-dot part of the optic.

Scope	Magnification & Length	Weight	Short	Medium	Long	Extreme	Max Obs Range	Price
6xMAG-1	6x55	0.25 kg	+4	+3	-1	-4	2946	$381

Aimpoint 3X-C

Notes: This low-magnification compact scope was designed for use by civilians, especially hunters with carbines and shotguns. It clips easily to a Picatinny rail, and is designed for use with reflex sights. The mount includes the Aimpoint FlipMount, which allows the 3X-C to be quickly swung out of the way or removed for sudden short-range engagements. It can be used for long-range aiming as well as observation. The 3X-C can also be used as a hand-held monocular and can be adjusted to the individual eye. A re-zeroing button allows the 3X-C to be re-zeroes when put back on the weapon or swung back into position. The 3X-C is encased in a shock-absorbing rubber cover around its aluminum construction.

The 3XMag-1 is designed for military us and police use. Is is even more adjustable to the user's eye, and is otherwise like the 3XC-1, except for being even more shock-proof.

Scope	Magnification & Length	Weight	Short	Medium	Long	Extreme	Max Obs Range	Price
3X-C	3x56	0.22 kg	+4	+3	-1	-4	1120	$290
3XMag-1	3x70	0.23 kg	+3*	+2	0	-3	1244	$322

*This scope provides +4 at point-blank range.

Aimpoint 9000

Notes: The 9000L is designed primarily for civilian hunters, with a secondary use by target shooters. It is a red dot sight built to

handle even heavy recoil. A technology called ACET allows the battery in the 9000L to last as much as 50,000 hours. The reticle is available in 2 MOA and 4 MOA sizes. It is fully waterproof, designed for operation in bad weather, and can be mounted on a MIL-STD-1913 or Weaver rail or by means of two 30mm rings. The eye relief and field of view are especially wide.

The 9000SC is a version of the 9000L with some more bells and whistles, such as a battery-powered red lights, absence of parallax, coating to stop lasers as well as tracers and eye blinding such as flash-bangs. Battery life is similar to the 9000L. The 9000SC is meant to be usable at night as well as day.

Scope	Magnification & Length	Weight	Short	Medium	Long	Extreme	Max Obs Range	Price
Model 9000L	1x30	0.21 kg	+4	+1	-3	-4	328	$80
Model 9000SC	1x30	0.21 kg	+4	+1	-3	-4	328	$85

Aimpoint CompC3

Notes: Though this might look like a compact telescopic sight (and does bear some resemblance to the 3xMag), it is in fact a CQB optic whose best feature is it's wide field of view, eyes-open operation, and a 2 MOA illuminated red dot that makes target acquisition much easier at short range. Aimpoint sells the CompC3 with MIL-STD-1913 interface, but can also be used with 30mm rings. Not a scope, the CompoC2 and its ilk are referred to as reflex collimator sights. A rotary switch changes the ComC3 to one of nine illumination levels, or off. It can be adjusted for windage and elevation, even on the fly.

The CompM3 is very much like the CompC3, but more rugged and potentially more useable. The dot in the scope may be 2 MOA or 4 MOA (at the buyer's option), can be used in conjunction with NODs, is coated in rubber to ease impacts, is submersible to 45 meters, and has a wider FOV. There is no parallax and is weather-sealed. It incorporates laser eye safe protection.

The CompM4 has a unique feature; it can be run off of a low-power battery compartment, a high-power battery compartment, of both together, for up to 80,000 hours of continuous use. It is shipped with an interface for a MIL-STD-1913 rail or 30mm rings. In addition to having laser eye-safe reticle, the CompM4 has a feature called by Aimpoint killFlash that immediately dials down the reticle to prevent flashblinding. (Unlike the others, it can be used with one eye or both eyes open.) It is designed for use with NODs, hence the killFlash feature. In addition, it is compatible with Aimpoint's 3xMag sight.The nine red dot intensity settings can adjust on the fly to an extent to account for local lighting, and otherwise makes the red dot stand out very clearly. The CompM4 is type classified by the US Army as the M-68CCO.It incorporates the ruggedness of the CompM3.

Scope	Magnification & Length	Weight	Short	Medium	Long	Extreme	Max Obs Range	Price
CompC3	1x30	0.2 kg	+5	+2	-2	-4	328	$86
CompM3	1x30	0.22 kg	+5	+2	-1	-3	338	$89
CompM4	1x30	0.27 kg	+5	+3	-2	-3	338	$94

Aimpoint Concealed Engagement Unit

Notes: Simply put, the CEU is an elbow telescope with a mil-dot reticule, giving the operator an ability to engage around a corner or from under hard cover. The CEW is preferably mounted using Aimpoint's TwistMount, allowing the optic to be quickly removed and a more direct-fire optic placed on the mount. The new optic will have the same zero as the CEU. It can have one of four TwistMounts: 42mm high, 51mm high, 60mm high, and 51mm with a high rise ring. It can be combined with other Aimpoint sights and provides a true image instead of a reverse image like most mirror sights. Other team members with TwistMounts can also be passed the CEU and use it just as well; it will fit on their previous zero with the TwistMount. If necessary, it rotates up to 260 degrees to allow it to use around opposite corners. It is designed, like many of Aimpoint's designs, for CQB.

Scope	Magnification & Length	Weight	Short	Medium	Long	Extreme	Max Obs Range	Price
CEU	1x20 Special	0.35 kg	+2	+2	-3	-5	300	$127

Barska AR6

Notes: IRL, Barska's products are on the low-end of the cost scale. And the reviews are…mixed. Some say they are as cheap in quality as their price and you get what you pay for. Others praise Barska, saying that their products are every bit as good as more expensive optics at a bargain price. I will have to just run the numbers and leave the opinion to you guys who try the AR6.

The AR6 is designed primarily for short to medium-range shots, and within that, shots which require quick target acquisition. At its 1x magnification, it can be used as a CQB optic. This is because of the low magnification in general and the clear Mil-Dot illuminated reticles, which are colored either red or green at the option of the buyer. The reticle has adjustable brightness. Though useable on smaller-caliber rifles, the AR6 was specifically designed for mid to large-caliber rifles, and repeated shaking from heavier-caliber rounds firing will not damage the scope or take out of zero. This is partially due to construction, but also due to the shock-absorbing cantilever mount. (Two of these mounts are available – one for a conventionally-tapped receiver/barrel, and one for a Picatinny or

Weaver Rail.) This mount also allows for the scope to be placed more or less back or forwards on top of the rifle. The AR6 is sealed against water, fog, and moisture and dust in general; the lenses are also coated to repel such. The turrets are click adjustable, and there are turrets for fine and coarser adjustments. Finish is in matte black.

Scope	Magnification & Length	Weight	Short	Medium	Long	Extreme	Max Obs Range	Price
AR6	1-6x24	0.5 kg	+3	+3	+1	0	1156	$410

Bushnell Elite Handgun Scope

Notes: Though there is nothing that prevents this scope from being used on a rifle, the Bushnell Elite Handgun Scope was designed to be used on large-caliber hunting handguns. It has a special 51-centimeter eye relief, designed for the violent recoil of heavy-caliber handguns without having the scope slam into one's eye or face. The long eye relief may prevent its proper use on a rifle. It uses a Multi-X Reticle, is waterproof, and is purged of air and is argon-filled. The optics are coated against water and fog, mud, and general dust and dirt. The Bushnell Elite is designed to take the recoil of Magnum handguns, and is in general shockproof. The windage and elevation increments are by quarter-MOA and make an audible click. The turrets are designed for fast focusing, and can be quickly zeroed. The scope tube is one-piece aluminum, which may be finished black or silver.

Scope	Magnification & Length	Weight	Short	Medium	Long	Extreme	Max Obs Range	Price
Elite Handgun Scope	2-6x32mm	0.28 kg	+1	+2	+2	+2	1538	$546

Elcan DigitalHunter

Notes: Though this sight was designed primarily for civilian hunters, rumors place it with US forces in both Iraq and Afghanistan. It has the heart of a standard telescopic sight, but is equipped with electronics that help determine where to place the crosshairs. The hunter enters wind, temperature, windage, elevation, temperature, and such variables to allow the hunter to make a "more educated guess." It also has interesting features, such as a digital camera, to act as almost a sort of "gun camera." It has electronic zoom capability, and pictures can be retained with the supplied SD card (it can take up to a 512MB card). The DigitalHunter even has a USB port to download your pictures to a computer or other device. Needless to say, this feature could also be used for long-range surveillance…A minus point is the battery power it uses – a set of two AAs every four hours of operation.

Scope	Magnification & Length	Weight	Short	Medium	Long	Extreme	Max Obs Range	Price
DigitalHunter	2.5-13.5x60	0.79 kg	+1	+2	+3	+5	2889	$1023

Elcan Specter

Notes: The Specter is a series of ACOG-type scopes, fulfilling the same sort of role that the ACOG does, but from an earlier generation than Trijicon's ACOG. The Specter features large, easy-to-manipulate dials along with wide eyepieces and reticles. It can be switched between close-quarters mode, where the reticle turns to a bright red dot, and for longer ranges, which uses illuminated crosshairs. The Specter is easily adjustable for windage and elevation. The dials have click stops to keep them from straying. The Specter uses high-efficiency "broadband" coatings to make targets stand out better, especially distant targets. The mounting is by lever, ideal for MIL-STD-1913 and Weaver rails. Eye relief is excellent for both-eyes-open use.

The SpecterDR differs primarily in its magnification (a little bump) and the ability to quickly switch scope magnification from 1x and a CQB reticle to a telescopic reticle with 4x magnification. This version is useful on light machineguns as well as rifles and submachineguns.

The SpecterM145 is more or less a straightforward telescopic sight, with separate versions for separate platforms: the M145C light machinegun optic, the M145M4 Carbine/SMG Optic, and the M145MW Carbine/Rifle Optic. It is designed specifically for mounting on a MIL-STD-1913 rail. It is designed to be rugged and resistant to the bumps and rattles of automatic weapon use.

Scope	Magnification & Length	Weight	Short	Medium	Long	Extreme	Max Obs Range	Price
SpecterECOS	3.4x37	0.51 kg	+1	+1	+2	+3	1806	$206
SpecterDR	1-4x33	0.58 kg	+4	+2	+2	+1	1965	$225
SpecterM145	3.4x39	0.71 kg	+1	+1	+2	+3	1806	$216

EOTech L3

Notes: These are simple red-dot holographic sights with illuminated reticles, and powered by a single N-Cell battery (though two AA cells are an option). They are generally regarded as being of excellent quality, and are used by several police forces worldwide as well as military forces. They are suitable for use on pistols, submachineguns, and rifles of various lengths, as well as crossbows,

grenade launchers, and less lethal projectors. The L3 was bought by L3 Communications, but EOTech is still the primary supplier for the L3.

L3s generally hold their zero despite of abuse, and have a "battery on" indicator. They hold their zero even after dismounting and remounting. Users recommend Duracell batteries over any other brand of battery; they just seem to hold up best in an L3. They come from the factory with neoprene Scope Covers, but many users change them out for flip up covers, as the neoprene covers are hard to get on and off. They are not compatible with weapon-mounted night vision sights, though they can be used with NODs. The L3 series has a 68 mil field of view. L3s are designed for MIL-STD-1913 rails or Weaver rails. They are submersible to 3 meters. The glass has anti-reflection coatings. Batteries last about 600 hours of full-time on.

The Model 510 was an early version of the L3; it did have several problems, including a tendency for the reticle to go blank unexpectedly due to battery contact issues (especially in response to recoil), but otherwise did well when it was functioning.

The Model 512 is currently the most popular form of the L3. It has the normal holographic red dot inside a red circle, but it has been brightened somewhat, and it does not have the battery contact issues of earlier models. It comes in black, Realtree APG and Mossy Oak Obsession finishes. The Model 552 is also similar to the 512, but does have compatibility with weapon-mounted night vision devices as well as NODs. The 552 also has the choice of an XR308 or standard red dot reticle.

The Model 518 is a lightened and improved version of the Model 512, with a longer sight base and optics that allow for drop-in laser battery caps that allow for visible laser or IR laser spotting (though there is no laser on the unit itself). The Model 518 uses twin AA batteries as standard, but twin CR2032 lithium cells are an option, as are a single N-Cell. The Model 518 has 20 brightness settings. The Model 558 is similar, but compatible with weapon-mounted night vision optics and has easy-adjust buttons for most functions.

Scope	Magnification & Length	Weight	Short	Medium	Long	Extreme	Max Obs Range	Price
L3 M510	x1	0.33 kg	+5	+2	-2	-5	270	$116
L3 M511	x1	0.33 kg	+5	+2	-2	-5	300	$127
L3 M512	x1	0.33 kg	+5*	+2	-1	-5	300	$133
L3 M552	X1	0.39 kg	+5*	+3	-1	-5	330	$146
L3 M518	X1	0.39 kg	+5*	+3	-1	-5	340	
L3 M558	X1	0.39 kg	+5*	+3	-1	-5	340	

EOTech XPS2

Notes: The XPS2 is a deceptively-simple holographic sight with no magnification – but with great value in CQB fighting. It is EOTech's smallest and lightest holographic sight, and is only 97x54x64 millimeters. It is useful to soldiers, police officers, or hunters (especially varmint hunters). It is designed to mount on a Picatinny or Weaver Rail, and is small enough to mount on pistols and revolvers as well as submachineguns, carbines, and rifles. Windage and elevation are adjusted using screws on the right side. Models are delineated by the reticles or red dots they use. The XPS2-0 has a circle with a red dot in it; the XPS2-1 has one red dot in the reticle; the XPS2-2 is like the XPS2-0, but has a second red dot below the center one. The XPS2-FN has a more elaborate reticle with windage curves for moving targets, a red dot in the center of the curves, and a scale below them marked 70m, 5, and 3. The "3" is level with the red dot inside the windage arms. The XPS2-SAGE has small windage arms, and is marked 10m, 8, 6, 4, and 2; the "2" is level with the dot inside the windage arms. The reticles are illuminated, using a single 123 lithium battery.

Scope	Magnification & Length	Weight	Short	Medium	Long	Extreme	Max Obs Range	Price
XPS2	1x30mm	0.26 kg	+5*	+2	-1	-3	114	$162

*At point-blank range (half short range), this bonus increases to +6.

GSI Beta Lighted Infantry Telescopic Sight

Notes: The BLITS is a forerunner of infantry scopes such as the Trijicon and foreign sights like the SUSAT. It is a large, bulky, heavy unit, but befitting its tech level. It provides moderate magnification, but a rather narrow FOV at 6 degrees. The diopter setting is fixed, but the range and magnification are also fixed. The BLITS is adjustable for windage, but to a much more limited amount of elevation. It is capable of being mounted on a MIL-STD-1913 or Weaver rail, of a STANAG 2324-compatible sight. A detachable antiglare filter is provided. It takes a small watch-type battery, used to power the illumination of the reticle.

Scope	Magnification & Length	Weight	Short	Medium	Long	Extreme	Max Obs Range	Price
BLITS	4x27mm	0.79 kg	+0	+2	+3	+1	1712	$193

IOT Tactical Scopes

Notes: As the name might suggest, these scopes are designed for use by police and military, though they are also sold to civilians.

They are in many ways identical to the Hunting Riflescopes, coming in a wide array designed for anything from CQB to long-range sniping. As with the Hunting Riflescopes, they are known for toughness and durability, but some consider them a bit large. They are built stronger than IOR's civilian scopes, and have click adjustments to ensure that dope stays where it's put. Most are designed to be mounted straight onto MIL-STD-1913 or Weaver rails, though they can also use conventional mounts with an adapter. IOR Military/Police tend to be more compact than their civilian counterparts.

The line begins with the Combat Tactical Scope (CTB), which has low magnification, a short focal length, and the ability to quickly switch to a 1x CQB mode with a simple reticle. The Combat Tactical Scope differs from its other counterparts in that it is designed to fitted without modification to an AR-15/M-16-type carrying handle. The Combat Tactical Scope also has a channel that is compatible with the newer 62-grain 5.56mm bullets. It is in many ways similar to some types of Trjicon's ACOG.

The Simple Tactical Sniper Scope (STSS) are designed for the needs of the spotter for the sniper team, and are optimized to resist the shaking and banging of a semiautomatic sniper rifle. They are parallax-free beyond a range of 100 meters, and their field of view is tight to help eliminate errors causes by having too wide a sight picture. The magnification of these scope is fixed.

Variable Power Tactical Scopes (VPTS) are outwardly similar to their civilian counterparts, but have the differences noted above; they are also built more ruggedly than their civilian counterparts. As with the STSS, the FOV is kept tight; however, FOV widens with the power of magnification chosen. Reticules are illuminated. The 1x/4x and the 2.5-10x have fixed 100 meter parallaxes, the parallax improves to that with the 4-14 and the 6-24 are parallax-free down to 50 meters, the 9-36 and 12-52 are parallax free down to 7 meters, and the 9-36x44 are parallax free down to 8 meters. They are useful for any ammunition, but are designed specifically for 5.56mm and 7,62mm ammunition. The 1x/4x is a tactical version of the Bulldog, and is also called the Bulldog Tactical.

The 6x Zoom series allows the shooter to switch between the low magnification and x6 zoom. This gives a quick switch from short/range zoom to long-range zoom. The bonus ratings below reflect this 6x zoom rating and maximum zoom. The 10x Zoom series is essentially the same, but the quick switch is to 10x. The first bonus is for the first multiplier; the second number is for the quick-switch multiplier.

The Predator is designed more for short and medium-range shots: it is parallax free from 6 meters up, and is slightly larger and considerably heavier. They also have one reticle for short-range and medium-range shots (in game terms), and one for long and extreme-rame shots.

The VTRs 100 have BDC click patterns, 1 centimeter per click, which changes the mil FRP, designed for longer ranges. They are parallax free from 100 meters. Each click is 1 cm, which is 100 meters at extreme range.

Scope	Magnification & Length	Weight	Short	Medium	Long	Extreme	Max Obs Range	Price
CTB	3x26	0.45 kg	+3	+1	+2	+1	1431	$405
STSS	6x42	0.62 kg	-1	+2	+2	+1	2290	$259
STSS	10x42	0.69 kg	-3	-1	+2	+3	3406	$385
STSS	10x56	0.82 kg	-3	-1	+2	+3	3893	$440
VPTS	2.5-10x42	0.62 kg	+1	+1	+3	+2	2166	$244
VTPS	4-14x42	0,9 kg	-2	-1	+3	+2	2930	$230
VTPS	6-24x50	0.96 kg	-3	-1	+3	+3	4227	$332
VTPS	6-24x56	1 kg	-3	-1	+3	+3	4396	$345
VTPS	9-36x56	1.25 kg	-4	-2	+3	+4	5847	$459
VTPS	9-36x44	0.9 kg	-4	-2	+3	+4	5438	$427
VTPS	12-52x56	1.37 kg	-5	-3	+4	+5	7341	$577
VTRS 6x	1.5-6/8x26	0.67 kg	+3/-1	+3/+2	+2	+2/+1	7623	$600
VTRS 6x	2-6/12x32	0.8 kg	+2/-1	+1/+2	+3/+2	+2/+1	8502	$672
VTRS 6x	3-6/18x42	0.85 kg	+3/-1	+1/+2	+2/+3	+1/+2	14694	$840
VTRA 6x	3.5-6/18x50	1 kg	+3/-1	+1/+2	+2/+3	+1/+2	15470	$924
VTRS 10x Predator	1-10x26	0.94 kg	+3/-3	+1/-1	+2/+2	+3/+3	8594	$505
VTRS 10x	1-10x26	0.77 kg	+3/-3	+0/-1	+2/+2	+3/+3	8185	$481
VTRS 10x	4-10/28x50	1.12 kg	-2/-3	-1/-1	+3/+2	+2/+3	4053	$460
VTRS 10x	5.8-10/28x56	1.27 kg	-1/-3	+2/-1	+3/+2	+2/+3	4539	$316
VTRS 100	2.5-10x42	0.62 kg	+1	+1	+3	+2	2166	$244
VTRS 100	3-18x42	0.85 kg	-2	-1	+3	+4	2930	$250
VTRS 100	3.5-18x42	1 kg	+3	+1	+2	+1	3399	$265
VTRS 100	6-24x56	1 kg	-1	+2	+2	+1	2625	$431

Leupold CQB-SS

Notes: The Leupold CQB-SS is designed for close combat, out to medium range, with some utility at long range. It is not, however, an occluded eye gunsight and considerable training must be done to use with both eyes open beyond short range. The turrets have click modifications and are unlikely to get knocked out of their set position by accident. The reticle is illuminated and may be set to 8 levels of illumination. The scope includes a lens shade to help eliminate glare and unwanted reflections.

Scope	Magnification & Length	Weight	Short	Medium	Long	Extreme	Max Obs Range	Price
CQB-SS	1.1-8x24	0.66 kg	+3	+0	+2	+1	720	$97

Leupold Mk 4

Notes: The M4 ER/T (Extended Range/Tactical) is a more-or-less standard-size riflescope, designed for sniping, hunting, or competition shooting. The elevation and range turrets not only have click adjustments; they have a further turret which unlocks the turrets allowing the shooter to make very fine adjustments, and another control to lock the turrets. The turrets have tactile revolution indicators, so adjustments may be made in the dark by feel. The Mk 4 has Leupold's Xtreme Twilight Lens System (XTLS), which sharpens the view in low-light situations. The reticle is not only illuminated, it magnifies with the magnification of the scope to retain consistent range and holdover estimation values. The Mk 4 can be had with two different reticles, the H-58 and H-27. For game purposes, they are identical.

The Mark 4 CQ/T (Close Quarters/Tactical) combines a red-dot optical sight and the flexibility of a variable-power riflescope within a small device. The Mk 4 CQ/T is becoming popular with competition shooters. The reticle is illuminated; the shooter may set up to 11 light settings for the reticle. Common AA batteries power the reticle and the red dot for 600 hours. The Mk 4 CQ/T has two dial-type turrets for the variable magnification and drift adjustments.

The Mark 4 LR/T is a shorter-ranged counterpart to the ER/T. It has less magnification, but is longer. They are designed primarily for military and police work, but are also available to civilians. The MR/T is also a tactical scope, designed specifically for the US Army's SPR. It has a large option of ranges, though it is designed for more short-range sniping. The MR/T can be mounted atop an AR-15's carrying handle, and has enough eye relief to clear this handle and the charging handle. The scope is compact enough that several other accessories can be mounted if necessary (and you are using Weaver or MIL-STD-1913 rails). The turrets are click-adjustable and either have ¼-MOA (the M2) or ½-MOA with 1-MOA elevation turrets (M1). Most MR/Ts use the M2 knobs, while the v5 uses the M1 knobs. The reticule is illuminated, and may have a Duplex of Mil-Dot pattern (not important in game terms). The v1 has a reticule which has twin optical aiming points and knob positions to allow it to be used specifically with .300 Blackout rounds.

The Mark 4 HAMR (High-Accuracy Multi-Range) combines a DeltaPoint reflex sight for close-range work and a compact optical sight for use at medium range. (There is also a basic HAMR, the HAMR 1, that doesn't have the DeltaPoint sight.) The HAMR 2 has a DeltaPoint with a 7.5 MOA, while the HAMR 3 has a 3.5 MOA. The sight designed for use with both eyes open and is designed for rapid enhanced accuracy. The sight is designed using the Xtended Twilight Lens System, which provides enhanced vision in low-light situations by gathering more light. The scopes use DiamondCoat 2 lens coating as a scratchproofing treatment. The reticle is visible both in daylight and in light conditions equivalent to EENT or BMNT. The HAMR is designed to be 100% resistant to rain, snow, ice, and fog, and submersion down to 20 meters.

The mount/interface for the Mk 4 can also be used by the CQB-SS. The HAMR's DeltaPoint sight is identical to the standard DeltaPoint (below).

Scope	Magnification & Length	Weight	Short	Medium	Long	Extreme	Max Obs Range	Price
Mk 4 ER/T	6.5-20x34	0.64 kg	-2	0	+3	+4	1530	$305
Mk 4 CQ/T	1-3x14	0.5 kg	+3	0	-2	-3	230	$46
Mk 4 HAMR 1	4-24x30	0.42 kg	0	+3	+2	+1	2077	$194
Mk 4 HAMR 2/3	4-24x30	0.44 kg	0	+3	+2	+1	2077	$230
Mk 4 LR/T	3.5-10x40	0.55 kg	-1	0	+3	+2	1130	$225
Mk 4 MR/T 1	1.5-5x20	0.45 kg	+3	+1	+1	0	546	$109

Leupold Mk 6

Notes: The Mark 6 series is meant to be a riflescope in a small package which is useful as CQB range as well as the ranges most firefights take place (50-200 meters). It features the XTLS low-light attenuation system, the DiamondCoat 2, which gathers light more efficiently and offers a high degree of abrasion, and a FPF (Front Focal Plane) reticle which magnifies with the range in the same way as the Mk 4 ER/T above. Turrets have click modifications to protect settings and find common settings more quickly. While the Mk 6 M6C1 is primarily for CQB and short-range combat, the Mk 6 is designed for longer-range combat. Both are suitable for DMRs.

Scope	Magnification & Length	Weight	Short	Medium	Long	Extreme	Max Obs Range	Price

Mk 6 M6C1	1-8x34	0.65 kg	+3	+2	0	-1	902	$204
Mk 6	3-18x44	0.67 kg	+0	+1	+2	+4	1558	$173

Leupold Mk 8

Notes: This is another scope designed for eyes-open close-combat. Eventually a more upscale version of the CQB-SS, the Mk 8 has Pinch & Turn 10-Mil adjustments and a 5 MOA holographic dot. The standard ring setting complies with standard 77-grain 5.56mm NATO rounds, while twisting the ring allows for different loads and bullet weights. The elevation and windage are click-adjustable; the click adjustments are audible as well as tactile. The lenses are indexed to each other and coated with DiamondCoat 2 to increase scratch resistance and gather more light. Two possible reticules can be had, one adjustable for most NATO loads, one more designed for the new Mk 262 rounds. There are 10 levels of lighting for the reticule and the holographic dot.

Scope	Magnification & Length	Weight	Short	Medium	Long	Extreme	Max Obs Range	Price
Mk 8 CQBSS	1.1-8x24	0.66 kg	+3	0	+2	+1	720	$97
Mk 8 35mm	3.5-25x56	1.05 kg	-1	+2	+3	+4	1846	$297

Leupold Mk AR Mod 1

Notes: Designed specifically for the AR platform (though useable with other rifles), and with modern sporting and target shooting in mind, the Mk AR comes in four main types and with several different reticules. (Most reticules are in fact Mil-Dot reticules or modified forms of them.) The Mk AR Mod 1A is designed for more close-up work and where one does not want a large scope. It is compact and has an illuminated reticule (with fixed illumination), and has lockable turrets to keep the dope from being banged or brushed out of focus. The longer and higher-magnification Mod 1B is designed specifically for varmint hunting, and is optimized for use with rimfire-shooting rifles (out of the box, for Remington 33-grain HP .22 Long Rifle rounds). The Mod 1C and the AR seem to make quite a pair; user comments are almost totally positive. The Mod 1C is designed for high eye relief and both-eyes-open use if necessary. It uses click-lock turret movement, ensuring the dope stays on the scope. It's longer focal length makes it more suited to non-rimfire rounds. The Mod 1D is simply a higher-magnification version of the 1C.

Scope	Magnification & Length	Weight	Short	Medium	Long	Extreme	Max Obs Range	Price
Mk AR Mod 1A	1.5-4x20	0.27 kg	+3	+3	0	-1	671	$87
Mk AR Mod 1B	3-9x33	0.31 kg	+0	+1	+2	+4	1169	$130
Mk AR Mod 1C	3-9x40	0.35 kg	+0	+1	+2	+4	1252	$140
Mk AR Mod 1D	4-12x40	0.42 kg	-1	+2	+3	+4	1527	$171

Leupold Tactical Prismatic Riflescope

Notes: This scope is designed for CQB; it provides a reticle for point blank, short range, and to an extent, medium range work. The Prismatic has a removable illumination module. Without it, the non-illuminated holographic reticle is still visible. The illuminated reticle has eight settings, from zero illumination to very bright for complete darkness. The reticle is what Leupold calls Circle Glass; it is a simple circle with crosshairs in it. The Prismatic is designed for both-eyes-open shooting. It is small enough to mount on a pistol or submachinegun. The scope has ½-MOA adjustments and have click adjustments to keep the scope from being knocked out of settings. The scope is compatible with rings and a MIL-STD-1913 or Weaver Rail.

Scope	Magnification & Length	Weight	Short	Medium	Long	Extreme	Max Obs Range	Price
Tactical Prismatic	1x14	0.34 kg	+4	+2	-2	-4	Normal Vision	$47

Leupold VX-6

Notes: The VX-6 series uses Leupold's Quantum Optical System to magnify and to an extent, increase the brightness of objective views. The system is also known as Xtended Twilight, as it increases to an extent the twilight illumination. The series does this with lens coatings and lens layouts rather than actual illumination of the scope or night vision (for the most part; some of this series provides illuminated reticles). The VX-6 is rugged and is capable of quick zooming; the turrets give positive clicks and can be quickly taken back to zero. (Some users say the turrets are so tight as to defy easy turning.) The lenses have multiple coatings to resist fog, water, mud, rain, dust and dirt, and suchlike. The scope is filled with argon instead of air, providing a neutral interior unreactive with other substances. Some shooters fault cheap construction; some fault lenses which are just a little unclear. Versions with illuminated reticles power off after five minutes of inactivity (the scope detects movement and five minutes of movement counts as inactivity to the scope).

The base is the VX-6 CDS 1-6x24mm short-range scope. The VX-6 1-6x24mm MultiGun CDS is designed for several rifle and some handgun types, and has an illuminated reticle, with available non-illuminated reticle. The CDS Illuminated Reticle version, of course, comes with an illuminated reticle, and with on non-illuminated option. Reticles come in the Fine Duplex (essentially crosshairs), the FireDot Circle (with a small circle at the center, and a thickened line leading up), and the FireDot 4 (which is like the FireDot, but has three thickened lines instead of four). Except as noted below, all are the same in game terms as the 1-6x CDS.

The VX-6 CDS-ZL uses a Matte Reticle color and has the Xtended Twilight Lens System, blackened lens edges, complete water and dirt-proofing, and extra coating for the lenses in for form of DiamondCoat2. The interior of the tube is filled with an argon/krypton mixture, which is non-reactive and colorless. It has a matte black finish to avoid glare. The CDS is more of a base design, without the blackened lens edges and DiamondCoat2 coating for the lenses. The CDS-ZL and CDS do not have illuminated reticles. The CDS Illuminated Reticle is as the CDS for game purposes, but does have an illuminated reticle.

The Side Focus CDS, as the name would indicate, moves the focusing knob to the right side, better for long-range focusing without disturbing the rifle's zero. The scope zooms from x1 to x6, automatically jumps with the touch of a turret top to 3x for quick shots, and has magnification up to 18x. The tube is filled with an argon/krypton mixture to keep out atmosphere and has the normal coatings plus the DiamondCoat2 coatings for extra resistance to nature. Lifting up on the top turret returns the scope to zero (or x1). There are nine reticle choices for use with this scope, at the choice of the buyer. The 3-18x50 version is basically the same scope with greater focal length. The 4-24x52 version is also essentially the same, but with greater magnification and longer focal length. However, the scope also has a button on the left knob that allows the user to select between 12 pre-set magnifications, and the left knob button allows the user to select from among 12 pre-set illuminated reticle settings.

Scope	Magnification & Length	Weight	Short	Medium	Long	Extreme	Max Obs Range	Price
VX-6 CDS	1-6x24	0.34 kg	+3	+2	0	-1	935	$83
VX-6 MultiGun CDS	1-6x24	0.35 kg	+3	+2	+1	0	935	$84
VX-6 CDS-ZL	2-12x42	0.5 kg	+2	+1	+1	+2	1328	$114
VX-6 CDS	2-12x42	0.5 kg	+2	+1	+1	+2	1328	$120
VX-6 Illuminated Reticle	2-12x42	0.5 kg	+2	+1	+1	+2	1328	$132
VX-6 Side Focus CDS	3-18x44	0.53 kg	+1	+1	+2	+3	1793	$197
VX-6 Side Focus CDS	3-18x50	0.58 kg	+1	+1	+3	+4	2044	$267
VX Side Focus CDS	4-24x52	0.69 kg	-1	+1	+4	+5	2126	$360

Leupold VX-R Patrol

Notes: The VX-R Patrol are two similar scopes designed for CQB, ordinary, if short-ranged, combat, and for use by Designated Marksmen. Two versions are made, one with greater magnifications. It essentially looks like a miniature riflescope, with turrets for elevation and drift adjustments, as well as a turret to lock the present focus. Neat the objective lens is a knob used to adjust the contrast of the illuminating reticule, used to adjust the reticle to one of eight illumination levels. (One has no illumination; the 8 setting is reputedly bright enough to ruin your night vision and leave afterimages.) The VX-R also has two click settings, allowing the user generic high/and low illumination.

Scope	Magnification & Length	Weight	Short	Medium	Long	Extreme	Max Obs Range	Price
VX-R Patrol	1.25-4x20	0.33 kg	+3	+2	0	-1	902	$80
VX-R Patrol	3-9x40	0.43 kg	+2	+2	+1	+1	1753	$99

Leupold DeltaPoint Reflex Sight

Notes: A reflex sight is a type of optical sight (rarely magnifying) which improves short-range shooting by putting a crosshairs or aiming dot calibrated to the shooter's zero. This type of sight is most effective at short range, though it has some small utility at medium range. It appears to be a simple piece of glass in a frame above the receiver or slide, but it is much more. It is an aiming aid, up close where it counts. The DeltaPoint reflex sight is designed for use on pistols; two exist – one which fits on an already-present mount, and one that comes with a mount.

Scope	Magnification & Length	Weight	Short	Medium	Long	Extreme	Max Obs Range	Price
DeltaPoint (With Mount)	x1	0.02 kg	+3*	+1	-2	-4	100	$36
DeltaPoint (Without Mount)	x1	0.02 kg	+3*	+1	-2	-4	100	$30

*Bonus is +4 at Point-Blank Range (one-half Short Range).

Nightforce ATACR

Notes: Though Nightforce scopes are sold exclusively by an American company and mostly in the US, the scopes themselves are made in Japan. The ATACR (Advanced TACtical Riflescope) is built with the company's credo: Rugged, Reliable, Repeatable. Like many higher-end scopes, a lift on a turret returns the spring-loaded wheel to zero. The lenses are made of ED glass, which has excellent light transmission properties and color contrast. The reticle may be MilDot or MOA, and is illuminated with variable brightness. Both provide fast Kentucky windage and precise ranging. The mount is a low-profile ZeroHold mount.

The ATACR is highly resistant to jarring and rough handling, while retaining its zero and settings on the scope. The turrets are capped, and the turret must be pushed down to change settings. This prevents accidental settings changes. Elevation and windage are already fine adjustable in 0.25 MOA or 0.1 Mrad increments, but a turret for even finer modifications is provided. Parallax is adjusted for using special marks on the reticle. Lifting a turret returns the measurement to the shooter's zero.

The F1 features a choice of three MilDot and one MOA reticle. The others have a choice of one each. The Enhanced version has XtremeSpeed thread making for very fast diopter adjustments. It has double the field of view of its brother scope, the ATACR F1; at 5x, the Field of view is 5.74 meters wide.

Scope	Magnification & Length	Weight	Short	Medium	Long	Extreme	Max Obs Range	Price
ATACR F1	4-16x42	0.85 kg	-1	0	+3	+4	941	$961
ATACR	4-16x50	0.94 kg	-1	0	+3	+4	1007	$1029
ATACR F1	5-25x56	1.07 kg	-2	-1	+4	+5	1105	$1184
ATACR Enhanced	5-25x56	1.11 kg	-2	-1	+5	+5	1117	$1196

Sightmark Core SX

Notes: The Core SX series comes in several flavors, each to cover a different sort of shooting and firearm. They are, in general, made for use by smaller-caliber and non-ordinary weapons. Each model is tested on the type of firearm they would be used for and tested in field conditions, with the testing shooter making notes the whole way. They are also benchrest tested. The interior of the tubes are nitrogen-filled and purged of air, and sealed against the outside air.

The Core SX 1x24 Shotgun Scope is designed for short-range shot or slugs, with a red-dot sight for quick acquisition, though it provides no magnification (one can make adjustments to his eye, however). It has a duplex reticle, and a wide field of view making it ideal for short and medium-range shots at turkey, rabbits, squirrels, and even wild boar. It is designed to take heavy recoil (literally 1000gs) without being bumped out of zero. It has multicoated optics, and the scope tube is matte black anodized aluminum that is fog, water, mud, and dirtproof. The reticle is black in color.

The Core SX 1.5-4x32 is designed specifically for use on a crossbow; I don't actually know whether it can be used on a firearm, but my guess would be that it could not take the shock of any but the smallest-recoiling guns. Another such obstacle to such use would be that the scope reticle is adjusted to compensate for a drop of a bolt moving from 250-400 feet per second, far slower than most firearm rounds. The red/black VXR-M reticle is illuminated (with 11 brightness settings), and has a wide field of view to hunt even whitetail and mule deer with a crossbow.

The Core SX 2-7x32 SGR BDC is a shotgun scope. Though it can be used for shot, its primary design use is with slug rounds, from lead slugs to rifled slugs to sabot slugs. It uses an SGR Ballistic Shotgun Reticle, essentially black crosshairs with a marking circle in the center. It is constructed within a single tube of aircraft aluminum with a matte black hard anodized finish. It has multicoated lens coatings and resettable capped turrets, and has excellent weatherproofing.

The Core SX 3x32 is a crossbow scope designed for larger targets or longer ranges, though it is tuned for medium-high-velocity crossbows (about 320 feet per second). It is also tuned for heavier bolts. The reticle is illuminated with a red/black VXR-L reticle with 11 brightness settings. The VXR-L reticle has crosshairs, interrupted on the sides and bottom by graduation lines. The reticle is etched into one of the internal lenses in black and illuminated in red. It does not have zoom magnification, but does have knobs for fine adjustments. Construction, finish, and color as per the other Core SX scopes.

The Core SX 3-9x40 is designed specifically for use with rimfire rifles and carbines, particularly those firing rounds like .17 Hornady Magnum Rimfire and .17 Mach 2 which have greater range for their size. The BDC reticle has holdover points out to 200 yards, though with Kentucky Windage greater-range shots may be made. It is specifically calibrated for 40-grain standard velocity and 29-grain high-velocity rounds, though of course other weight rounds may be sighted in. It is otherwise constructed like the SGR BDC, with finger turrets and return to zero features, as well as turrets capped against weather.

The Core SX 4x32 scope is also a rimfire scope; however, it can be useful on certain rimfire pistols, though it is primarily for rifles and carbines. It is designed for quick target acquisition, with a BDC reticle. Except for its fixed magnification (with fine adjustments that can be made), it has roughly the same construction as the Core SX 3-9x40. There is a new version of the 4x32 scope, designed for the same actions, and virtually the same as the original 4x32 Rimfire scope. It does, however have turrets that are capped and all of which are immediately resettable to zero with a push. The scope is made of stronger 6061-T6 aircraft aluminum, finished the same way as other Core SX scopes. Field of View is a full 11 meters at 100 meters. It is much lighter than its predecessor, due to lighter materials.

The Core SX 4x32 Pistol is, as the name suggests, designed for use with pistols, revolvers, bolt-action, and single-shot designed

for hunting. It is designed to take the punishment meted out by the recoil of even .500 Wyoming Magnum rounds. It is able to take up to 800gs of force, and has an eye relief of over 43 centimeters and an eyepiece diameter of 38 millimeters. Field of view is 4.16 meters at 100 meters. The reticle is a metal overlay to an interior lens, black in color and a TDR (Tapered Duplex Reticle)-type reticle. Finish and construction is as almost all the rest of Core SX scope. As hunting handguns are light, the Pistol Scope has been kept as light as possible.

The Core SX 10-40x56 CBR is the only scope of this series that is a "normal" scope, designed for rifles of all calibers for long-range shooting, though effective for all types of long-range shooting, the Rifle Scope is designed specifically for long-range competition and hunting. The tube is of harder 6061-T6 aircraft aluminum, finished to the regular matte black hard anodized. It is otherwise, for the most part, built to the same construction standards as other Core SX scopes. The CBR reticle is etched black on the central lens, and illumination is red and overlays the black of the etching. Windage and elevation are in 0.125 MOA clicks, with pop-up turrets offering up to 40 MOA of travel, and a push on a turret to reset to zero. Like other Core SX illuminated scopes, the Rifle Scope uses a CR 2032 battery, which in this case provides 100 hours of power at maximum illumination.

Scope	Magnification & Length	Weight	Short	Medium	Long	Extreme	Max Obs Range	Price
Core SX 1x24 Shotgun Scope	1x24	0.31 kg	+3*	+1	-3	-5	459	$41
Core SX 1.5-4x32 Crossbow Scope	1.5-4x32	0.45 kg	+2*	+1	+1	0	612	$60
Core SX 2-7x32 Shotgun Scope	2-7x32	0.4 kg	+2*	+1	+2	+2	832	$82
Core SX 3x32 Crossbow Scope	3x32	0.4 kg	+2	+1	+1	+1	907	$91
Core SX 3-9x40 Rimfire Scope	3-9x40	0.4 kg	+2	+1	+3	+3	1256	$124
Core SX 4x32 Rimfire Scope	4x32	0.4 kg	+2	+1	+2	+2	795	$83
Core SX New 4x32 Rimfire Scope	4x32	0.33 kg	+2	+1	+2	+2	795	$83
Core SX 4x32 Pistol Scope	4x32	0.28 kg	+2*	+1	+1	0	716	$75
Core SX 10-40x56 Rifle Scope	10-40x56	0.87 kg	-2	-1	+4	+5	2575	$280

*At point-blank (half short range), the bonus is one greater.

Sightmark Wolverine

Notes: The Wolverine is designed specifically for shotguns and SBRs; it is a red-dot sight meant for CQB. There are two varieties, the CSR and FSR. The CSR features a 4 MOA red dot reticle with adjustable brightness for its reticle. Power consumption is very low, and a battery lasts a long time in it. It has a night vision mode, and can be clipped to a night vision scope. The housing is a single 6061-T6 structure in a shockproof housing. The housing is covered in rubber and the lenses are scratchproof, anti-reflective, and is fog-proof and nitrogen-purged. It has an IP67 waterproof rating and submersible to a meter. It /2
has an adjustable height mount.

The FSR is also designed for short-range engagements and is specifically designed for the AR platform. It has a longer objective lens that allows for more rapid target acquisition and offers a 2 MOA reticle. The FSR is otherwise the same as the CSR and has the same features.

Scope	Magnification & Length	Weight	Short	Medium	Long	Extreme	Max Obs Range	Price
Wolverine CSR	1x23	0.29 kg	+3*	+1	-3	-5	440	$39
Wolverine FSR	1x28	0.35 kg	+4*	+1	-2	-4	496	$44

*At point-blank (half short range), the bonus is one greater.

Trijicon ACOG

Notes: Though some versions (such as the 4x32) were present well before the Wars in Afghanistan and Iraq, the Trijicon ACOG made its name there – first as the standard optic of the US Marines, and then of the US Army, replacing a plethora of earlier experiments with other scopes. And though it has been supplemented by other scopes and engagement optics, it still figures greatly in US Military use, as well as with some local and national police forces around the world. Since that first 4x32, many other types, sizes, and strengths of ACOG have been developed, so that there now some 15 Trijicon ACOGs.

The ACOG is designed to be a small and light package, for increasing the chance of hitting with short-to-medium-range shots, and even having a better-than-average chance of hitting long-range targets. The reticles are simple. Most ACOGs use a fiberoptic tube and tritium to illuminate the reticle, though some use an LED powered by a single AA battery. (It goes without saying that these are better in dark conditions.) The ACOGs have a wide field of vision, and most are small and deliberately do not offer high magnification, to increase their utility in CQB. Some are designed to fit into the AR-15/M-16/M-4 carrying handle, but most are designed to use the ACOG's Picatinny or Weaver rail interface.

The following ACOGs are designed for AR carrying handles. The TA44 is designed especially for CQB and point-blank shots, and

has very low magnification. It is designed for mounting on an AR-15/M-16/M-4 carrying handle, and one would find difficulty mounting it any other way (Impossible: Gunsmith, to mount it on another type of rifle). The reticle is simple, with an amber, red, or green circle with a dot of the same color in the center. This is supplemented by a black vertical line to estimate windage adjustments. The TA45 has either an 8 MOA triangle reticle with a vertical base line (top two-thirds colored, bottom black), or a colored crosshair with black ends. The TA47 is the same, but with a higher magnification, and a third reticle choice – a circle instead of a triangle. The TA50 has crosshairs or circles, and comes in low height or standard-height versions.

The following are designed specifically for mounting on Picatinny or Weaver Rails, and have adjustable height. The TA33-C is further designed to mount on either 5.56mm/.223 or ,300/.308/7.62mm-series caliber rifles, and come with either a colored chevron reticle with crosshatched vertical line below, crosshairs, or a circle with a crosshatched black line below. The circle on the .300/.308/7.62mm version is larger than on the 5.56mm/.223 versions.

The following come in either carrying handle or Picatinny/Weaver rail mounts with adjustable height. They TA11 version for carrying handles comes with a reticle with a small circle (called a Donut) with a vertical line with crosshatches below. A chevron instead of a Donut, a half-Donut with a dot in the middle and a vertical black line with crosshatching, a crosshairs, of a Mil-Dot M-249-scope-type reticle. The TA-11-C version has a reticle with a small colored crosshair and a black reticle, a chevron in a large circle, a triangle atop a vertical line with crosshatches. The same but with a chevron atop, the same with a half Donut and a dot in the middle, and a crosshairs. The TA11-C has a version with a reticle illuminated by LED with batteries; this is the TA11-C-LED. Reticles for the .223/5.56mm versions are a chevron, donut, or horseshoe with dot in the middle, with a vertical crosshatched line. The TA110-C-LED offers the same reticles, but is illuminated via battery-powered LED.

The TA11E is calibrated for 7.62mm rifles out to 800 meters. It includes a Picatinny/Weaver rail interface. It has a chevron-type reticle, with a width of 5.53 MOA. The reticle comes in red, green, or amber. The reticle is illuminated with a combination of fiberoptics, and tritium.

The TA01 comes in either AR handle mounts or Picatinny/Weaver mounts, and has exclusively different types of crosshairs, in black or red. It has fiberoptic illumination. The TA31-BAC features dual illumination – fiberoptic during the day and tritium at night. Reticles span just about all of Trijicon's reticle types, military, police, and civilian. Mounts come in both carrying handle and Picatinny/Weaver Rail mounts. The TA02 is essentially the same as the TA01, but has LED illumination. The TA55-C comes only with a Picatinny/Weaver rail mount, and comes in versions designed for 5.56mm/.223 and .308/7.62mm. They have only chevron with a vertical crosshatched line reticles, and the reticles are only in red. They are illuminated by fiberoptics and tritium. The TA648-C is primarily for long-range shots, and has a dual-illumination reticle of many different types. It not only fits on a Picatinny/Weaver rail, it comes with a length of Picatinny Rail suitable for the receiver/barrel of a bare rifle, or one with modifications to mount a Picatinny Rail.

Scope	Magnification & Length	Weight	Short	Medium	Long	Extreme	Max Obs Range	Price
TA44	1.5x16mm	0.14 kg	+3*	+2	-3	-5	484	$43
TA45	1.5x24mm	0.18 kg	+4*	+3	-2	-4	545	$49
TA47	2x20mm	0.18 kg	+2*	+2	+3	+2	967	$188
TA-50 (Standard Height)	3x24mm	0.17 kg	+2	+2	+3	+2	1020	$199
TA-50 (Low Mount)	3x24mm	0.16 kg	+2	+2	+3	+2	1020	$199
TA33-C	3x30mm	0.22 kg	+2	+2	+3	+2	1084	$212
TA11/TA11-C	3.5x35mm	0.4 kg	+2	+2	+4	+3	1252	$245
TA11E	3.5x35mm	0.4 kg	+2	+2	+4	+3	1252	$245
TA110-C-LED	3.5x35mm	0.53 kg	+2	+2	+4	+3	1252	$248
TA01	4x32mm	0.28 kg	+1	+2	+4	+3	1284	$257
TA31-BAC	4x32mm	0.34 kg	+1	+2	+4	+3	1284	$260
TA02-LED/TA02-C-LED	4x32mm	0.51 kg	+1	+2	+4	+3	1284	$263
TA55-C	5.5x50mm	0.73 kg	-1	+1	+4	+4	1888	$383
TA648-C	6x48mm	1.05 kg	-1	0	+5	+4	1935	$498

*At point-blank (half short range), the bonus is one greater.

Trijicon RX34 Reflex Sight

Notes: The latest of Trijicon's reflex sight line, the RX34 has a field of view of 4.5 MOA and is designed specifically for CQB. The reticle consists of a simple amber dot in the center of the sight. The RX34 is designed for use in low light, daylight, or no light; it is mildly illuminated. It is designed to give a quick-acquisition sight picture with pinpoint accuracy with a large sight picture and realistic color. The Rx34's lenses are not reflective. It is built for both-eyes-open shooting.

The normal RX34 does not come with the hardware to mount it to a rifle. The RX01NSN comes with a Picatinny/Weaver rail interface.

Scope	Magnification & Length	Weight	Short	Medium	Long	Extreme	Max Obs Range	Price
RX34	1x42mm	0.23 kg	+4*	+2	-2	-4	501	$55

*At Point-Blank range (one-half short range) bonus is +5.

Trijicon Sealed Reflex Sight

Notes: The SRS is an interesting sort of Optic: it does have a space for a lithium battery, but it primarily for use at night and indoors, as during the day, the SRS is powered by a wrap-around solar panel atop the scope. This panel also recharges the battery. The solar panel will also work in cloudy weather, even heavy clouds, and indoors if under electric lights. The switch from solar to battery power and back again is seamless, with no blinking of the scope or its reticle. The only time id doesn't work is when the battery is discharged and there is no daylight or electric light available, in which case no reticle will be seen and no brightening of sighting through the scope. The battery will power the SRS for about 15 hours (and a total of 50-80,000 hours of use with repeated charging); the solar panel will provide power as long as there is daylight or electric light available. For the most part, you should not run out of power. The SRS is essentially otherwise a red-dot-type scope, similar in concept to an ACOG.

Scope	Magnification & Length	Weight	Short	Medium	Long	Extreme	Max Obs Range	Price
Sealed Reflex Sight	1x28mm	0.38 kg	+4*	+2	-2	-4	501	$55

*At Point-Blank range (one-half short range) bonus is +5.

Trijicon Vudu

Notes: The Vudu is a series of compact scopes useful for both close range and some longer-range work. The Vudu may have one of two reticles at the buyer's often: a circular at short range and a crosshair at long range, or a circular at short range and a smaller circle/crosshair at medium range. The Vudu is designed to be equally handy on a bolt or lever-action rifle as on a semiautomatic; the smaller ones can be used on larger pistols. The Speed Ring reticle allows for quick snap shots at short range, but accuracy at higher magnifications. It is designed for short to medium shots, including CQB. They are made of 7075 T6 aluminum and are quite tough in action. They are so tough, Trijicon offers a lifetime warranty on the Vudu. Illumination controls are push buttons, and there is a turret on top for windage adjustments and turrets on the sides for elevation adjustments; they are click adjustable and have turret locks. They have an EZ Stop zero adjustment feature, returning the magnification to base at a click. They have a parallax adjustment for long-range shots. Finish is uniformly black.

Scope	Magnification & Length	Weight	Short	Medium	Long	Extreme	Max Obs Range	Price
Vudu	1-6x24	0.56 kg	+4	+2	-1	-3	526	$95
Vudu	2.5x10x44	0.76 kg	+3	+2	+1	-2	790	$154
Vudu	3.5x18x50	0.94 kg	+2	+2	+3	+2	967	$188

Tru-Glo TRUTEC Red Dot Sight

Notes: This is a relatively short, compact re-dot sight designed for CQB, though it has some utility at medium range. It has a 2 MOA reticle for precise aiming, and a circle around this reticle. It has push-button controls, such as brightness, focus, eye vision, and auto-on and auto-off features. In addition, the Tru-Glo TRUTEC has a timer that can turn the brightness off after a given period. It's shock-resistant to 1000g, and waterproof and fog proof, and sealed against gas (or the outside atmosphere – the device is filled with nitrogen). It has click windage and elevation adjustments. It mounts to either a Picatinny or Weaver rail, and includes high and low-mounting bases. It is known for long battery like on a CR3032 battery.

Scope	Magnification & Length	Weight	Short	Medium	Long	Extreme	Max Obs Range	Price
TRUTEC Red Dot	1x20mm	0.2 kg	+4*	+1	Nil	Nil	428	$60

*At Point-Blank range (one-half short range) bonus is +5.

Vortex Diamondback/Diamondback HD

Notes: The Diamondback is a line of riflescopes, some of which can be used as pistol scopes and shotgun scopes. The tube is of one-piece aircraft aluminum alloy blocks, purged with argon for most models. The lenses are multicoated with XD extra-low dispersion glass, which increases resolution and color fidelity. The left side turret corrects for parallax and focus, with a push on top returning them to zero. The knobs are small to allow a perfect mounting height. They are water and weatherproof, dust and dirtproof. The HP versions have a quick 4x zoom and focus. Lenses exposed to air have antireflective coatings.

The Diamondback 1.75-5x32 rifle scope is also useful to shotgunners and pistoleers. It is available with a V-Plex reticle. The reticle has features for estimating range, holdover, and wind drift correction. The turrets are capped, allowing re-indexing and re-

zeroing, and providing additional protection for the knobs.

The Diamondback 2-7x35 is essentially a larger version of the above – intended for rifles, but easily used on shotguns and pistols. It is designed to take the recoil of even heavy-caliber rifle rounds. The Precision-Glide Erector System uses added components in the zoom feature to ensure smooth zooming.

The Diamondback HP 2-8x32 is also similar to the 2-7x35 scope, except for its HP features, and slightly greater magnification and lesser focal length. It uses a second focal plane reticle, which is a V-Plex reticle. The right side knob has a capped finger knob that does fine magnification adjustments and parallax adjustments.

The Diamondback 3-9x40 is similar to the above scopes in construction and features, except for its magnification. It is not only meant for rifles, but muzzleloaders and shotguns firing slugs. It is too big for pistols except the longest of them. It uses a V-Plex MOA reticle. The Diamondback 3.5-10x50 is designed for the same applications, but also meant to sight on targets at a longer range.

The Diamondback 3-12x42 HP is designed for longer-ranged shots, especially from magnum and other high-powered rifles; they otherwise have all the features of previous HP-equipped scopes.

The Diamondback 4-20x40 is also meant for long-range shots, primarily from centerfire long-range and magnum rifles, but also useable with muzzleloaders and shotguns slugs. It uses a V-Plex Dead-Hold BDC reticle, which helps stabilize the reticle. It has low capped knobs which are finger-actuated. The Diamondback 4-20x40 AO is identical except for the Adjustable Objective, which makes for finder adjustments, especially on long-range targets.

The Diamondback 4-16x42 HP has, of course, the HP features, and also uses low dispersion glass which increases color fidelity and light-gathering ability. Turrets are designed for low mounting.

The Diamondback 2-7x35 Rimfire is, as the name suggests, designed specifically for the shorter ranges of rimfire rounds. However, with a 50-meter parallax setting, it is just as useful for shotguns firing shot and muzzleloaders. Construction is otherwise like other Diamondback scopes, but it has a crystal-clear, tack-sharp reticle.

Scope	Magnification & Length	Weight	Short	Medium	Long	Extreme	Max Obs Range	Price
Diamondback 1.75-5x32	1.75-5x32	0.36 kg	+3*	+1	-1	-3	684	$124
Diamondback 2-7x35	2-7x35	0.4 kg	+3*	+1	0	-1	748	$208
Diamondback HP 2-8x32	2-8x32	0.45 kg	+3*	+1	0	-1	761	$212
Diamondback 3-9x40	3-9x40	0.41 kg	+2	+1	+1	0	982	$274
Diamondback 3.5-10x50	3.5-10x50	0.46 kg	+2	+1	+2	+2	1138	$318
Diamondback HP 3-12x42	3-12x42	0.51 kg	+2	+1	+3	+3	1101	$339
Diamondback 4-20x40	4-20x40	0.41 kg	+1	0	+5	+4	1449	$447
Diamondback AO 4-20x0	4-20x40	0.48 kg	+1	0	+5	+4	1449	$470
Diamondback HP 4-16x42	4-16x42	0.61 kg	+1	0	+4	+2	1337	$425
Diamondback 2-7x35 Rimfire	2-7x35	0.4 kg	+3*	+1	0	-1	748	$208