



L I V E L I F E L A R G E R
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Nikon Sport Optics





Being There

At last...

It's been far too long since your last escape.

But now you're here. The air is bracing. Visibility perfect. And as the cranes head home, they bid you a fond farewell.

You smile and raise your binoculars... and now you're there with them, high above, gliding through the crystal-clear air.

What could be more exhilarating?

You smile at the thought of your extraordinary Nikon optics. The finest materials, exclusive coatings and brilliant, sharply defined images across the entire lens. Fused with precision ergonomics that unfailingly guide you to where you want to go.

Above all, it's the knowledge that you'll have what it takes to venture into any situation, no matter how challenging, and experience the ultimate vision.

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Nikon and the Environment

Nikon is constantly developing new ways to prevent environmental pollution and ensure a healthier ecosystem. In 1998, Nikon introduced the Nikon Basic Policy for Green Procurement, a broad range of activities designed to reduce the environmental impact of our products. Under this policy, Nikon employs materials, parts, and packaging items produced with special concern for the environment.

Another strategy, the Environmental Action Plan for Fiscal 2005, established the goal of completely eliminating seven harmful chemical substances — hexavalent chrome, lead, cadmium, mercury, PBB, PBDE and polyvinyl chloride — from all Nikon consumer products by September 2005.

Nikon is also in full compliance with the EU's July 2006 RoHS (Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment) directive, as well as other new EU regulations.

We are reducing waste through environmental policies that extend the life of our products and simplify repairs, as well as minimising energy consumption through the more efficient use of power.

Nikon — innovating new and exciting ecofriendly products for our precious world.



Numerical information code for binoculars

All Nikon binoculars are designated with a numerical formula, such as "10x25 5.4°".

The value "10x" indicates the magnification of the binoculars. If a person uses 10x binoculars to observe a wild bird from a distance of 100 metres, for example, it will appear to the observer as if he or she were viewing the bird from a distance of 10 metres (100 divided by 10 equals 10) with the naked eye.

The next number, "25", tells you that the effective diameter of the objective lens is 25mm. The greater the diameter of the objective lens, the brighter your image will be with the same illumination. If the objective lens is too large, however, the binoculars will be heavy and may cause trembling of the hands.

Finally, the number "5.4°" represents the actual field of view of the binoculars. This is the angle of the visible field, as measured from the centre of the objective lenses. The bigger the value, the easier it is to locate an object.

Understanding the meaning of these numbers should provide you with greater freedom in selecting and using binoculars.

* For more details, see page 46.

Check the letters in the name of any Nikon binoculars — they convey helpful information about each model. Magnification (10x) Individual focusing Waterproof 10x50IF HP WP Objective diameter (mm) High eyepoint D: Roof (Dach) prism WP: Waterproof CF: Central focusing IF: Individual focusing HP: High eyepoint

The following icons tell you for what purpose each series is best suited:



Mountaineering, camping, hiking

Rugged outdoor activities demand portability and durability. Models that also feature rubber armouring and waterproofing are ideal.



Birdwatching, nature watching

Wide field of view and 7x to 10x magnification models are suited for general nature viewing. Observing whales or birds at longer distances is more comfortable at 8x to 12x magnification. Fieldscopes and Spotting Scopes are recommended for even closer views.



Marine sports, fishing

Waterproofing and durability are critical for these activities. High brightness and a wide field of view are also desirable. Models featuring vibration reduction are convenient for on-board use



Spectator sports

Binoculars featuring a wide field of view and 7x to 10x magnification are recommended for fast-moving sports. Zoom-type binoculars are convenient, enabling quick and easy change of magnification according to the viewing situation.



Hunting and outdoor

Models with 8x to 10x magnification are suitable for hunting, with waterproofing and durability being further prerequisites. For early morning and evening use, binoculars with a large objective diameter are recommended.



Travelling

Compact, lightweight models featuring moderate magnification and field of view are ideal for travelling.



Theatre

Compact models featuring magnification from 4x to 8x are recommended for theatre use. To focus on a particular performer at a concert, 7x to 10x models are suitable.



Stargazing

Astronomical observation requires a bright optical system with large objective diameter and exit pupil. Waterproof and aberration-corrected binoculars are most suitable.



Museum

In museums, compact and lightweight models with lower magnification and a close focusing distance of less than 2m are desirable.



For eyeglass wearers

High-eyepoint design for a clear field of view even for wearers of eyeglasses.

Enduring perfection

Nikon binoculars have established a benchmark for extraordinary value by which all others are compared. Building on Nikon's eminence as the global leader in precision optics,* we provide binoculars for virtually any application, making it easy to find brilliant, impeccable optics for your own specific needs. Most models feature Nikon multilayer-coated lenses of the highest

quality to provide astonishingly bright, razor-sharp images. All models feature rugged construction, and finely tuned ergonomic engineering for comfortable handling during long hours of use. Whatever your passion — be it birdwatching, rugby, an ocean crossing, or a night at the opera — Nikon has the ideal binoculars for you.



HIGH GRADE

When only the best will do

Nikon's high-grade HG L series binoculars bring everything into focus and uncover the beauty of the world around you.

Topping off Nikon's acclaimed lineup of binoculars, the six HG L series models are designed for unparallelled performance and comfort.

Advanced lens and prism construction delivers sharp, bright images that intensify your viewing experience. Other elements, such as the user-oriented optical and mechanical design, work together to reveal fine details you'd have otherwise missed. And in 42mm objective diameter models, the weight has been significantly reduced.

What's more, environment-friendly materials extend the quality of the HG L series even further.

The overall result is something Nikon believes all binocular users should experience: more moments of clarity.



8x20HG L DCF

Features common to the HG L series

- Sharp, clear images to the lens periphery, thanks to Nikon's exclusive field flattener lens and eyepiece design
- Nikon's original multilayer coating attains a high light transmission rate across a wide range of wavelengths and reduces flare and ghosts for excellent colour reproduction
- Phase-correction-coated roof prisms deliver high resolution
- Prisms feature a high-reflection silver coating to provide brighter images
- High-eyepoint design provides a clear field of view, even for eyeglass wearers
- Soft-touch silicon rubber eyecup
- Turn-and-slide rubber eyecups with multi-click* facilitate easy positioning of eyes at the correct eyepoint

- Large focusing ring makes operation easy
- Every model is waterproof up to 2m/6.6 ft. (3m/9.8 ft. for 8x20HG L DCF/10x25HG L DCF) for 5 minutes and fog-free, with 0-ring seals and nitrogen gas
- Made with environment-friendly materials
 Non-polyvinyl chloride material used for body, eyepiece lens cap, objective lens caps, case and wide strap
- Eco-glass optics that are free of lead and arsenic are used for all lenses and prisms
- Can be fixed to a tripod using optional tripod adaptor* (see p 43)

^{*}Except 8x20HG L DCF/10x25HG L DCF.



8x42HG L DCF/10x42HG L DCF











- Lightweight (8x: 795g, 10x: 790g)
- Sturdy, lightweight die-cast magnesium alloy body
- Close focusing distance of 3m
- Dioptre adjustment ring locking system prevents unintentional rotation
- Excellent performance at temperatures as low as -20°C
- Rubber armouring for shock resistance and a firm, comfortable grip
- Ergonomic 3D design for greater ease of holding
- Eyepiece lens caps are connected for easy use



8x32HG L DCF/10x32HG L DCF











- Finely balanced compensation of aberrations
- Close focusing distance of 2.5m
- Dioptre adjustment ring locking system prevents unintentional rotation
- Excellent performance at temperatures as low as -20°C
- Rubber armouring for shock resistance and a firm, comfortable grip
- Ergonomic 3D design for greater ease of holding
- Eyepiece lens caps are connected for easy use



8x20HG L DCF/10x25HG L DCF

















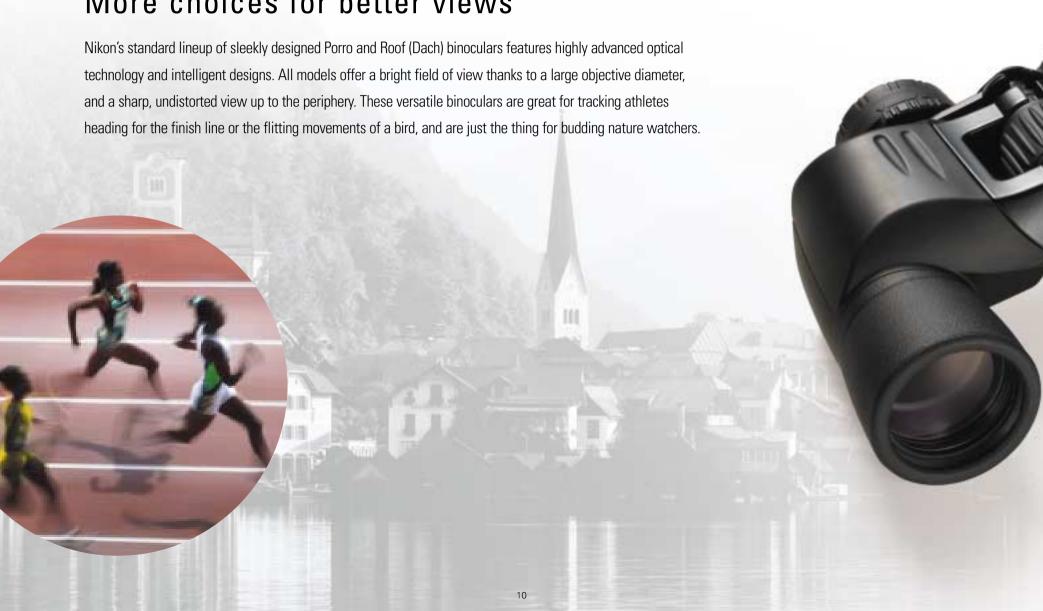
- Sturdy, lightweight die-cast magnesium alloy body
- · Foldable design is convenient for carrying
- Close focusing distance of 2.4m (8x) and 3.2m (10x)
- . Dioptre adjustment ring is located in the centre of the body, which improves operability
- Excellent performance at temperatures as low as -30°C



* For specifications, see pp 38-39.

STANDARD







Action Series 7x35CF/8x40CF/7x50CF/10x50CF/12x50CF/16x50CF







- Aspherical eyepiece lens eliminates image distortion
- Multilayer-coated lenses and large objective diameter for optimal clarity of image
- Rubber armouring for shock resistance and a firm, comfortable grip
- Sophisticated design
- Wide strap
- Can be fixed to a tripod using optional tripod adaptor (Action 16x50CF includes tripod adaptor) (see pp 42-43)



Action Zoom Series 7-15x35CF/10-22x50CF







- Multilayer-coated lenses for a bright image
- Superior optical design ensures sharp images at any magnification
- Rubber armouring for shock resistance and a firm, comfortable grip
- Smooth zooming
- Sophisticated design
- Wide strap
- Can be fixed to a tripod using optional tripod adaptor (Action 10-22x50CF Zoom includes tripod adaptor) (see pp 42-43)



Action EX Series 7x35CF/8x40CF/7x50CF/10x50CF/12x50CF/16x50CF









- Waterproof (up to 1m/3.3 ft. for 5 minutes) and fog-free with nitrogen gas
- High-eyepoint design provides a clear field of view even for eyeglass wearers
- Turn-and-slide rubber eyecups with multi-click
- Multilayer-coated lenses and large objective diameter for optimal image clarity
- Rubber armouring for shock resistance and a firm, comfortable grip
- Eco-glass optics are free of lead and arsenic
- Aspherical eyepiece lens eliminates image distortion (7x50CF, 12x50CF only)
- Can be fixed to a tripod using optional tripod adaptor (16x50CF includes tripod adaptor) (see pp 42-43)



^{*} For specifications, see pp 38-39.

COMPACT

Big performance in sleek designs

When you're on the go, convenience is everything. That's what makes the Nikon compact lineup so appealing. Small enough to take anywhere, they're ideal for getting great views for that next holiday, concert, or sporting event.





SPRINT IV Series 8x21CF/10x21CF







- · Compact and lightweight
- · Multilayer-coated lenses for a bright image
- · Close focusing distance of 3m
- · Stylish design and body colour
- Rubber coating for comfortable grip (metallic black models)
- Available in two body colours (silver/metallic black)



SPRINT IV 8x21CF <Silver/Metallic black> Photo: Silver

Sportstar EX Series 8x25DCF/10x25DCF









- Waterproof and fog-free with nitrogen gas
- · Turn-and-slide rubber eyecups facilitate easy positioning of eyes at the correct eyepoint
- Close focusing distance: 2.5m (8x), 3.5m (10x)
- Multilayer-coated lenses for bright images
- Compact and lightweight
- Fold-up design; easy to carry around
- Available in two body colours (silver/charcoal grey)



Sportstar EX 8x25DCF <Silver/Charcoal grey> Photo: Charcoal grey

EAGLEVIEW ZOOM 8-24x25CF







- Unique zoom lever designed for extra-smooth 8-24x zooming
- Turn-and-slide rubber eyecups for easy positioning of eyes at the correct evepoint
- Multilayer-coated lenses for bright images
- Carbon fibre material in parts of the grip enhance durability
- Designed for comfortable fit and easy handling
- Compact and lightweight
- Parts contain eco-friendly materials
- Available in two body colours (silver/black)



EAGLEVIEW ZOOM 8-24x25CF <Silver/Black> Photo: Silver

TRAVELITE V Series 8x25CF/9x25CF/10x25CF/12x25CF/8-24x25CF







- Aspherical lenses* minimise distortion and provide sharp images up to the periphery
- · Multilayer-coated lenses for bright images
- · Special rubber armour for shock resistance and a firm, comfortable grip
- Carbon fibre in the body material improves durability
- Small, lightweight and ergonomic design
- Click-type dioptre adjustment ring prevents unwitting rotation
- 8-24x zoom (8-24x25CF TRAVELITE V only)



8-24x25CF TRAVELITE V

TRAVELITE EX Series 8x25CF/9x25CF/10x25CF/12x25CF















- Waterproof (up to 2m/6.6 ft. for 5 minutes) and fog-free with nitrogen gas
- Aspherical eyepiece lens eliminates image distortion
- · High-eyepoint design provides a clear field of view for those who wear eyeglasses
- Close focusing distance: 2.8m
- Multilayer-coated lenses for brighter images
- Turn-and-slide rubber eyecups facilitate easy positioning of eyes at the correct eyepoint
- Eco-glass optics are free of lead and arsenic



TRAVELITE EX 8x25CF

^{*}Except for 8-24x25CF TRAVELITE V

^{*} For specifications, see pp 39-41.

HIGH-CLASS COMPACT



6x15M CF



6x15M CF/7x15M CF Black







- Stylish metal body
- Ultra-compact and lightweight
- Close focusing distance: 2m
- Multilayer-coated lens for bright images



5x15DCF Titanium/7x15DCF Titanium







- Prism features high-reflection silver coating for brighter images
- Phase-correction-coated prisms for high resolution
- Multilayer-coated lenses
- High-eyepoint design for a clear field of view for wearers of eyeglasses (5x)
- Close focusing distance: 1.2m (5x), 1.5m (7x)
- Stylish titanium body
- Two types of rubber eyecups (for regular and eyeglass use)



5x15 HG Monocular/7x15 HG Monocular





- Prism features high-reflection silver coating for brighter images
- Phase-correction-coated prisms for high resolution
- Multilayer-coated lenses
- High-eyepoint design (5x)
- Close focusing distance: 0.6m (5x), 0.8m (7x)



* For specifications, see pp 40-41.

HUNTING AND OUTDOOR

Close in on your target with confidence

These waterproof, fog-free Nikon binoculars are just the ticket for outdoor use. Bright, beautifully defined images are delivered by superior quality, multilayer-coated lenses. O-ring seals and nitrogen gas provide added resistance to the effects of changes in climate, while the durable design and rubber armouring ensure reliable performance and a comfortable grip, even during prolonged use. Worry-free viewing of the great outdoors.



MONARCH Series 8x36DCF/10x36DCF/8x42DCF/10x42DCF/12x42DCF/8.5x56DCF/10x56DCF/12x56DCF



- All lenses and prisms are multilayer-coated for the brightest images
- · Phase-correction-coated roof prisms for high resolution
- High-reflection mirror-coating prism for bright image
- High-eyepoint design provides a clear field of view, even for eyeglass wearers
- Close focusing distance: 2.5m (36mm/42mm models)
- Eco-glass optics that are free of lead and arsenic are used for all lenses and prisms
- Waterproof (up to 1m/3.3 ft. for 5 minutes) and fog-free with nitrogen gas
- Turn-and-slide rubber eyecups facilitate easy positioning of eyes at the correct eyepoint
- Rubber armouring for shock resistance and a firm, comfortable grip
- Lightweight body uses fibreglass-reinforced polycarbonate resin
- Wide strap
- Can be fixed to a tripod using optional tripod adaptor (see p 43)

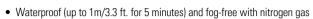


10x50CF WP









- Multilayer-coated large 50mm objective lens for a bright image
- High-eyepoint design
- Rubber armouring for shock resistance and a firm, comfortable grip
- Can be fixed to a tripod using optional tripod adaptor (see pp 42-43)



Flip-down cap with tie prevents loss (except 8x36DCF).







* For specifications, see pp 40-42.

MARINE

Go with the pro for smoother sailing

For top performance in a marine environment, Nikon binoculars are the way to go. All the models in our Marine lineup deliver crisp, brilliant images. They're sealed with 0-rings and filled with nitrogen gas to minimise the effect of temperature changes, making them ideal for nautical applications. And selected models even feature a built-in compass to help keep you on course. Nikon's waterproof, weather-resistant binoculars — performance you can count on.

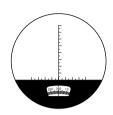


7x50CF WP/7x50CF WP Compass





- Central focusing system; waterproof (up to 1m/3.3 ft. for 5 minutes) and fog-free with O-ring seals and nitrogen gas
- Built-in compass with illuminator and scale (7x50CF WP Compass)
- High-evenoint design for a clear field of view even for wearers of eyeglasses
- Multilayer-coated lenses for a bright image
- Rubber armouring for shock resistance and a firm, comfortable grip
- Floating strap provided
- Can be fixed to a tripod using optional tripod adaptor (see pp 42-43)



Compass and distance scale (for 7x50CF WP Compass)

You can measure dimensions or distances if you know one of the values.





Floating strap for 7x50CF WP/7x50CF WP Compass

7x50IF WP/7x50IF WP Compass





- Waterproof (up to 2m/6.6 ft. for 5 minutes) and fog-free with nitrogen gas
- All lenses and prisms are multilayer-coated for the brightest images
- Rubber armouring for shock resistance and a firm, comfortable grip
- High-evepoint design for a clear field of view even for wearers of
- Built-in compass and scale to ascertain subject direction, and distance or size (7x50IF WP Compass)
- Can be fixed to a tripod using optional tripod adaptor (see pp 42-43)



7x50IF HP WP Tropical (Model with built-in scale available)





- Waterproof (up to 5m/16.4 ft. for 5 minutes) and fog-free with nitrogen gas.
- Horizontal and vertical scales for measuring dimensions or distances (scale type)
- · High-eyepoint design for a clear field of view
- · Large objective diameter for bright image
- Can be fixed to a tripod using optional tripod adaptor (see p 42)
- Polarising filter and horn-shaped rubber evecup are available (options)



Distance scale

You can measure dimensions or distances if you know one of the values.



- Large 70mm objective diameter meets demand for exceptionally bright, high magnification
- High-eyepoint design for a clear field of view
- Can be fixed to a tripod using optional tripod adaptor (see p 42)
- Polarising filter and horn-shaped rubber eyecup are available (options)



Polarising filter (option)

This filters out light reflections from water or glass.



Horn-shaped rubber eyecup (option)

Keeps light out of the eyepiece for easy viewing. Comfortable rubber cups are soft on your face, particularly good for use on bright days at sea and in other extreme conditions.

Usable models

- 7x50IF HP WP Tropical
- 18x70IF WP WF
- 7x50IF SP WP
- 10x70IF SP WP

^{• 10}x70IF HP WP

^{*} For specifications, see pp 42-43.

NATURE WATCHING

Celebrate nature

Whatever your pleasure — be it birdwatching, hiking, mountaineering, or marine pursuits — nothing compares with the raw, unspoilt beauty of nature. And nothing enables you to appreciate nature like Nikon high-performance binoculars.

Available in the most extensive range of models and features, all deliver extraordinary resolving power while providing superb ergonomics; and all boast the technological expertise of the world leader in precision design.



8x30E II/10x35E II





· Optics employ Eco-glass containing no arsenic or lead

- Wide apparent field of view (63.2° for 8x30E II, 62.9° for 10x35E II)
- Close focusing distance: 3m (8x), 5m (10x)
- Lightweight, die-cast magnesium-alloy body
- All lenses and prisms are multilayer-coated
- · Can be fixed to a tripod using optional tripod adaptor (see p 42)



7x50IF SP WP/10x70IF SP WP







· Superior optical design for aberration-free observation, built especially for astronomical use

- Multilayer-coated lenses for a bright image
- Waterproof up to 5m/16.4 ft. (2m/6.6 ft. for 10x70IF SP WP) for 5 minutes and fog-free with 0-ring seals and nitrogen gas
- · High-eyepoint design
- Can be fixed to a tripod using optional tripod adaptor (see p 42)
- Polarising filter and horn-shaped rubber eyecup are available (options, see p 19)



8x32SE CF/10x42SE CF/12x50SE CF











- Sharp, clear images to the lens periphery, thanks to Nikon's original field flattener lens and eyepiece design
- High-eyepoint design for a clear field of view
- Close focusing distance: 3m (8x32SE CF)
- · Lightweight thanks to die-cast magnesiumalloy body
- Protein-compound rubber armouring for shock resistance and a firm, comfortable grip
- Can be fixed to a tripod using optional tripod adaptor (see p 42)



18x70IF WP WF





- Wide 64.3° apparent angular field of view
- All lenses are multilayer-coated for a bright image
- Waterproof (up to 2m/6.6 ft. for 5 minutes) and fog-free with 0-ring seals and nitrogen gas
- High-eyepoint design
- Can be fixed to a tripod using optional tripod adaptor (see p 42)
- Polarising filter and horn-shaped rubber eyecup are available (options, see p 19)



^{*} For specifications, see pp 42-43.





Scopes A whole new world of discovery

Nikon offers a broad selection of the finest Fieldscopes, Spotting Scopes and interchangeable eyepieces, all delivering brilliant optical performance and rugged waterproof construction. What's more, Nikon leads the way in the fast-proliferating field of digiscoping with a stellar array of attachments and adaptors that marry our Fieldscopes and Spotting Scopes to the

globally acclaimed Nikon COOLPIX and Nikon D-series SLR digital cameras. Never before has it been so easy to capture such magnificent, electrifying close-ups of distant birds and wildlife — without having to carry along heavy telephoto lenses.





Scopes Fieldscopes

Fieldscope ED82/Fieldscope ED82 A





- Large 82mm objective lens for the brightest image
- Extra-low dispersion (ED) glass for chromatic aberration compensation and brighter, clearer viewing
- All lenses and prisms are multilayer-coated for the brightest images
- Waterproof (up to 2m/6.6 ft. for 5 minutes) and fog-free with 0-ring seals and nitrogen gas
- Built-in type slide hood
- · Easy-to-use sight on the hood
- Angled body type for easy viewing and comfortable sketching (ED82 A)
- Eleven different eyepieces compatible (options, see p 26)



Fieldscope III/Fieldscope III A Fieldscope EDIII/Fieldscope EDIII A



- Waterproof (up to 2m/6.6 ft. for 5 minutes) and fog-free with 0-ring seals and nitrogen gas
- All lenses and prisms are multilayer-coated for the brightest images
- Built-in type slide hood
- Angled body type for easy viewing and comfortable sketching (mA, EDmA)
- Extra-low dispersion (ED) glass for chromatic aberration compensation and brighter, clearer viewing (ED皿, ED皿A)
- Eleven different eyepieces compatible (options, see p 26)



Scopes Fieldscopes

Fieldscope ED50/Fieldscope ED50 A





- Compact and lightweight with 50mm-diameter ED (Extra-low Dispersion) objective lens to minimise chromatic aberration
- Available in straight or angled design
- Multilayer-coated lenses
- Waterproof (up to 1m/3.3 ft. for 5 minutes) and fog-free with nitrogen gas
- Choose from three colours charcoal grey, pearlescent green and rose pink
- Compatible with six MC eyepieces and three Wide DS eyepieces (options)
- 55mm filter can be attached to objective lens













Fieldscope ED50 (charcoal grey)

Fieldscope ED50 (pearlescent green)

Hand-holding case for Fieldscope ED50 series

Eyepieces for Fieldscopes







wide MC eyepiece*



20x/30x/38x wide MC eyepiece wide MC eveniece



27x/40x/50x

40x/60x/75x



wide MC eveniece

13-30x/20-45x/25-56x 13-40x/20-60x/25-75x MC II zoom evepiece



16x/24x/30x Wide DS eyepiece



27x/40x/50x Wide DS eyepiece



40x/60x/75x Wide DS eveniece

Note: For compatibility with Fieldscope models, see pp 44-45.

^{*} Not recommended for Fieldscope ED50/ED50A.

Scopes Spotting Scopes

Spotting Scope RA III 82 WP/Spotting Scope RA III 82 A WP Spotting Scope RAIII 65 WP/Spotting Scope RAIII 65 A WP



Trim body with a large-diameter lens

· Large objective lens for a brighter field of view

• All lenses, prisms and eyepieces are multilayer-coated • Waterproof (up to 2m/6.6 ft. for 5 minutes) and fog-free with 0-ring seals and nitrogen gas

 Bayonet-type eyepiece mount with locking system enables guicker, more secure eveniece connections

• Six high-eyepoint eyepieces available, with turn-and-slide eyecups

• Comes with detachable Target Sight TGS-1 for quick-and-easy targeting

Built-in sliding hood

Available in two colours, charcoal grey and olive green

Rubber armouring for shock resistance

• Objective lens cap with tie to prevent loss can be attached to the cap-retaining hook on the hood



Bayonet-type eveniece mount with locking system





Detachable Target Sight TGS-1

Each scope is equipped with a special detachable sight for quick-and-easy targeting without adjustment.





Nikon Target Sight TGS-1

Features

• Enables easy targeting • Attaches to Spotting Scope RA TWP Series

- Long eye relief Fixed focus Small and lightweight
- Water resistant with 0-ring seals Lead- and arsenic-free Eco-glass
- * Except at high magnification with Zoom Eyepiece

Evepieces for Spotting Scopes



16-48x/20-60x Zoom eyepiece



eyepiece



20x/25x LER eveniece



30x/38x Wide eyepiece



16-48x/20-60x Zoom DS eyepiece



20x/25x DS eveniece

Spotter XL II







- Phase-correction-coated roof prism for high resolution
- All lenses and prisms are multilayer-coated for the brightest images
- High-eyepoint design (19mm)
- Built-in type slide hood with sight
- · Compact and lightweight
- Rubber armouring



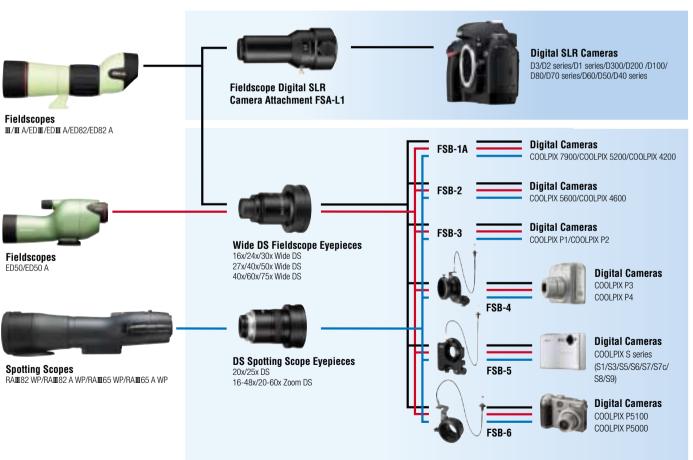
^{*} For specifications, see pp 44-45.

Scopes

Digiscoping System

This convenient system makes it possible to record images viewed through a Fieldscope or Spotting Scope. Connecting a Fieldscope with an attachment for a Nikon digital SLR camera, or a Fieldscope/Spotting Scope with a bracket for a Nikon COOLPIX series camera makes it easy for the user to capture super-telephoto images.

For product details, see "Nikon Digiscoping System" catalogue.







Universal Bracket

Enables you to connect a Fieldscope or Spotting Scope to a 35mm [135] format camera, digital camera or video camera, and record images without having to use an exclusive attachment and attachment ring.

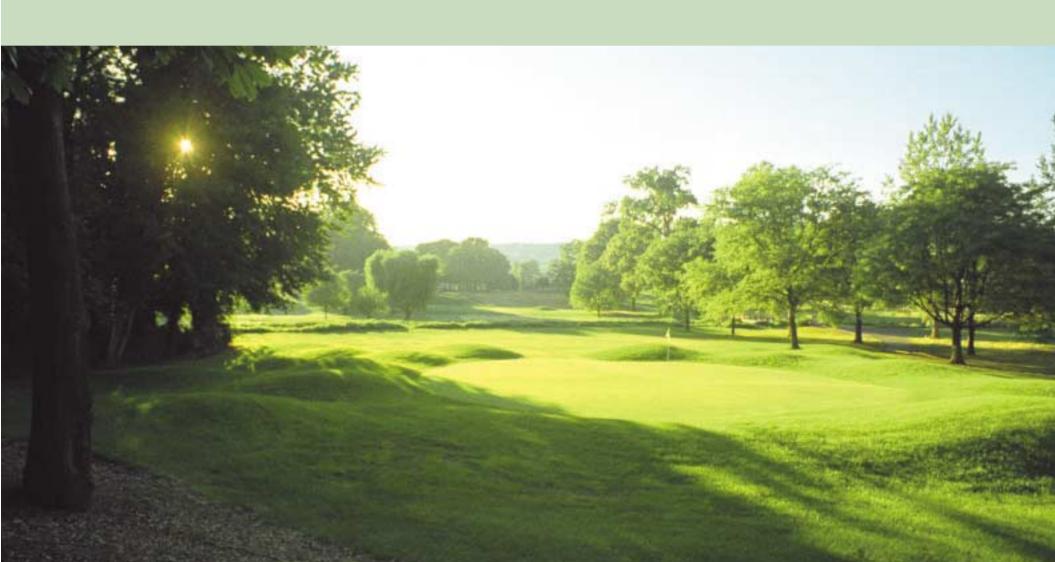


Laser Rangefinders

The measure of excellence

When distance matters, nothing is more essential than accuracy. Known industry-wide for superior optical technologies and cutting-edge design capabilities, Nikon takes pride in delivering innovative, high-quality products. The Laser Rangefinder lineup extends from a high-

spec model with angle measurement functions to models exclusively designed for golfing and hunting, each perfectly suited to its particular purpose.





Common features

- Distance* measurement display step is 0.5m/yd. (shorter than 100m/yd.: Laser 550A S/550/350G, shorter than 1,000m/yd.: Laser 1200S)
- High-quality 6x monocular with multilayer coating for bright, clear images (7x for Laser 1200S)
- High-eyepoint design affords eyeglass wearers easy viewing
- Simple one-touch measurement
- Compact, lightweight design enables easy, single-hand operation
- Dioptre adjustment function
- Capable of distancing different targets in succession by keeping the button pressed (single press of the button with Laser 350G)
- Waterproof (up to 1 metre for 10 minutes: Laser 550A S/550/ 350G, up to 2 metres for 5 minutes: Laser 1200S/800S), but not for underwater usage; the battery chamber is water resistant.
- Wide temperature tolerance: −10°C to +50°C
- * Actual distance with Laser 550A S.

Applications







Forestry surveys

Sailing

Golfing or caddying*2 Exploring ruins

*1 Except Laser 350G *2 Except Laser 550

Laser Rangefinders

Laser 550A S

- Easy one-push operation enables measurement of horizontal distances, height, angle and vertical separation (difference in height between two targets), in addition to the actual distance measurement function.
- The results are displayed on both an internal and an external LCD panel. The external LCD panel shows all results simultaneously.
- Select from two measurement modes (Target Priority Switch System):
 First Target Priority mode displays the range to the nearest target among multiple results obtained with a single measurement useful when golfing for measuring the distance to a pin on a green with woods in the background.

Distant Target Priority mode displays the range to the farthest target among multiple results obtained with a single measurement — useful when hunting in heavily wooded areas.

Measurement range: 10-500m/11-550 yd./33-999 ft.)

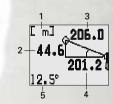
Internal display

- 1. Actual (linear) Distance
- 2. Horizontal Distance
- 3. Height
- 4. Angle
- 5. Height between two points
- 6. First Target Priority mode
- 7. Distant Target Priority mode
- 8. Battery condition
- 9. Distance
- Unit of measure (m/yd.) (no unit displayed for ft.)
- 11. Reticle (—;—)
- 12. Laser irradiation ()

External display

- 1. Measurement unit (m/yd./ft.)
- 2. Height
- 3. Actual (linear) Distance
- 4. Horizontal Distance
- 5. Angle (°)

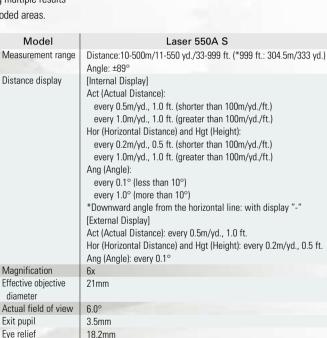




Measurement example (golf)



Ex. conditions	Horizontal distance	_ Height	Shot distance (Approx (197 yd.))
*With medium iron	(167.4 yd.)	(29.6 yd.)	(197 yd.)	* Upward in



Laser 550A S

The specifications of the product may not be achieved depending on the target object's shape, surface texture and nature, and/or weather conditions.

Auto power shutoff function equipped (after about 30 sec.)

VCCI class B, Class 1M Laser product (IEC60825-1:2001), Class 1 Laser product (21CFR 1040.10 and 1040.11) CE, EMC directive, Fcc Part15 subpart B Class B, c-tick, WEEE

130x69x45mm

210g (excluding battery)

CR2 lithium battery x 1 (DC 3V)

Dimensions (LxHxW)

Weight

Power source

Safety and EMC

Note: The origin of the technique of this Laser Rangefinder with inclinometer is the Surveying Instruments incorporated measuring capability of both distance and angle which were developed by Nikon Corporation. Among such products, especially, the first highly advanced electronic model, the Total Station DTM-1, is the root (Sold in 1985).

Laser Rangefinders

Laser 1200S/Laser 800S

• Select from two measurement modes (Target Priority Switch System):

First Target Priority mode displays the range to the nearest target among multiple results obtained with a single measurement — useful when golfing for measuring the distance to a pin on a green with woods in the background.

Distant Target Priority mode displays the range to the farthest target among multiple results obtained with a single measurement — useful when hunting in heavily wooded areas.

- Measurement range: 10-1,100m (11-1,200 yd.) (Laser 1200S) 10-730m (11-800 yd.) (Laser 800S)
- LCD with backlight

Laser 550

- Easy-to-use model features Distant Target Priority Mode specifically designed for hunting.
- Measurement range: 10-500m (11-550 yd.)

Laser 350G

- · Compact, high-performance laser rangefinder specifically designed for golf.
- First Target Priority Mode enables easy measurement of the distance to your target pin at the golf course.
- Depressing the POWER button provides 8-second continuous measurement, which enables measurement even with slight hand movement.
- Measurement range: 10-500m (11-550 yd.)

Internal display (Laser 1200S/800S)

- 1. Distance
- 2. Unit of measure (m/vd.)
- 3. Reticle (—)
- 4. Laser irradiation ()<)
- 5. First Target Priority mode
- 6. Battery condition

Safety and EMC











VCCI class B, Class 1M laser product (IEC60825-1:2001), Class 1 laser product (21CFR 1040.10 and 1040.11) CE, EMC directive, Fcc Part15 subpart B Class B, c-tick, WEEE







Model	Laser 1200S	Laser 800S	Laser 550	Laser 350G
Measurement range	10-1,100m/11-1,200 yd.	10-730m/11-800 yd.	10-500m/11-550 yd.	
Distance display	Every 0.5m/yd. (shorter than 1,000m/yd.) Every 1.0m/yd. (greater than 1,000m/yd.)	Every 0.5m/yd.	Every 0.5m/yd. (shorter than 100m/yd.) Every 1.0m/yd. (greater than 100m/yd.)	
Magnification	7x	бх		
Effective objective diameter	25mm	21mm		
Actual field of view	5.0°	6.0°		
Exit pupil	3.6mm	3.5mm		
Eye relief	18.6mm	18mm	18.3	2mm
Dimensions (LxHxW)	145x82x47mm	126x72x37mm	130x69	3x37mm
Weight (excluding battery)	280g	210g 180g		
Power source	CR2 lithium battery x 1 (DC 3V). Auto power shutoff function equipped (after 8 sec.)			

The specifications of these products may not be achieved depending on the target object's shape, surface texture and nature, and/or weather conditions.

Exceptional Optics for Specialised Needs

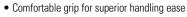
Dedicated applications demand the expert attention that only Nikon can deliver



Loupes

LED Lighting Loupes

- Small, high-quality white LED provides natural illumination across wide area
- Slim, compact, lightweight design
- Aspherical lens reduces image distortion







- Aspherical lens used to reduce image distortion
- Comfortable grip offers superior holding ease
- Highly sophisticated design
- Plastic, equiconvex aspherical lens features anti-scratch coating



Model	LED Lighting Loupes 4D 8D		New Racket-Type Loupes			
			4D	6D	8D	10D
Effective diameter	107x53.5mm	80mm	107x53.5mm	80x50mm	80mm	60mm
Refractive power	4 dioptre	8 dioptre	4 dioptre	6 dioptre	8 dioptre	10 dioptre
Reference magnification	1.5x	2x	1.5x	1.8x	2x	2.5x
Dimensions (L x D x H)	155 x 170 x 22mm	200 x 90 x 22mm	145 x 170 x 17mm	140 x 152 x 17mm	199 x 89 x 18mm	179 x 69 x 15mm
Weight	110g	95g	115g	95g	100g	65g



Precision Loupe (for connoisseurs)

- Superior resolution of 63 lines/mm
- Airtight retractable lens is ideal for professional tasks
- Lens comprises three optical glass elements

Effective diameter	13mm
Focusing distance	25mm
Magnification	10x (±1%)
Dimensions (L x W x H)*1	42 x 24 x 16mm
Weight	Approx. 15g
	A STATE OF THE STA

*1 When the lens is retracted to its original position.



Binocular Telescopes / Sightseeing Binoculars



20x120 III Binocular Telescope

- Large 120mm objective diameter and Nikon's original coating for a bright image even in the dark
- Sharp image realised by aberration compensation
- Waterproof (up to 2m/6.6 ft. for 10 minutes), filled with nitrogen gas, fog-free and dust resistance
- · Shock and corrosion-resistant structure
- High-eyepoint design for a clear field of view
- Easy handling with 360° azimuth and –30° ~ +70° tilting
- Height (with stand, binocular tubes in horizontal position): 440mm
- · Rigid fixed-pillar stand (option) is available



Model	20×120III
Magnification	20x
Objective diameter	120mm
Angular field of view (Real)	3.0°
Angular field of view (Apparent)	55.3°
Field of view at 1,000m	52m
Exit pupil	6.0mm
Relative brightness	36.0
Eye relief	20.8mm
Close focusing distance	133.0m
Interpupillary distance adjustment	58-74mm
Weight	15.5kg*
Length	680mm*
Width	452mm*
Type	Porro

* Binocular body only

30x80 II Sightseeing Binoculars

- Periscope design for easy location of scenic highlights without manual focusing
- Flexible single-coin viewing time from one to five minutes
- Airtight construction
- Compact design with short eyepiece tube saves space
- Easy handling with 360° azimuth and -30° ~ +25° tilting

For requirements of local currency coin box and product modifications, contact your nearest authorised Nikon distributor. Language of user directions plate can be modified to suit local needs.

30x80 II Sightseeing Binoculars



Model	30x80II
Magnification	30x
Objective diameter	80mm
Angular field of view (Real)	1.7°
Angular field of view (Apparent)	48°
Field of view at 1,000m	29m
Exit pupil	2.7mm
Relative brightness	7.3
Eye relief	10.7mm
Close focusing distance	150m
Interpupillary distance adjustment	62mm(fixed)
Weight	42.0kg
Length	1,600mm
Width	450mm*
Type	Periscope

20x120 III with pillar stand

* Stand base size (W x D): 450 x 360mm



Fieldmicroscopes

EZ-Micro

- Enables photography with a Nikon COOLPIX digital camera
- Stereoscopic observation at 20x magnification
- Made with environmentally friendly materials
- Built-in illumination system
- Exclusive compact design for easy operation





EZ-Micro + FSB Bracket + COOLPIX Digital Camera

Model	EZ-Micro	
Magnification	20x (fixed)	
Optical system	Upright, unreversed image; eyepiece dioptre adjustable	
	for both eyes; 51 to 72mm interpupillary distance adjustment	
Field of vision	11mm diameter	
Angle of view	12.6°	
Vertical adjustment	38mm from the base of stage	
Photographic optical system	Collimated light beam	
Photographic magnification	Digital camera at widest angle: approx. 20x	
	Digital camera at telephoto end: approx. 70x*	
Eye relief	12.8mm	
Plate	Removal and reversible (top: flat; underside: built-in cup)	
Light source	Two white LEDs	
Light settings	Three settings: off, one lamp, two lamps	
Power source	One AA-size battery; approx. 10-hour battery life	
	(alkaline battery at 20°C)	
Dimensions	(In use) 162-202 (H) x 145 (D) x 106 (W) mm	
	(Folded close) 138 (H) mm with lighting fitted	
Weight	Approx. 635g (without battery)	
Filters	M37 x 0.75mm thread filters can be attached	
Accessories	Large carrying case; jointed strap	

EZ-Micro

Fieldmicroscope Fieldmicroscope Mini

- Compact, portable body
- 20x magnification
- Stereoscopic microscope
- Built-in illumination system (Fieldmicroscope)
- Water resistant (Fieldmicroscope Mini)







Fieldmicroscope Mini

Model	Fieldmicroscope	Fieldmicroscope Mini		
Magnification	20x (fixed)			
Optical system	Upright, unreversed image, eyepiece dioptre adjustable for right eye			
Interpupillary distance adjustment	56-72mm	51-72mm		
Field of vision	11mm diameter			
Vertical adjustment	50mm from the	42mm from the		
	base of stage	base of stage		
Plate	Removal and reversible			
	(top: flat; underside: built-in cup)			
Weight	Approx. 610g	Approx. 395g		

^{*} Only when using COOLPIX P3 or P4, with output at A4 size. COOLPIX models \$1/\$3/\$5/\$6/\$7c/\$8/\$9 at A4 output size offer 60x magnification.

StabilEyes

All StabilEyes models offer

- Reduced vibration for superior performance and steady view
- Fully multilayer-coated lenses for optimal brightness
- Phase-correction-coated prisms for high resolution
- Waterproof and fog-free with O-ring seals and nitrogen gas
- Ergonomic styling for comfortable grip, easy access to controls

14x40





• Two vibration reduction modes: LAND mode for when footing is secure, to compensate for vibration from hand-shake and binocular movement when user follows a moving subject while studying nature or watching sports

ON BOARD mode for when footing is unstable due to strong vibration — for example, from an engine or strong wind

· Floating strap provided



StabilEves 14x40

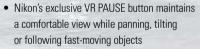
12x32/16x32











- Long eye relief design allows use with eyeglasses
- Turn-and-slide rubber eyecups
- Soft-to-the-touch neck strap included







Without vibration reduction



With vibration reduction



Without vibration reduction



With vibration reduction

Model	14x40	12x32	16x32	
Magnification	14x	12x	16x	
Vibration reduction system	Optical co	mpensation by erecting p	risms with	
		gimballed frame		
Vibration compensation range	±5°	±	3°	
Objective diameter	40mm	32	mm	
Eye relief	13mm	15	mm	
Dioptre adjustment	±2 dpt.	±3	dpt.	
Field of view (real)	4°	5°	3.8°	
Field of view (apparent)	52.1°	55.3°	55.9°	
Field of view at 1,000m	70m	87m	66m	
Exit pupil	2.9mm	2.7mm	2.0mm	
Relative brightness	8.4	7.3	4.0	
Interpupillary distance adjustment	60-70mm	56-72mm		
Close focusing distance	5m	3.	5m	
Dimensions (L x W x D)	186 x 148 x 88mm	178 x 142 x 81mm	181 x 142 x 81mm	
Weight (without batteries)	1,340g	1,130g	1,120g	
Operating temperature range		−10°C to +50°C		
Battery	DC 6V (four AA-type	DC 3V (two AA-type alkaline batteries)		
	alkaline batteries)			
Battery life	Approx. 6 hours*			

^{*}Continuous operation with AA-type alkaline batteries at normal temperature (20°C)

Note: Nikon has adopted a calculation method based on ISO 14132-1:2002, and therefore, values for the apparent field of view have changed from those previously stated. For details, see page 43.

Technical Data

Binoculars and Scopes



Binoculars

HIGH GRADE











					67
Model name	8x42HG L DCF	10x42HG L DCF	8x32HG L DCF	10x32HG L DCF	8x20HG L DCF
Magnification (x)	8	10	8	10	8
Objective diameter (mm)	42	42	32	32	20
Angular field of view (Real/degree)	7.0	6.0	7.8	6.5	6.8
Angular field of view (Apparent/degree)	52.1	55.3	57.2	59.2	50.8
Field of view at 1,000m (m)	122	105	136	114	119
Exit pupil (mm)	5.3	4.2	4.0	3.2	2.5
Relative brightness	28.1	17.6	16.0	10.2	6.3
Eye relief (mm)	20.0	18.5	17.0	16.0	15.0
Close focusing distance (m)	3.0	3.0	2.5	2.5	2.4
Interpupillary distance adjustment (mm)	56-72	56-72	56-72	56-72	56-72
Weight (g)	795	790	695	695	270
Length (mm)	157	157	129	129	96
Width (mm)	139	139	138	138	109 (65*)
Туре	Roof	Roof	Roof	Roof	Roof

^{*}Folded











Model name	Action 7-15x35CF Zoom (set at 7x)	Action 10-22x50CF Zoom (set at 10x)	Action EX 7x35CF	Action EX 8x40CF	Action EX 7x50CF
Magnification (x)	7-15	10-22	7	8	7
Objective diameter (mm)	35	50	35	40	50
Angular field of view (Real/degree)	5.5	3.8	9.3	8.2	6.4
Angular field of view (Apparent/degree)	37.2	36.7	59.3	59.7	42.7
Field of view at 1,000m (m)	96	66	163	143	112
Exit pupil (mm)	5.0	5.0	5.0	5.0	7.1
Relative brightness	25.0	25.0	25.0	25.0	50.4
Eye relief (mm)	8.7	8.6	17.3	17.2	17.1
Close focusing distance (m)	11.0	15.0	5.0	5.0	7.0
Interpupillary distance adjustment (mm)	56-72	56-72	56-72	56-72	56-72
Weight (g)	805	1,025	800	855	1,000
Length (mm)	138	197	120	138	179
Width (mm)	182	193	184	187	196
Type	Porro	Porro	Porro	Porro	Porro

^{*}Folded

STANDARD

10x25HG L DCF	Action 7x35CF	Action 8x40CF	Action 7x50CF	Action 10x50CF	Action 12x50CF	Action 16x50CF
10	7	8	7	10	12	16
25	35	40	50	50	50	50
5.4	9.3	8.2	6.4	6.5	5.5	4.1
50.5	59.3	59.7	42.7	59.2	59.9	59.6
94	163	143	112	114	96	72
2.5	5.0	5.0	7.1	5.0	4.2	3.1
6.3	25.0	25.0	50.4	25.0	17.6	9.6
15.0	11.9	11.9	17.6	11.8	9.7	12.3
3.2	5.0	5.0	8.0	7.0	7.0	9.0
56-72	56-72	56-72	56-72	56-72	56-72	56-72
300	715	760	980	970	960	990
112	123	143	189	184	179	184
109 (67*)	182	182	193	193	193	193
Roof	Porro	Porro	Porro	Porro	Porro	Porro

COMPACT

		ı	COMIFACT	1		I I
Action EX 10x50CF	Action EX 12x50CF	Action EX 16x50CF	SPRINT IV 8x21CF <silver black="" metallic=""></silver>	SPRINT IV 10x21CF <silver black="" metallic=""></silver>	Sportstar EX 8x25DCF <silver charcoal="" grey=""></silver>	Sportstar EX 10x25DCF <silver charcoal="" grey=""></silver>
10	12	16	8	10	8	10
50	50	50	21	21	25	25
6.5	5.5	3.5	6.3	5.0	8.2	6.5
59.2	59.9	52.1	47.5	47.2	59.7	59.2
114	96	61	110	87	143	114
5.0	4.2	3.1	2.6	2.1	3.1	2.5
25.0	17.6	9.6	6.8	4.4	9.6	6.3
17.2	16.1	17.8	11.3	8.6	10.0	10.0
7.0	7.0	7.0	3.0	3.0	2.5	3.5
56-72	56-72	56-72	56-72	56-72	56-72	56-72
1,020	1,045	1,040	240	230	280	280
178	178	177	93	87	103	103
196	196	196	117	117	114 (67)*	114 (67)*
Porro	Porro	Porro	Porro	Porro	Roof	Roof

Binoculars

COMPACT











Model name	EAGLEVIEW ZOOM 8-24x25CF (set at 8x) <silver black=""></silver>	8x25CF TRAVELITE V	9x25CF TRAVELITE V	10x25CF TRAVELITE V	12x25CF TRAVELITE V
Magnification (x)	8-24	8	9	10	12
Objective diameter (mm)	25	25	25	25	25
Angular field of view (Real/degree)	4.6	5.6	5.6	5.0	4.2
Angular field of view (Apparent/degree)	35.6	42.7	47.5	47.2	47.5
Field of view at 1,000m (m)	80	98	98	87	73
Exit pupil (mm)	3.1	3.1	2.8	2.5	2.1
Relative brightness	9.6	9.6	7.8	6.3	4.4
Eye relief (mm)	13.0	14.0	12.2	11.1	11.1
Close focusing distance (m)	4.0	3.0	3.0	3.0	4.0
Interpupillary distance adjustment (mm)	56-72	56-72	56-72	56-72	56-72
Weight (g)	350	255	255	250	260
Length (mm)	119	115	113	110	110
Width (mm)	110	118	118	118	118
Туре	Porro	Porro	Porro	Porro	Porro









		-			
Model name	5x15DCF Titanium	7x15DCF Titanium	5x15 HG Monocular	7x15 HG Monocular	MONARCH 8x36DCF
Magnification (x)	5	7	5	7	8
Objective diameter (mm)	15	15	15	15	36
Angular field of view (Real/degree)	9.0	6.6	9.0	6.6	7.0
Angular field of view (Apparent/degree)	43.0	44.0	43.0	44.0	52.1
Field of view at 1,000m (m)	157	115	157	115	122
Exit pupil (mm)	3.0	2.1	3.0	2.1	4.5
Relative brightness	9.0	4.4	9.0	4.4	20.3
Eye relief (mm)	15.8	12.0	15.8	12.0	17.0
Close focusing distance (m)	1.2	1.5	0.6	0.8	2.5
Interpupillary distance adjustment (mm)	56-72	56-72	_	_	56-72
Weight (g)	200	190	75	75	570
Length (mm)	83/71*	79/71*	71	71	124
Width (mm)	103	103	30	30	129
Type	Roof	Roof	Roof	Roof	Roof

^{*}The first number indicates the value with the normal eyecup, the second number when using the eyecup designed for eyeglass wearers.

HIGH-CLASS COMPACT

					To the same of the	
8-24x25CF TRAVELITE V (set at 8x)	TRAVELITE EX 8x25CF	TRAVELITE EX 9x25CF	TRAVELITE EX 10x25CF	TRAVELITE EX 12x25CF	6x15M CF	7x15M CF Black
8-24	8	9	10	12	6	7
25	25	25	25	25	15	15
4.6	6.3	5.6	5.0	4.2	8.0	7.0
35.6	47.5	47.5	47.2	47.5	45.5	46.4
80	110	98	87	73	140	122
3.1	3.1	2.8	2.5	2.1	2.5	2.1
9.6	9.6	7.8	6.3	4.4	6.3	4.4
13.0	15.5	15.8	15.9	15.9	10.1	10.0
5.0	2.8	2.8	2.8	2.8	2.0	2.0
56-72	56-72	56-72	56-72	56-72	56-72	56-72
310	355	360	365	365	130	135
127	100	101	102	103	48	47
118	116	116	116	116	108	108
Porro	Porro	Porro	Porro	Porro	Porro	Porro

MONARCH 10x36DCF	MONARCH 8x42DCF	MONARCH 10x42DCF	MONARCH 12x42DCF	MONARCH 8.5x56DCF	MONARCH 10x56DCF	MONARCH 12x56DCF
10	8	10	12	8.5	10	12
36	42	42	42	56	56	56
6.0	6.3	6.0	5.0	6.2	6.0	5.5
55.3	47.5	55.3	55.3	49.4	55.3	59.9
105	110	105	87	108	105	96
3.6	5.3	4.2	3.5	6.6	5.6	4.7
13.0	28.1	17.6	12.3	43.6	31.4	22.1
15.0	19.6	15.5	15.4	19.2	17.4	16.3
2.5	2.5	2.5	2.5	10	10	10
56-72	56-72	56-72	56-72	60-72	60-72	60-72
575	615	615	625	1,140	1,155	1,180
122	146	143	146	197	197	197
129	129	129	129	144	144	144
Roof	Roof	Roof	Roof	Roof	Roof	Roof

Binoculars

HUNTING AND OUTDOOR

MARINE











		_	•		•
Model name	10x50CF WP	7x50CF WP	7x50CF WP Compass	7x50IF WP	7x50IF WP Compass
Magnification (x)	10	7	7	7	7
Objective diameter (mm)	50	50	50	50	50
Angular field of view (Real/degree)	6.2	7.2	7.2	7.5	7.0
Angular field of view (Apparent/degree)	56.9	47.5	47.5	49.3	46.4
Field of view at 1,000m (m)	108	126	126	131	122
Exit pupil (mm)	5.0	7.1	7.1	7.1	7.1
Relative brightness	25.0	50.4	50.4	50.4	50.4
Eye relief (mm)	17.4	22.7	22.7	18.0	18.0
Close focusing distance (m)	17.0	10.0	10.0	25.0	25.0
Interpupillary distance adjustment (mm)	56-72	56-72	56-72	56-72	56-72
Weight (g)	1,065	1,100	1,120	1,170	1,210
Length (mm)	195	193	193	181	181
Width (mm)	207	202	202	203	203
Туре	Porro	Porro	Porro	Porro	Porro

Model name	7x50IF SP WP	10x70IF SP WP	18x70IF WP WF
Magnification (x)	7	10	18
Objective diameter (mm)	50	70	70
Angular field of view (Real/degree)	7.3	5.1	4.0
Angular field of view (Apparent/degree)	48.1	48.0	64.3
Field of view at 1,000m (m)	128	89	70
Exit pupil (mm)	7.1	7.0	3.9
Relative brightness	50.4	49.0	15.2
Eye relief (mm)	16.2	16.3	15.4
Close focusing distance (m)	12.3	25.0	81.0
Interpupillary distance adjustment (mm)	56-72	56-72	56-72
Weight (g)	1,485	2,100	2,050
Length (mm)	217	304	293
Width (mm)	210	234	234
Туре	Porro	Porro	Porro

Binocular Accessories

Tripod/monopod adaptors

Usable models

- Action series
- Action zoom series
- Action EX series
- 7x50CF WP/7x50CF WP Compass
- 7x50IF WP/7x50IF WP Compass
- 10x50CF WP



Usable models

- 7x50IF HP WP Tropical
- 8x32SE CF/10x42SE CF/12x50SE CF
- 18x70IF WP WF
- 7x50IF SP WP/10x70IF SP WP
- 10x70IF HP WP
- 8x30E II/10x35E II



NATURE WATCHING

7x50IF HP WP Tropical	10x70IF HP WP	8x30E II	10x35E II	8x32SE CF	10x42SE CF	12x50SE CF
7	10	8	10	8	10	12
50	70	30	35	32	42	50
7.3	5.1	8.8	7.0	7.5	6.0	5.0
48.1	48.0	63.2	62.9	55.3	55.3	55.3
128	89	154	122	131	105	87
7.1	7.0	3.8	3.5	4.0	4.2	4.2
50.4	49.0	14.4	12.3	16.0	17.6	17.6
15.0	15.0	13.8	13.8	17.4	17.4	17.4
24.5	50.0	3.0	5.0	3.0	5.0	7.0
56-72	56-72	56-72	56-72	53-73	53-73	53-73
1,360	1,985	575	625	630	710	900
217	304	101	126	116	149	182
210	234	181	183	183	192	202
Porro	Porro	Porro	Porro	Porro	Porro	Porro

Usable models

- 8x42HG L DCF
- 10x42HG L DCF
- 8x32HG L DCF
- 10x32HG L DCF
- MONARCH series



Soft (S) type

Hard (H) type

TRA-3 Usable models

MONARCH series

- Action series
- · Action zoom series
- Action EX series
- 7x50CF WP/7x50CF WP Compass
- 7x50IF WP/7x50IF WP Compass
- 10x50CF WP

Values for Apparent Field of View

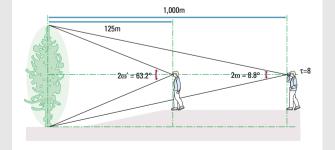
With the conventional method used previously, the apparent field of view was calculated by multiplying the real field of view by the binocular magnification. After revision, Nikon's figures are now based on the ISO 14132-1:2002 standard, and obtained by the following formula:

 $\tan \omega' = \tau x \tan \omega$ Apparent field of view: 2ω' Real field of view: 2ω Magnification: τ

For example, the apparent field of view of 8x binoculars with an 8.8° real field of view is as follows:

 $2\omega' = 2 \times \tan^{-1} (\tau \times \tan \omega)$ = 2 x tan-1 (8 x tan 4.4°)





Referring to the ISO 14132-2:2002 standard that was established at the same time as the abovementioned ISO 14132-1:2002, Nikon has determined that wide-viewfield binoculars must provide an apparent field of view over 60°.

Scopes





Model name	Objective diameter (mm)	Length (mm)*	Width (mm)*	Weight (g)*
Fieldscope ED82	82	327	108	1,575
Fieldscope ED82 A	82	339	108	1,670
Fieldscope Ⅲ	60	279	80	1,080
Fieldscope I A	60	291	94	1,180
Fieldscope EDIII	60	279	80	1,090
Fieldscope EDIII A	60	291	94	1,190
Fieldscope ED50	50	209	71	455
Fieldscope ED50 A	50	207	71	470
Spotting Scope RAII 65 WP	65	293	105	900
Spotting Scope RAII 65 A WP	65	304	105	920
Spotting Scope RAII 82 WP	82	380	114	1,200
Spotting Scope RAII 82 A WP	82	391	114	1,220
Spotter XL II	60	313	74	885

^{*}Body only (except Spotter XL II)

Eyepieces for Fieldscopes

Model name	Magnification	Angular field of view	Angular field of view	Field of view at 1,000m (m)	
	(x)	(Real/degree)	(Apparent/degree)	(approx.)	
20x/25x MC					
With III/III A/EDIII/EDIII A	20	3.0	55.3	52	
With ED82/ED82 A	25	2.4	55.3	42	
27x/40x/50x MC					
With ED50/ED50 A	27	1.7	42.0	30	
With III/III A/EDIII/EDIII A	40	1.1	42.0	19	
With ED82/ED82 A	50	0.9	42.0	16	
24x/30x wide MC*2					
With III/III A/EDIII/EDIII A	24	3.0	64.3	52	
With ED82/ED82 A	30	2.4	64.3	42	
20x/30x/38x wide MC*1*2					
With ED50/ED50 A	20	3.6	64.3	63	
With III/III A/EDIII/EDIII A	30	2.4	64.3	42	
With ED82/ED82 A	38	1.9	64.3	33	
27x/40x/50x wide MC*1*2					
With ED50/ED50 A	27	2.7	64.3	47	
With III/III A/EDIII/EDIII A	40	1.8	64.3	31	
With ED82/ED82 A	50	1.4	64.3	24	
40x/60x/75x wide MC*1*2					
With ED50/ED50 A	40	1.8	64.3	31	
With III/III A/EDIII/EDIII A	60	1.2	64.3	21	
With ED82/ED82 A	75	1.0	64.3	17	
13-30x/20-45x/25-56x MC zoom*1					
With ED50/ED50 A	13-30	3.0 (at 13x)	38.5 (at 13x)	52 (at 13x)	
With III/III A/EDIII/EDIII A	20-45	2.0 (at 20x)	38.5 (at 20x)	35 (at 20x)	
With ED82/ED82 A	25-56	1.6 (at 25x)	38.5 (at 25x)	28 (at 25x)	
13-40x/20-60x/25-75x MC II zoom*1*2					
With ED50/ED50 A	13-40	3.0 (at 13x)	38.5 (at 13x)	52 (at 13x)	
With III/III A/EDIII/EDIII A	20-60	2.0 (at 20x)	38.5 (at 20x)	35 (at 20x)	
With ED82/ED82 A	25-75	1.6 (at 25x)	38.5 (at 25x)	28 (at 25x)	
16x/24x/30x Wide DS*1*2					
With ED50/ED50 A	16	4.5	64.3	79	
With III/III A/EDIII/EDIII A	24	3.0	64.3	52	
With ED82/ED82 A	30	2.4	64.3	42	
27x/40x/50x Wide DS*1*2					
With ED50/ED50 A	27	2.7	64.3	47	
With III/III A/EDIII/EDIII A	40	1.8	64.3	31	
With ED82/ED82 A	50	1.4	64.3	24	
40x/60x/75x Wide DS*1*2					
With ED50/ED50 A	40	1.8	64.3	31	
With III/III A/EDIII/EDIII A	60	1.2	64.3	21	

^{*}¹These eyepieces are not to be used for Fieldscope I series. *²Turn-and-slide rubber eyecup.

Note: All eyepieces can be used for Fieldscope II series and ED78 series.

Exit (m		Relative brightness	Eye relief (mm)	Weight (g)
3.	.0	9.0	15.2	75
3.	.3	10.9	15.2	75
1.	.9	3.6	9.4	35
1.	.5	2.3	9.4	35
1.	.6	2.6	9.4	35
2.	.5	6.3	15.1	145
2.	.7	7.3	15.1	145
2.	.5	6.3	17.9	160
2.	.0	4.0	17.9	160
2.	.2	4.8	17.9	160
1.		3.6	17.8	165
1.		2.3	17.8	165
1.	.6	2.6	17.8	165
1.		1.7	17.0	175
	.0	1.0	17.0	175
1.	.1	1.2	17.0	175
3.8 (a		14.4 (at 13x)	12.9 (at 13x)	100
3.0 (a		9.0 (at 20x)	12.9 (at 20x)	100
3.3 (a	t 25x)	10.9 (at 25x)	12.9 (at 25x)	100
2.0./-	+ 10-1	144/-+10-1	141/-+10:	150
3.8 (a		14.4 (at 13x)	14.1 (at 13x)	150
3.0 (a 3.3 (a		9.0 (at 20x) 10.9 (at 25x)	14.1 (at 20x) 14.1 (at 25x)	150 150
3.3 (a	(20X)	10.9 (at 25x)	14.1 (dt 25X)	150
3.	1	9.6	18.7	170
2.		6.3	18.7	170
7.		7.3	18.7	170
/.	.0	7.5	10.7	170
1.	.9	3.6	17.8	180
1.		2.3	17.8	180
1.		2.6	17.8	180
	-			
1.	.3	1.7	17.0	190
	.0	1.0	17.0	190

Eyepieces for Spotting Scope RA III WP Series

Lycpicces for opottin	9							
Model name	Magnifi- cation (x)	Angular field of view (Real/ degree)	Angular field of view (Apparent/ degree)	Field of view at 1,000m (m) (approx.)	Exit pupil (mm)	Relative brightness	Eye relief (mm)	Weight (g)
16-48x/20-60x Zoom								
With RAII 65/65 A WP	16-48	2.4 (at 16x)	37.1 (at 16x)	42 (at 16x)	4.1 (at 16x)	16.8 (at 16x)	15.2 (at 16x)	185
With RAII 82/82 A WP	20-60	1.9 (at 20x)	37.1 (at 20x)	33 (at 20x)	4.1 (at 20x)	16.8 (at 20x)	15.2 (at 20x)	185
20x/25x LER								
With RAII 65/65 A WP	20	2.0	38.5	35	3.3	10.9	31.8	170
With RAII 82/82 A WP	25	1.6	38.5	28	3.3	10.9	31.8	170
20x/25x								
With RAII 65/65 A WP	20	2.5	47.2	44	3.3	10.9	18.0	130
With RAII 82/82 A WP	25	2.0	47.2	35	3.3	10.9	18.0	130
30x/38x Wide								
With RAII 65/65 A WP	30	2.2	59.9	38	2.2	4.8	19.3	180
With RAII 82/82 A WP	38	1.8	59.9	31	2.2	4.8	19.3	180
16-48x/20-60x Zoom DS								
With RAII 65/65 A WP	16-48	2.4 (at 16x)	37.1 (at 16x)	42 (at 16x)	4.1 (at 16x)	16.8 (at 16x)	15.2 (at 16x)	205
With RAII 82/82 A WP	20-60	1.9 (at 20x)	37.1 (at 20x)	33 (at 20x)	4.1 (at 20x)	16.8 (at 20x)	15.2 (at 20x)	205
20x/25x DS								
With RAII 65/65 A WP	20	2.5	47.2	44	3.3	10.9	18.0	140
With RAII 82/82 A WP	25	2.0	47.2	35	3.3	10.9	18.0	140

Eyepiece for Spotter XL ${\rm I\hspace{-.1em}I}$

Model name	Magnifi- cation (x)	3	Angular field of view (Apparent/		Exit pupil (mm)	Relative brightness	Eye relief (mm)	Weight (g)
		degree)	degree)	(approx.)				
Spotter XL II	16-48	2.3 (at 16x)	35.6 (at 16x)	40 (at 16x)	3.8 (at 16x)	14.4 (at 16x)	19.0 (at 16x)	_

Nikon Target Sight TGS-1

Magnification (x)	1
Effective objective diameter (mm)	8
Angular field of view (Real/degree)	9.5
Angular field of view (Apparent/degree)	9.5
Field of view at 1,000m (m)	166

Exit pupil (mm)	3
Relative brightness	9.0
Eye relief (mm)	43.1
Length x width (mm)	57 x 26
Weight (g)	21

Understanding Binoculars

Binocular performance

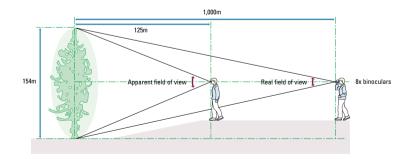
Three major elements play a vital role in binocular performance — magnification, field of view and brightness. Magnification is often regarded as the most important, but field of view and brightness are also crucial.

Magnification

Magnification, represented by a numerical value, is the relationship between a subject's real proportions and its magnified size. A subject 700 metres away seen with 7x magnification appears as it would from 100 metres with the naked eye. Magnifications less than 5x are generally not powerful enough for outdoor use. When magnification exceeds 12x, hand movement makes the image unstable and viewing uncomfortable. For general use, magnifications of 6x to 10x are recommended.

Field of view

The real field of view is the angle of the viewing field measured from the central point of the objective lens. All binoculars use numbers that indicate various specifications. In "8 x 40 8.8°", for example, 8.8° represents the real field of view. The apparent field of view* conveys how wide that field of view appears to the naked eye. The real field of view at 1.000 metres is the width of the visible area at a distance of 1.000 metres.



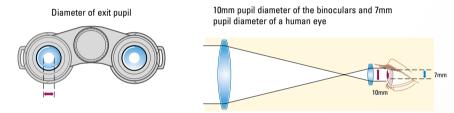
* Nikon has adopted a calculation method based on ISO 14132-1:2002, and therefore, values for the apparent field of view have changed from those previously stated. For details, see page 43.

Objective diameter

The effective aperture is the inside diameter (in mm) of the objective (front) lens frame. The larger the objective diameter, the greater the resolving power and the brighter the image. But large-diameter objective lenses make binoculars heavier, so 50mm is the general limit for manual operation.

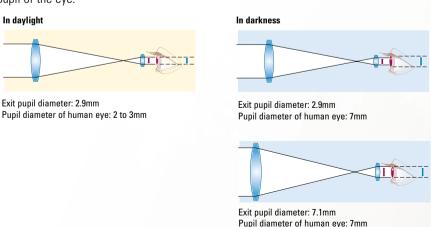
Exit pupil

The exit pupil is the image formed by the eyepiece lenses. The diameter of the exit pupil (in mm) is the effective aperture divided by magnification. The diameter of the human eye pupil varies from 2-3mm in daylight to 7mm in the dark. An exit pupil of 7mm gives maximum light to the dilated eye and is ideal for use in the dark.



Brightness

Relative brightness value is obtained by squaring the diameter of the exit pupil. The greater the relative brightness, the brighter the image. However, this value does not correspond exactly to increases in brightness over the naked eye, because light coming through the binoculars is 100% effective only if the exit pupil is the same diameter as the pupil of the eye.



The Nikon Advantage

Superior optics and design innovations ensure better views.

Nikon HG L series binoculars use the best optical technologies

For bright, high-contrast images

• Nikon's original multilayer coating

Minimises flare and ghosts, for very high transmission across a wide range of wavelengths. The result: excellent contrast and colour reproduction.

Phase correction coating

Corrects phase shifts caused when light reflects off the roof (Dach) prism. Provides a high-contrast image by eliminating the reduction of resolution.

• High-reflection silver coating

Much greater reflectivity and much less light loss from the prism, compared with ordinary aluminium coating, for brighter images.

For sharp, undistorted images

• Field flattener lens

Employed for eyepiece lens. Provides images that are sharp and clear all the way to the lens periphery.

• Distortion correction

Nikon's superb optical design provides high-level distortion correction enabling sharp, undistorted images even at the viewing area periphery.

Easy to use

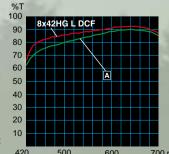
High-eyepoint design

Sophisticated design technology achieves a combination of high eyepoint and small size.



Light transmission rates

Generally speaking, the higher the light transmission rate of a lens, the brighter and clearer your image will be, with less blur and ghosts. Each of Nikon's high-grade binocular models features a high light transmission rate thanks to our multilayer-coated lenses and prisms.



A Nikon conventional product Source: Nikon (actual value)



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