

PENTAX

SPORT OPTICS

Brighten your adventure.™



PentaBright™ TECHNOLOGY

PENTAX PentaBright Technology: Your Best Solution for Top-Quality Viewing

The complex science of optics requires attention to the type and quality of glass, design, construction, eye relief, tube alignment, sealing against moisture, and user comfort. PENTAX has been an innovator in the field of optics for over 90 years, so no one knows optics better than PENTAX. We pioneered multi-layer lens coatings which greatly increase light transmission efficiency that delivers bright, high contrast images without flare. This establishes the core of our PentaBright technology.

The Backbone of PENTAX's Technological Excellence

Super-Multi-Layer Coating

All optical elements within every PENTAX product are treated with our time-proven multi-layer coating which not only improves light transmission to deliver bright, high contrast images without flare, but also reduces eye fatigue even during extended observation.

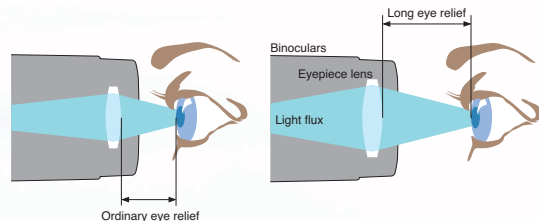
Durable Construction

Every PENTAX Sport Optics instrument is built to the highest of standards using some of the toughest materials available. PENTAX binoculars and spotting scopes are encased in highly durable rubber-armed housings, which are designed to protect the optical mechanisms inside from shock and damage, while making them easier to hold. PENTAX waterproof products are fully sealed and feature airtight construction. They are purged with laboratory grade nitrogen to provide a fog proof view in the harshest weather conditions, and extreme temperatures.*

**Not designed for underwater use.*

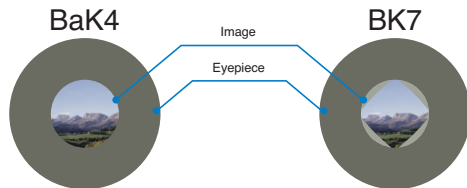
Long Eye Relief

The long eye relief offered in all PENTAX Sport Optics allows the viewer to see the entire field of view clearly and effortlessly. This is especially beneficial to eyeglass wearers, and allows viewing for extended periods of time without added eye strain.



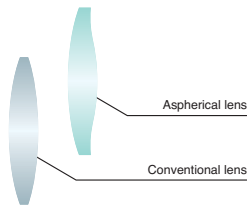
High-Refractive BaK4 Glass Prism

Due to its outstanding refraction index, the BaK4 glass prism is highly acclaimed for its perfectly round exit pupil and clear, unvignetted image.



Aspherical Optical Elements

The PENTAX aspherical optical elements greatly improve image brightness and sharpness, while minimizing disturbing distortions.

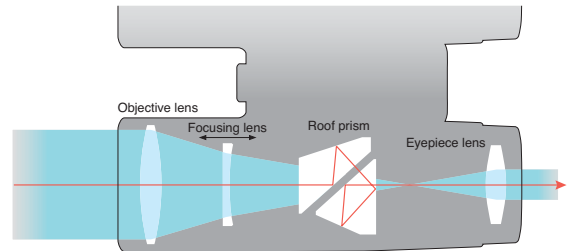


High-Resolution Phase Coating

The roof prisms of all DCF series models are specially treated with high-resolution phase coating. Previously incorporated only in the most expensive models, this special process cancels the phase difference created on the wave front of light passing through a roof prism, thus producing sharp, high-contrast images with much improved resolution.

Inner-Focus Optical Design

Incorporated in all DCF series models, plus the UCF and PCF WP II models, this sophisticated optical design is ideal for waterproof models that require a fully airtight body construction. It also contributes to a considerable reduction in size and weight and improves overall balance by minimizing weight shift during focusing.



Functional, Maneuverable Body Design

The body and optical mechanism of PENTAX binoculars and spotting scopes are computer-designed to ensure the easiest handling possible and minimize overall size and weight, without sacrificing optical performance.



Straight-Line Optics for the Highest Quality and Performance

The PENTAX DCF series meets a diverse set of needs by offering seven different models: the superior quality of the DCF ED, the time proven DCF SP, heavy duty DCF CS, value packed DCF NV, the ultra-compact DCF SW, and the bright DCF LV series.

All DCF series models feature high-performance straight-line optics with high-resolution phase-coated roof prisms and multi-coated optical elements. Several models also come equipped with nitrogen-filled waterproof construction (JIS Class 6), all with full-body protective rubber-armored housing and a sophisticated inner-focus optical design.

The PENTAX DCF series is the best choice for uncompromising observers who demand optimal image quality under all viewing conditions.

Southeast Alaska

Boating the inland waterway between Baranoff, Admiralty and Kuiu islands will yield sightings of hundreds of bald eagles and dozens of humpback whales, daily. Take time to venture ashore and walk in the tracks of the giant coastal grizzlies.



10x43 DCF ED



- Available in 8x32, 8x43, 10x43 and 10x50 magnifications.
- ED glass optical elements give truer colors and a sharper image.
- Full reflection coating reflects the maximum amount of light through the prisms.
- Hybrid aspherical lens elements provide edge-to-edge sharpness.
- Waterproof and nitrogen-filled (JIS Class 6) to handle the most extreme weather conditions.
- Phase-coated roof prisms provide high resolution, high contrast, sharp images.
- Short minimum focus distance for close-in subjects.
- Fully-multi-coated optics provide the maximum light transmission with little glare.
- Water repellent coating on exposed lens elements.
- Inner-focus optical design gives a well balanced, durable construction.
- Magnesium alloy body provides maximum durability in a lightweight body.
- Full rubber housing protects the binoculars from shock and makes them easier to hold.
- Locking diopter ring with click stops holds your adjustment.
- Protected by a Worry-Free Warranty.

DCF SP SERIES

8x43 DCF SP



- Available in 8x32, 8x43, 10x43, and 10x50.
- Hybrid aspherical lens elements for edge to edge sharpness in any lighting condition.
- Water repellent coating on exposed lens elements.
- Fully waterproof and fogproof, nitrogen-filled, submersible to 1 meter, JIS Class 6.
- Helicoid 4-stop eyepiece ring for comfortable eye relief.
- Phase-coated roof prisms for a sharper view.
- Lightweight, extremely strong magnesium alloy frame.
- Fully multi-coated lenses for increased light transmission.
- Inner-focus optical design.
- Protected by a Worry-Free Warranty.

DCF CS SERIES

8x42 DCF CS



- Available in 8x42 and 10x42 magnifications.
- Waterproof and nitrogen-filled (JIS Class 6) to handle the most extreme weather conditions.
- Phase-coated roof prisms provide high resolution, high contrast, sharp images.
- Silver-deposited roof prisms reflect more light for a brighter image.
- Fully-multi-coated optics provide maximum light transmission and reduced internal reflections.
- Inner-focus optical design allows improved sealing and improves balance.
- Protected by a Worry-Free Warranty.



Rwanda

Travel on safari from Kenya's Rift Valley into Uganda and on to Rwanda for one of nature's most exhilarating encounters. Time with the gorillas is limited to one hour and a distance no closer than seven meters. Bring your DCF's.

DCF NV SERIES

8x36 DCF NV

- Available in 8x36 and 10x36 models.
- Nitrogen-filled waterproof construction (JIS Class 6).
- High-resolution phase-coated and super-reflective coated roof prisms.
- Fully multi-coated lenses.
- Fiber reinforced polycarbonate body.
- Rubber covered exterior.
- Inner-focus optical design increases durability.
- Helicoid eyepiece ring with four click stops give the most comfortable eye relief.
- Long eye-relief for viewing with or without glasses.
- Click-stop adjustment locks in the right eyepiece diopter.
- Protected by a Worry-Free Warranty.



DCF SW SERIES

10x25 DCF SW

- Available in 8x25 and 10x25 magnifications.
- High resolution phase-coated and super-reflective coated roof prisms.
- Waterproof and nitrogen-filled (JIS Class 6).
- Ultra compact, dual hinge design.
- Helicoid eyepiece ring with four click stops.
- Fully multi-coated lenses.
- Long eye-relief for viewing with or without glasses.
- Click-stop adjustment locks in right eyepiece diopter.
- Rubber covered exterior.
- Protected by a Worry-Free Warranty.



DCF LV SERIES

9x28 DCF LV

- Available in 9x28 magnification.
- Extremely durable, lightweight, compact body.
- High resolution phase-coated and super-reflective coated roof prisms.
- Nitrogen-filled waterproof (JIS Class 6) construction.
- Inner-focus optical design.
- Helicoid eyepiece rings.
- Fully multi-coated lenses.
- Rubber covered exterior.
- Protected by a Worry-Free Warranty.



MARINE SERIES

7x50 MARINE

- Available in 7x50.
- Built-in Compass, with an easy to read compass scale.
- Ranging reticle to determine distance from object.
- LED Compass Illuminator for low-light or night use.
- Nitrogen-filled, waterproof construction.
- High-resolution phase-coated and super-reflective coated BaK-4 roof prisms.
- Fully multi-coated lenses.
- Helicoid eyepiece ring for comfortable eye relief.
- Inner-focus optical design adds to the durability.
- Long eye-relief for viewing with or without glasses.
- Protected by a Worry-Free Warranty.



PCF BINOCULARS

The PCF series of binoculars offer durable aluminum diecast bodies with full rubber armoring, high-performance optics with BaK4 glass prisms, fully-multi-coated optical elements, and aspherical eyepiece elements for superior image quality. The internal focus design, and helicoid eyepieces make the PCF series durable and comfortable. For use on or around water, they have a JIS Class 6 waterproof rating, which means they can also be used in any weather condition.

12x50 PCF WP II



- Available in 8x40, 10x50, 12x50, 20x60.
- Waterproof and fogproof, JIS Class 6 (1m depth of water), nitrogen-filled.
- Fully multi-coated lenses and BaK4 prisms for increased light transmission.
- Mechanical focus lock feature allows user to lock in at a specific distance for convenient focus-free viewing.
- Ruggedly constructed with rubber-armoring to protect the optical and mechanical systems.
- Helicoid eyepiece rings for comfortable eye relief.
- Protected by a Worry-Free Warranty.

Horicon

The Horicon wetland is the most extensive cattail marsh in the United States. It is also a water fowl viewing Mecca. It is easily accessible from Chicago and Milwaukee. Horicon's ornithology of birds, in addition to water fowl, includes snow bunting, sandhill cranes, great egrets, bald eagles, osprey, and peregrine falcons to name a few.



XCF BINOCULARS

PENTAX XCF binoculars offer many of the features of more expensive binoculars at an exceptional value. They feature fully-multi-coated optical elements and BaK4 glass prisms which deliver exceptional image quality. The rubber armoring adds to the durability of XCF series of binoculars.

10x50 XCF



- Available in 10x50, 12x50, 16x50 models.
- Multi-coated lenses provide optimal resolution.
- Center focusing to instantly bring images into focus.
- Rubber-armored to protect the optics and mechanical systems.
- Ergonomic design for easy handling.
- Protected by a Worry-Free Warranty.



UCF BINOCULARS

The PENTAX-developed dual axis, unibody design of the UCF series of binoculars gives you compact portability in a durable design. They are ideal for travel or any time you need a clear view without the bulk of a full sized binocular. The unique design of the UCF series prevents misalignment of the barrels, plus aspherical lens elements add to the sharpness of the binoculars. All PENTAX binoculars are covered by our Worry-Free Warranty.

UCF WP SERIES

8x25 UCF WP



- Available in 8x25 and 10x25.
- Fully waterproof and fogproof, submersible to 1 meter, JIS Class 6.
- Inner-focus optical design.
- High-refraction BaK4 glass prisms for a brighter, clearer image.
- Pop-out diopter adjustment knob.

UCF R SERIES

8x21 UCF R



UCF X II SERIES

8x25 UCF X II



- Available in 8x25, 10x25 models.
- Central fingertip control locks in diopter adjustment.
- Extra short minimum focusing distance of 6.2 feet.
- Fast and easy center focusing for handling ease.
- Slide-style eyepiece rings for extra viewing comfort.
- High quality BaK4 prisms transmit more light at the edges to enhance illumination for easier viewing in dim light.

Amazon

The clear but tannic stained waters of the Rio Negro are home to the powerful Peacock bass, Piranha and to the shy river dolphin. The adjacent jungles offer as many as 500 bird species per square mile plus monkeys, lizards and thousands of plant and tree species.



- 8x21 magnification.
- Ultra compact body...contemporary design.
- Fast and easy center focusing for handling ease.
- Revolutionary dual-axis, single body housing with synchronized eyepiece distance adjustment for correct optical alignment and comfortable viewing.
- Aspheric lenses.

UCF ZOOM II SERIES

8-16x21 UCF ZOOM II



- Magnification power ranges from 8-16x21.
- Aspheric lens elements enhance edge-to-edge sharpness.
- In-line control system positions zooming, focusing and diopter adjustment together.
- High-refraction BaK4 glass prisms for brighter, clearer image.
- Pop-out right diopter adjustment knob.

JUPITER SERIES

Weighing only 4.6 ounces, these feather-light binoculars are ideal for casual use. High-quality BaK4 prisms and fully coated optics for superior image quality and minimal glare. Rubber eyepiece rings for viewing comfort, and a compact, ergonomic body design that fits neatly into a pocket or purse.

8x21 JUPITER III



- 8x21 magnification.
- Lightweight and compact construction.
- Easy to use center focusing.

PAPILIO SERIES

The PENTAX Papilio binoculars (Papilio being Latin for butterfly), offer aspherical lens elements, fully-multi-coated optics, and BaK4 glass prisms housed in a durable compact body. They also offer a totally unique close focusing feature, down to 1.6 feet, that make them ideal for butterfly and insect watching, as well as the observation of birds.

8.5x21 PAPILIO



- Available in 6.5x21, and 8.5x21 models.
- Ideally suited for viewing insects, birds, artwork or any other object at close range, down to 1.6 feet.
- Tough rubber covered exterior provides a sure grip and protects the internal mechanisms.
- Helicoid eyepiece rings for extra viewing comfort.
- Fully multi-coated optics to eliminate harmful ultraviolet rays while improving light transmission for high contrast images with no glare or flare.
- High quality BaK4 prisms transmit more light at the edges to enhance illumination for easier viewing in dim light.

China

Chengdu – Chengdu's most famous residents aren't poets or athletes, but the beloved black and white bear. When in China visit the giant Panda breeding research base about 18 kilometers outside of Chengdu, which houses about a dozen of the gentle giants.



SPOTTING SCOPES

PENTAX offers a selection of high-performance spotting scopes to accommodate all viewing applications in the field. The ED line of spotting scopes come in a variety of sizes, from the compact PF-65ED II to the extremely bright PF-80ED. Each ED scope features extra-low dispersion (ED) glass to ensure images with more contrast and truer colors, rotating tripod collars and built-in sunshades. The entire line of spotting scopes also include smc lens coatings and are completely waterproof and rubber armored giving a reliable tool for the field. All scopes are covered by a PENTAX Worry-Free Warranty.

PF-80ED



Also available in angled version (PF-80ED-A)

- Utilizes PENTAX telescope eyepieces, renowned for sharpness, field of view, contrast, and freedom from aberration.
- Extra Low Dispersion (ED) optics incorporate Lanthanum Crown (rare earth) glass elements for optimum resolution.
- Accepts all standard 1 1/4 inch interchangeable telescope eyepieces.
- Waterproof, fogproof and nitrogen-filled.
- Super-Multi-Coating maximizes light transmission, clarity and contrast.
- Lightweight magnesium alloy housing.
- Built-in lens shade.

SPOTTING SCOPES

PF-65ED-A II



Also available in straight version (PF-65ED II)

- Utilizes PENTAX 1.25" telescope eyepieces, renowned for sharpness, field of view, contrast, and freedom from aberration in a choice of fixed or zoom powers.
- Extra Low Dispersion (ED) optics incorporating Lanthanum Crown (rare earth) glass elements for optimum optical resolution.
- Larger objective lenses for bright viewing under all light conditions.
- JIS Class 6 waterproof, fogproof and nitrogen-filled.
- Super multi-coating maximizes light transmission, clarity and contrast.

CAMERA ADAPTERS

PENTAX offers two digiscoping options for adapting a digital camera to a spotting scope. For DSLR users, we offer the PF-CA35 adapter that allows any k-mount body to be attached to our spotting scopes. We also offer the UA-1 universal adapter that allows almost any compact digital camera to be attached to PENTAX scopes.



Cameras sold separately

XO EYEPIECES



- High-performance eyepieces are perfect for high-magnification observation and photography of the planets.
- High-refraction, low-dispersion lanthanum glass elements to provide high-resolution images with minimal aberrations.
- PENTAX-original smc full-surface multi-layer lens coating to improve light transmission efficiency.
- JIS Class 4 weatherproof construction makes these eyepieces more durable and water resistant.

XF EYEPIECES



- High-refraction, low-dispersion lanthanum glass elements to provide high-resolution images with minimal aberrations.
- PENTAX-original smc full-surface multi-layer lens coating to improve light transmission efficiency.
- JIS Class 4 weatherproof construction make these eyepieces more durable and water resistant.

XW EYEPIECES



- 70 degree field of view for easier wide views.
- Fully multi-coated lenses increase light transmission and color quality.
- High-refraction, low-dispersion lanthanum glass elements deliver bright, high-resolution images with minimal aberrations and distortions.
- JIS Class 4 weatherproof construction make these eyepieces weather resistant and more durable.
- Long eye-relief for comfortable viewing with or without glasses.

GUIDELINES FOR SELECTING THE IDEAL PENTAX BINOCULAR

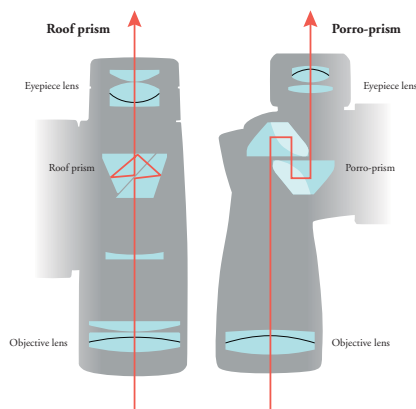
There are important guidelines to help you select the pair of binoculars that best suit your requirements.

Roof Prism vs. Porro-Prism

Both roof and porro-prism optics are designed to turn the image upside down — from an inverted image to an erect image — by incorporating convex optical elements in their objective and eyepiece lenses. However, each design has some definite advantages.

Featuring a straight-line axis and high-precision optics, the roof prism design is better equipped for specialized applications. At the same magnification, it also allows for a more compact, streamlined body for enhanced maneuverability and portability.

On the other hand, the porro-prism design combines time-honored optics and solid viewing performance with a familiar, functional styling. It is customarily employed in popular, multi-purpose models.



Magnification

The term “magnification” refers to the degree at which your subject appears larger through binoculars than with the naked eye. At eight-times magnification, for instance, a subject standing at 800 yards away appears as if it were standing at a distance of 100 yards. Objective lenses being the same, the greater

the magnification, the less bright the image and the narrower the angle of view. Since high-magnification models also increase the risk of binocular shake, use of a tripod is recommended for these models. If your application involves occasional high-magnification viewing, a zoom model may be a good option.

Image Brightness

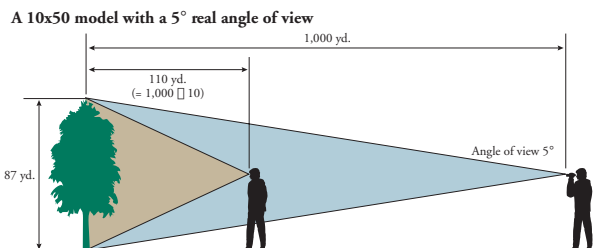
When you hold your binoculars at one foot away from your eye, you will see a bright spot, or “exit pupil,” in the middle of the eyepiece lens. The larger the diameter of the exit pupil, the brighter the image field. As a simple guide, a diameter of three millimeters assures comfortable daytime viewing, while that of five to seven millimeters is required for astronomical observation.

The exit pupil can be easily calculated by dividing the effective aperture of the objective lens by the magnification, while the relative brightness can be obtained by squaring the exit pupil. For the same magnification, binoculars with a larger exit pupil offer a brighter image field and are better equipped for observations under poor lighting conditions at dawn or dusk.

Angle of View








Expressed in degrees, the term “angle of view” defines the image field that can be seen without moving the binoculars. The greater the magnification, the narrower the angle of view. So binoculars with a greater angle of view are recommended for observation of fast-action sports and active subjects, while a pair with a greater magnification is better suited for observation of subjects at great distance.

If the subject is at a distance of 1,000 yards for instance, binoculars with a five-degree angle of view offer a circular image field of 87 yards in diameter.



GUIDELINES FOR SELECTING THE IDEAL PENTAX BINOCULAR

Which PENTAX Binocular is Best Suited for Your Application?

	 Outdoor/ Wildlife	 Sports	 Theater/ Concert	 Travel/ Hiking	 Marine Sports	 Bird Watching	 Astronomy
DCF ED	●	●		●	●	●	● ¹⁾
DCF SP	●	●		●	●	●	● ¹⁾
DCF CS	●	●		●	●	●	●
DCF NV	●	●		●	●	●	
DCF LV	●	●	●	●		●	
DCF SW	●	●	●	●			
MARINE	●				●		
PCF WP II	● ²⁾	● ²⁾			●	● ²⁾	●
XCF	●	●		●		●	
UCF X II	●	●		●		●	
UCF WP	●	●		●	●	●	
UCF R		●	●	●			
UCF ZOOM II	●	●		●		●	
PAPILIO	●	●	●	●		●	
JUPITER III		●	●	●			

1) Excluding the 8x32 DCF SP 2) Excluding the 12x50 PCF WP II, and 20x60 PCF WP II

1) Excluding the 8x32 DCF ED

BINOCULAR SPECIFICATIONS

Model	Type of Prism	Focus	Magnification	Obj. Lens Diameter (mm)	Exit Pupil (mm)	Relative Brightness	Eye Relief (mm)	Focus Range	Field of View (ft@ 1000 yd)	Height x Width (in)	Weight (oz)
8x32 DCF ED	roof	center	8	32	4.0	16.0	17	4.9'-∞	393	5.0 x 5.0	23.5
8x43 DCF ED	roof	center	8	43	5.4	29	22	6.6'-∞	330	5.7 x 5.0	25.2
10x43 DCF ED	roof	center	10	42	4.3	18.5	17	6.6'-∞	315	5.7 x 5.0	25.8
10x50 DCF ED	roof	center	10	50	5.0	25.0	22	11.5'-∞	261	6.7 x 5.2	30.2
8x32 DCF SP	roof	center	8	32	4.0	16.0	17	4.9'-∞	393	5.0 x 5.0	23.2
8x43 DCF SP	roof	center	8	43	5.4	29.0	22	6.6'-∞	330	5.7 x 5.0	24.5
10x43 DCF SP	roof	center	10	43	4.3	18.5	17	6.6'-∞	315	5.7 x 5.0	25.0
10x50 DCF SP	roof	center	10	50	5.0	25.0	22	11.5'-∞	261	6.7 x 5.2	29.6
8x42 DCF CS	roof	center	8	42	5.2	27.6	21	8.2'-∞	393	5.8 x 5.3	22.6
10x42 DCF CS	roof	center	10	42	4.2	17.6	18	8.2'-∞	315	5.6 x 5.3	21.7
8x36 DCF NV	roof	center	8	36	4.5	20.3	16	9.8'-∞	342	6.1 x 5.1	22.6
10x36 DCF NV	roof	center	10	36	3.6	13	17.5	9.8'-∞	288	6.1 x 5.1	22.6
9x28 DCF LV	roof	center	9	28	3.1	9.6	18	9.9'-∞	294	4.6 x 4.5	12.9
8x25 DCF SW	roof	center	8	25	3.1	9.6	21	9.8'-∞	288	4.3 x 4.1	10.6
10x25 DCF SW	roof	center	10	25	2.5	6.3	20	9.8'-∞	261	4.3 x 4.1	10.6
7x50 Marine	roof	center	7	50	6.8	46.2	17.6	9.8'-∞	261	6.9 x 4.7	33.6
8x40 PCF WP II	porro	center	8	40	5.0	25.0	20	11.5'-∞	330	5.5 x 7.0	28.2
10x50 PCF WP II	porro	center	10	50	5.0	25.0	20	18.2'-∞	261	7.0 x 7.2	34.2
12x50 PCF WP II	porro	center	12	50	4.2	17.4	20	18.2'-∞	219	7.0 x 7.2	34.6
20x60 PCF WP II	porro	center	20	60	3.0	9.0	21	26.4'-∞	114	8.8 x 7.7	45.1
10x50 XCF	porro	center	10	50	5.0	25	13	30'-∞	342	6.5 x 7.8	30.7
12x50 XCF	porro	center	12	50	4.2	17.6	11	30'-∞	294	6.5 x 7.8	30.7
16x50 XCF	porro	center	16	50	3.1	9.6	13	34'-∞	183	6.5 x 7.8	31.7

BINOCULAR SPECIFICATIONS

Model	Type of Prism	Focus	Magnification	Obj. Lens Diameter (mm)	Exit Pupil (mm)	Relative Brightness	Eye Relief (mm)	Focus Range	Field of View (ft@ 1000 yd)	Height x Width (in)	Weight (oz)
8x25 UCF X II	porro	center	8	25	3.1	9.6	15	6.2'-∞	324	4.5 x 4.3	10.6
10x25 UCF X II	porro	center	10	25	2.5	6.3	15	6.2'-∞	261	4.5 x 4.3	10.6
8x25 UCF WP	porro	center	8	25	3.1	9.6	15	6.2'-∞	324	4.3 x 4.6	12.3
10x25 UCF WP	porro	center	10	25	2.5	6.3	15	6.2'-∞	261	4.4 x 4.6	12.3
8x21 UCF R	porro	center	8	21	2.6	6.7	13	9.2'-∞	324	3.2 x 4.3	7.1
8-16x21 UCF ZOOM II	porro	center	8-16	21	2.6-1.3	6.7-1.7	11 (16X)	9.8'-∞	261-156	4.4 x 4.4	10.9

6.5x21 PAPILIO	porro	center	6.5	21	3.2	10.2	15	1.6'-∞	393	4.5 x 4.3	10.2
8.5x21 PAPILIO	porro	center	8.5	21	2.5	6.3	15	1.6'-∞	315	4.6 x 4.3	10.2

8x21 JUPITER III	porro	center	8	21	2.63	6.9	10	15'-∞	369	3.0 x 4.2	4.6
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PF-CA35 CAMERA ADAPTER

Focal Length:		Minimum Focusing Distance:	
With PF-80ED:	1,000mm	With PF-80ED:	Approx. 21.0 ft. (6.5m)
With PF-80ED-A:	1,000mm	With PF-80ED-A:	Approx. 21.0 ft. (6.5m)
Effective Aperture: F12.5		Dimensions (L x ø): 5.9 x 2.3 in. (149 x 59 mm)	
		Weight: 8.8 oz. (250g)	

SPOTTING SCOPE SPECIFICATIONS

Model:	PF-80ED/80ED-A	PF-65ED II/65ED-A II
Objective Lens:	80mm	65mm
Eyepiece Ring:	Collet type	Collet type
Focus Range:	19.0 ft. (5.8m) ~∞	16.4 ft. (5m) ~∞
Dimensions:	397x120x98mm/415x135x100mm 15.6x4.7x3.9 in./16.3x5.3x3.9 in.	270x115x85mm/270x120x85mm 10.6x4.5x3.3 in./10.6x4.7x3.3 in.
Weight:	49.4 oz. (1,400g)/56.4 oz. (1,600g)	37 oz. (1,050g)/37.7oz. (1,070g)

Eyepiece:		XW7	XW10	XW14	XW20	Zoom Eyepiece 8-24mm	XF8.5	XF12	XFZoom Eyepiece 6.5-19.5mm
Magnification:	With PF-65ED II	55.5x	39x	28x	19.5x	16x-48x	46x	32.5x	20x-60x
	With PF-65ED-A II	55.5x	39x	28x	19.5x	16x-48x	46x	32.5x	20x-60x
	With PF-80ED:	71x	50x	36x	26x	20-60x	59x	42x	26x-78x
	With PF-80ED-A	74x	52x	37x	27x	21-63x	61x	43x	27x-81x
Angle of View:	With PF-65ED II	1.25	1.8	2.5	3.5	2.4-1.25	1.3	1.85	2.1-1
	With PF-65ED-A II	1.25	1.8	2.5	3.5	2.4-1.25	1.3	1.85	2.1-1
	With PF-80ED	1.0	1.4	2.0	2.7	1.9-1.0	1.0	1.5	1.6-0.8
	With PF-80ED-A	0.95	1.4	1.9	2.6	1.8-0.95	0.95	1.4	1.8-0.95
Field of View:	With PF-65ED II								
	At 1,000m:	21m	31m	44m	61m	40-21m	22m	32m	37-17m
	At 1,000 yd.	63 ft.	93 ft.	132 ft.	183 ft.	120-63 ft.	66 ft.	96 ft.	117-51ft
	With PF-65ED-A II								
	At 1,000m	21m	31m	44m	61m	40-21m	22m	32m	37-17m
	At 1,000 yd.	63 ft.	93 ft.	132 ft.	183 ft.	120-63 ft.	66 ft.	96 ft.	117-51 ft.
	With PF-80ED:								
	At 1,000m:	17m	24m	35m	47m	33-17m	17m	26m	28-14m
	At 1,000 yd.:	51 ft.	72 ft.	105 ft.	141 ft.	99-51 ft.	51 ft.	78 ft.	84-42 ft.
	With PF-80ED-A:								
	At 1,000m	16.5m	24m	33m	45m	31-16.5m	16.5m	24m	31-16.5m
	At 1,000 yd.	49.5 ft.	72 ft.	99 ft.	135 ft.	93-49.5 ft.	49.5 ft.	72 ft.	93-49.5 ft.
Exit Pupil:	With PF-65ED II	1.2mm	1.7mm	2.4mm	3.3mm	4-1.4mm	1.4mm	2.0mm	2.2-1.1mm
	With PF-65ED-A II	1.2mm	1.7mm	2.4mm	3.3mm	4-1.4mm	1.4mm	2.0mm	3.2-1.1mm
	With PF-80ED	1.1mm	1.6mm	2.2mm	3.1mm	4.0-1.3mm	1.4mm	1.9mm	3.0-1.0mm
	With PF-80ED-A	1.1mm	1.6mm	2.2mm	3.0mm	3.8-1.3mm	1.3mm	1.8mm	3.0-1.0mm
Eye Relief:	20mm	20mm	20mm	20mm	18-22mm	18mm	18mm	11-15mm	
Relative Brightness:	With PF-65ED II	1.4	2.9	5.7	10.9	16-2.0	1.9	4.0	10.2-1.2
	With PF-65ED-A II	1.4	2.9	5.7	10.9	16-2.0	1.9	4.0	10.2-1.2
	With PF-80ED	1.2	2.6	4.8	9.6	16-1.7	1.9	3.1	9.0-1.0
	With PF-80ED-A	1.2	2.6	4.8	9.0	14.4-1.7	1.6	3.2	9.0-1.0
Dimensions (L x ø):	120 x 61 mm	110 x 61 mm	97 x 61 mm	86 x 61 mm	144 x 69 mm	83x43mm	78x43mm	90x50mm	
	4.7 x 2.4 in.	4.3 x 2.4 in.	3.8 x 2.4 in.	3.4 x 2.4 in.	5.7 x 2.7 in.	3.3x1.7 in.	3.1x1.7 in.	3.5x2.0 in.	
Weight:	13.8 oz. (390g)	13.8 oz. (390g)	12.9 oz. (365g)	12.5 oz. (355g)	19.4 oz. (550g)	5.3 oz. (150g)	5.5 oz. (155g)	8.5 oz. (240g)	

RIFLE SCOPE TECHNOLOGY

The Backbone of PENTAX's Precision Shooting Optics

Heavy Duty Springs

Every PENTAX scope uses either a heavy duty coil spring or dual bias springs secured in the tube to prevent movement under recoil. These springs exert even counter-pressure for windage and elevation adjustments.

Leakproof "O" Rings

All PENTAX riflescopes are filled with nitrogen gas and are double sealed with heavy-duty neoprene "O" rings providing a lifetime seal that makes your scope waterproof and fogproof.

Precision-Machined Click Assembly

Positive and repeatable, our precision, finger adjustable windage and elevation click adjustments are easy to set and stay put after you set them.

Exceptionally Thick Tube Walls

Single-piece tubes, made from aircraft quality aluminum, have thicker walls than most scopes. They'll maintain their shape and resist crushing in the most extreme conditions.

Extremely Tough Reticles

Built and tested to withstand the heaviest recoil, PENTAX reticles are three times stronger than the industry standard.

Super-Hard Scratch-Resistant Finishes

Outer tube surfaces are hard-anodized to prevent wear and scratches. PENTAX scopes still look good after years of hard use.



LIGHTSEEKER-XL

With PENTAX you'll be up and out shooting earlier, and you'll stay out later - right up to the legal limits. Successful hunting means a bright scope for fast target acquisition, even in the toughest light conditions. PENTAX's internal lenses are up to 40% larger than the competition. PentaBright™ means light - lots of light. Plus lightweight, one piece, aircraft aluminum construction and quick focus European style eyepieces make them tough and fast.



Lightseeker-XL 3x-9x

PentaBright™ TECHNOLOGY

- Available in 3x-9x 40mm, 2.5x-10x 50mm, and 4x-16Xx 44mm models.
- Bright, fully-multi-coated.
- Durable one-piece tube construction.
- Easy to mount.
- Waterproof and fog proof.
- Worry-Free Warranty.

LIGHTSEEKER-XL 2.5X-10X 50mm



Tanzania

Tent safaris under Kilimanjaro with the night sounds of hyenas and jackals are reason enough to enjoy East Africa. But encounters with Mbogo, the fearsome Cape Buffalo, will make this an adventure of a lifetime. Bring your .416, .458, and a rugged PENTAX scope.



LIGHTSEEKER-SL

The compact and versatile Lightseeker-SL rifle scope from PENTAX was designed with popular short mag rifles in mind. Durable one-piece, waterproof construction and fully multi-coated optics make this scope ideal for any hunter who desires a lightweight scope with superior optical performance.



Lightseeker-SL 3x-9x

PentaBright™
TECHNOLOGY

- Available in 3x-9x 32mm.
- Compact and lightweight.
- Long eye relief.
- Fully-multi-coated optics.
- Durable, waterproof construction.
- Worry-Free Warranty.

LIGHTSEEKER-SL 3X-9X 32mm



Alaska

The Brooks Range of interior Alaska is home to the great white Dall sheep. Flat shooting accurate rifles with variable and light weight scopes are required for hunting this mountain/valley terrain. Well-conditioned legs are also a primary requirement.



LIGHTSEEKER-30

The Lightseeker-30 series incorporates legendary Lightseeker optics housed in a 30mm tube. Developed for bean field shooters in the Deep South, groundhog hunters in the Piedmont, prairie dog hunters of the West, 1000 meter target shooters, or anyone who demands optimum optical and mechanical performance.

PentaBright™
TECHNOLOGY

- Available in 3x-10x 40mm, 4x-16x 50mm, and 6x-24x 50mm models.
- Superior light gathering.
- Crystal clear resolution.
- Fully-multi-coated optics.
- Dramatically increased adjustment range.
- 30mm tube.
- Worry-Free Warranty.

LIGHTSEEKER-30 6X-24X 50mm



Santa Fe Trail

The prairie dog was here long before the pioneers' wagons dug the still visible ruts in the famous Santa Fe Trail. The umpteen generations of prairie dogs are still abundant here and ranchers welcome hunter control of this prolific species. Shots from 100 to 500 yards require flat shooting, varmint cartridges and a high power PENTAX scope.

PIONEER II

PENTAX Pioneer rifle scopes give hunters superior quality at an affordable price. Offered in the popular 3x-9x and 4.5x-14x magnifications, the Pioneer scopes offer durable one piece tube construction, fully-multi-coated optics, and are perfectly sealed to make them completely waterproof.

PentaBright™
TECHNOLOGY

- Legendary PENTAX optics.
- Fully-multi-coated glass elements.
- Waterproof and fog proof.
- Crystal clear resolution.
- Worry-Free Warranty.

PIONEER II 3X-9X 40mm MATTE



ULTIMATE ZOOM

The PENTAX Ultimate Zoom rifle scope offers all of the features you might expect in a PENTAX scope, but with a built-in battery-powered motor zoom. This state-of-the-art scope's zoom includes a remote switch for ease of zooming adjustment without removing your hand from the rifle or your eye away from the eyepiece. Features include solid one-piece tube construction, waterproof, fog proof, nitrogen-filled, and fully multi-coated optics. Backed by the PENTAX Worry-Free Warranty, your next adventure should include the PENTAX Ultimate Zoom. Whether you are at the hunting lodge, or sitting around the campfire, expect other hunters' interest in your Ultimate Zoom scope!

ULTIMATE ZOOM 3X-15X 50mm



Rocky Mountains

If you were tent camping in the Rockies, and heard a bull elk bugle, it would raise the hair on the back of your neck. If you can hunt them during the rut, the bugling of a wapiti (elk) is an awesome encounter with raw nature.

They all hunted the Rockies – kings, presidents, and prime ministers, and luckily so can you and I.

PentaBright™ TECHNOLOGY

- Legendary Fully-Multi-Coated PENTAX optics.
- Built-in battery-powered motor zoom with remote switch for ease of zooming. Takes one 3V Lithium battery (CR123A).
- Solid one piece tube construction.
- Waterproof, fog proof, nitrogen-filled.
- Adjustable objective for parallax correction.
- Worry-Free Warranty.

GAMESEEKER II

PENTAX Gameseeker II rifle scopes are the perfect combination of features at an extremely affordable price. Even though these scopes are inexpensive, they include essential features for when you are in the field. They will handle any condition you are likely to encounter on your hunt.

PentaBright™ TECHNOLOGY

- Available in 3x-9x 40mm, 4x-12x 40mm, 3x-9x 50mm, 2.5x-10x 56mm, 4x-16x 50mm models.
- Solid one piece, 1" tube construction make these scopes extremely durable.
- Waterproof to handle the most extreme hunting situations.
- Nitrogen-filled to prevent any internal fogging of optical elements.
- Fully-multi-coated optics.
- All scopes include the new bullet drop compensating Precision Plex reticle.
- Worry-Free Warranty.

GAMESEEKER II 3X-9X 40mm MATTE



Texas

Whitetail/South Texas – it's all the same. Texas has the largest whitetail population in North America with as many methods of hunting them. You may see more big bucks in a day than years of hunting whitetail elsewhere. And many bucks from Texas are prominent in the record books.

GAMESEEKER 5X

The PENTAX Gameseeker just got better. The Gameseeker 5X incorporates all of the outstanding features of our standard line plus 5X magnification on our 3x-15x50mm. Affordable, dependable and all of the extras you would expect of a more expensive scope. The 5X gives you the edge on those long shots as well as crystal clear viewing at any range near or far. Exceptional eye relief up to 4.6" allows safe distance from eyepiece when shooting heavy recoil rifles and a more comfortable fit to your eyes. A much larger field of view (up to 30.4' @ 100 yds.) than standard rifle scopes at higher powers. The Gameseeker comes with our Penta-Plex reticle design for a clear view of your target. With our one piece solid tube construction, Nitrogen-filled waterproof design, fingertip reticle adjustments (no tools needed) and a large 50mm fully coated lens, this is the ultimate all-around scope. All PENTAX scopes have fully-multi-coated optics with PentaBright Technology giving you a sharp, clear image every time. All PENTAX scopes are covered by our best in the class Worry-Free Warranty. Whether you are just plinking or on the hunt of a lifetime the PENTAX Gameseeker is the scope you have been looking for.

PentaBright™

TECHNOLOGY

- Available in 3-15x50 magnification
- Large, 50mm objective gathers the optimum light for a bright, clear image
- Versatile zoom range is ideal for the widest range of shooting situations without compromising image quality.
- Solid one piece, 1" tube construction makes this scope extremely durable.
- Waterproof to handle the most extreme hunting situations.
- Nitrogen-filled to prevent any internal fogging of optical elements.
- Fully-multi-coated optics with PentaBright Technology give a sharp, clear image.
- One quarter M.O.A. finger adjustable turrets make sighting-in accurate and fast.
- Quick focus style eyepiece adjusts focus to match your eyes.
- Available with the popular Penta-Plex reticle.
- Worry-Free Warranty.

GAMESEEKER 5X (3X-15X 50mm)



SIGHTS



HS20 Dot Sight



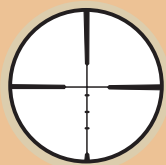
RD10 Dot Sight

DOT SIGHTS

Gameseeker Dot Sights are the perfect alternative when a traditional rifle scope won't work. They are parallax-free and built to last. Whether used for turkey hunting or for quick target acquisition with a pistol, the Gameseeker Dot Sights offer a clear view of your target.

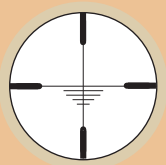
- 4 MOA dot is the ideal size for most shooters.
- 11 brightness settings for various shooting conditions.
- Battery provides 72 hours of continuous use.
- PentaBright Technology gives a sharp, clear image.
- Parallax-free for accurate target acquisition.

PRECISION RETICLES



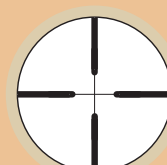
BALLISTIC PLEX (BP) LIGHTED BALLISTIC PLEX (LBP)

The Ballistic Plex™ reticle is a copyrighted design on the lower vertical crosshair that compensates for bullet drop. The Ballistic Plex reticle is set to provide dead-on aiming from 100 yards to 500 yards for many of the most common hunting cartridges.



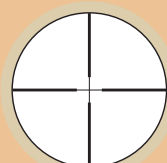
PRECISION PLEX (PP)

The Precision Plex reticle is based on the popular Ballistic Plex reticle and designed to compensate for bullet drop as the distance to your target increases. It adds a yardage estimation system to help determine that distance. (Available only in Gameseeker scopes.)



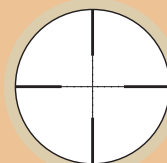
TWILIGHT PLEX RETICLE (TW)

Specially designed for extreme low light conditions and rapid target acquisition. Excellent for dark timber and dangerous game.



PENTA-PLEX RETICLE (P)

Four heavy posts are easily seen in any light. Fine crosshairs in center allow for perfect shot placement.



MIL-DOT RETICLE

An extremely accurate device for estimating range up to 1,000 yards. A simple calculation will determine the distance to target.

RIFLE SCOPES SPECIFICATIONS

GAMESEEKER II

	Tube Diameter (in)	Objective Diameter (mm)	Eyepiece Diameter (mm)	Exit Pupil (mm)	Eye Relief (in)	Field of View (ft@100 yd)	Adjustment Graduation (in@100 yd)	Maximum Adjustment (in@100 yd)	Length (in)	Weight (oz)	Reticle
3X-9X 40mm	1	40	35	13.3-4.44	3.3-3.0	39.8-13.4	1/4	50	12.3	13.2	PP, P
4X-12X 40mm	1	40	35	9-3.3	3.2-2.6	27.2-9.4	1/4	50	13.0	13.5	PP, P
3X-9X 50mm	1	50	35	7.6-4.8	4.4-2.8	35.9-11.9	1/4	50	13.1	15.4	PP
2.5X-10X 56mm	1	56	35	22.4-5.6	4.7-3.3	34.6-8.9	1/4	50	13.7	20.1	PP
4X-16X 50mm	1	50	35	10-2.76	3.0	26.2-6.8	1/4	50	13.9	16.1	PP

LIGHTSEEKER-XL

	Tube Diameter (in)	Objective Diameter (mm)	Eyepiece Diameter (mm)	Exit Pupil (mm)	Eye Relief (in)	Field of View (ft@100 yd)	Adjustment Graduation (in@100 yd)	Maximum Adjustment (in@100 yd)	Length (in)	Weight (oz)	Reticle
3X-9X 40mm	1	40	35	13.3-4.4	3.5-4.0	34-14	1/4	75	13.1	19	P
4X-16X 44mm	1	44	35	11.0-2.8	3.5-4.0	24-8	1/4	60	15.2	23	BP
2.5X-10X 50mm	1	50	35	20.0-5.0	3.5-4.2	34-10	1/4	75	14.0	21	TW

LIGHTSEEKER-SL

	Tube Diameter (in)	Objective Diameter (mm)	Eyepiece Diameter (mm)	Exit Pupil (mm)	Eye Relief (in)	Field of View (ft@100 yd)	Adjustment Graduation (in@100 yd)	Maximum Adjustment (in@100 yd)	Length (in)	Weight (oz)	Reticle
3X-9X 32mm	1	32	35	8.9-3.6	3.5-5.0	23-10	1/4	50	10.3	12	BP

RIFLE SCOPES SPECIFICATIONS

LIGHTSEEKER-30

	Tube Diameter (in)	Objective Diameter (mm)	Eyepiece Diameter (mm)	Exit Pupil (mm)	Eye Relief (in)	Field of View (ft@100 yd)	Adjustment Graduation (in@100 yd)	Maximum Adjustment (in@100 yd)	Length (in)	Weight (oz)	Reticle
3X-10X 40mm	30mm	40	35	13.3-4.4	3.5-4.0	34-14	1/4	90	13.1	20.0	BP
4X-16X 50mm	30mm	50	42	12.0-3.1	3.3-3.8	27-7.3	1/4	74	15.7	22.3	MD, BP
6X-24X 50mm	30mm	50	42	7.6-2.1	3.2-3.7	18-5.3	1/8	52	16.2	22.7	MD, BP

PIONEER II

	Tube Diameter (in)	Objective Diameter (mm)	Eyepiece Diameter (mm)	Exit Pupil (mm)	Eye Relief (in)	Field of View (ft@100 yd)	Adjustment Graduation (in@100 yd)	Maximum Adjustment (in@100 yd)	Length (in)	Weight (oz)	Reticle
3X-9X 40mm	1	40	31	13-4.4	3.8-3.04	36.7-12.2	1/4	60	12	13	P
4.5X-14X 42mm	1	42	31	9.3-3.0	3.26-3.07	25.1-8.4	1/4	50	13.1	16.4	P

ULTIMATE ZOOM

	Tube Diameter (in)	Objective Diameter (mm)	Eyepiece Diameter (mm)	Exit Pupil (mm)	Eye Relief (in)	Field of View (ft@100 yd)	Adjustment Graduation (in@100 yd)	Maximum Adjustment (in@100 yd)	Length (in)	Weight (oz)	Reticle
3X-15X 50mm	30mm	50	35	16.7-3.3	4.5-3.4	339-68	1/4	45	14.3	28	P

PENTAX

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Designs and specifications are subject to change without notice.

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The PENTAX “Worry-Free” Warranty

PENTAX Sport Optics products are of the highest optical and mechanical quality. If your PENTAX Binocular, Spotting Scope or Rifle scope purchased in the USA from an authorized PENTAX Sport Optics dealer requires repair, PENTAX will repair or replace it to the original purchaser (even if damaged by fault) for a charge of \$19.95, to cover handling and return shipping.*

This warranty does not cover cosmetic damage, theft or loss. Replacement may be with comparable model at PENTAX’s discretion if the original model is no longer available.

*Applies only to unmodified equipment or product with modifications performed by authorized PENTAX repair personnel.

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