

# WX 7×50 IF / 10×50 IF



# There Are No Limits. Only New Frontiers.

Since its first endeavour in the world of optical products in 1917, Nikon's affinity for binoculars innovation has delivered myriad sensational and extraordinary views to the eyes of the world. Now, with a full century of experience to draw upon, Nikon raises the bar for optics aficionados to a level thought unachievable.

Introducing Nikon WX – more than a lesson in optical achievement, WX speaks volumes by catapulting its user to the frontier of incredible sharpness throughout a seemingly endless viewing periphery. Not only can this super-wide field of view transport an entire constellation of crystal-clear imagery to the eyes of the beholder, but it does so with the amazing realism that has been Nikon's hallmark for 100 years.

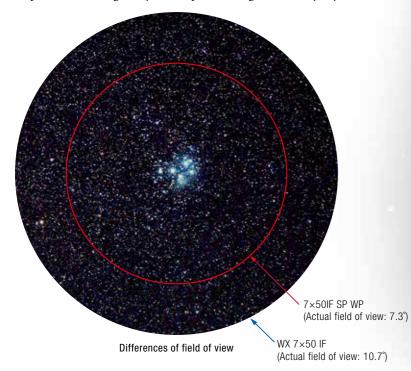
Nikon WX is truly the Binoculars of the Century.



# This is where a century of innovation takes you.

#### Eyepieces featuring unprecedented optical performance

Employing eyepieces with superior optical performance, a super-wide field of view (apparent field of view of 66.6° for WX 7×50 IF, 76.4° for WX 10×50 IF) is achieved. Minimising astigmatism and coma aberration, a sharp and clear image is realised, while the sharpness of the image at the centre of the field is achieved all the way to the periphery of the super-wide field of view. Without perceiving the frame, you can experience a feeling as if you are spacewalking into a starry sky.



#### Field Flattener Lens System

The Field Flattener Lens System is employed for compensating curvature of field from the centre to the very edge of the periphery. While realising a super-wide field of view, it assures a sharp and clear image across the entire field of view. The super-wide field of view allows you to take in a wide-sweeping view of star clusters or galaxies, while individual stars can be clearly seen as sharp points.





Conventional 7×50 binoculars Stars at the periphery are out of focus and appear as lines.

\*Simulated images

### Comprehensive optical design that includes the eyes

With a super-wide field of view, it usually becomes very noticeable that images in peripheral areas are distorted and changing as the binoculars are panned. To avoid this, pin-cushion distortion was deliberately retained, enabling comfortable observation.

We are not just trying to eliminate all aberrations. We consider the user's eyes as important parts of the optical system that convey information to the optic nerve, and execute optical design comprehensively including the user's eyes.

#### High-quality multilayer coating

High-quality multilayer coating which features uniformly high light transmittance across the entire visible range, is applied to all lenses and prisms to realise a more natural, clearer view. It reproduces the colours of stars in the night sky with fidelity.

#### Three ED glass elements employed in each tube

Using three ED (Extra-low Dispersion) glass elements in each



tube, chromatic aberration that causes colour fringing is compensated at the very edge of the field of view, realising a contrast-rich and highresolution image.

WX 7×50 IF Super-wide and flat field of view

#### Abbe-Koenig prisms

Abbe-Koenig prisms that feature total reflection on all surfaces and have a high transmission rate are employed, for a brighter field of view. Applying a phase-correction coating on roof (Dach) surfaces of Abbe-Koenig prisms, which compensates phase shifts of light when reflecting inside prisms, results in high-resolution and high-contrast images.



## Nikon's mission is to help you achieve yours.

#### Straight helicoid dioptre adjustment ring

• The dioptre adjustment ring employs a straight helicoid design. Eyepieces move back and forth in a straight line, and the lenses themselves do not rotate, ensuring the optical axis is not decentred during dioptre adjustment.



#### Turn-and-slide rubber eyecups with six-click adjustment facilitate easy positioning

non-eyeglass users.

#### Thread for attaching filter

• 55mm filter (P=0.75) can be attached to objective lens.

Advanced level of sturdiness and operability

lightweight body that facilitates handheld viewing.

that carefully pays attention to weight balance.

Employing Abbe-Koenig prisms enables a slim design

• Magnesium alloy is utilised, realising a sturdy,



#### Accessories that support comfortable astronomical observation

- Comes with tripod adaptor TRA-5. 1/4-in. (ISO1222) tripod screw enables attaching to a tripod.
- WX binoculars exclusive case is supplied for storing the binoculars and accessories.





#### Long eye relief

- view.
  - a flat shape for easy maintenance of details.

#### All lenses and prisms are free of lead and arsenic

• Under the Nikon Green Procurement Standards, we employ not only lenses and prisms but also body materials taking the environment into special consideration.

#### Waterproof and fogproof structure that withstands severe conditions

- Waterproof structure that will not be affected if submerged in water to a maximum depth of 5m/16.4 ft. for 10 minutes. (NOT designed for underwater usage.)
- Airtight structure with a nitrogen-filled body that prevents the inside of the optical system from fogging and resists mould even with significant changes in temperature.
- Wide operating temperature range of -20°C to +60°C/-4°F to +140°F enables use in severe conditions.

• Click intervals become finer as the eyecups are extended, for easier adjustment by





#### Eyepieces featuring advanced optical performance

• Achieve a super-wide field of view. The apparent field of view is 66.6° (for WX 7×50 IF) and 76.4° (for WX 10×50 IF).

\*Previous standard values of apparent field of view (real field of view × magnification) WX 7×50 IF: 75.0° WX 10×50 IF: 90.0°

• Optical design that realises both a super-wide field of view and long eye relief. Eyeglass wearers can also enjoy a full, clear super-wide field of

• Rubber eyecups are designed to be removed for cleaning eyepieces. Eyepiece frame is designed in









#### **Specifications**

	WX 7×50 IF	WX 10×50 IF
Magnification (×)	7	10
Objective diameter (mm)	50	50
Angular field of view (Real/degree)	10.7	9.0
Angular field of view (Apparent/degree)*	66.6	76.4
Field of view at 1,000m (m)	188	157
Field of view at 1,000 yd. (ft.)	563	472
Exit pupil (mm)	7.1	5.0
Relative brightness	50.4	25.0
Eye relief (mm)	17.7	15.3
Close focusing distance (m/ft.)	12.3/40.4	20.0/65.6
Length (mm/in.)	272/10.7	291/11.5
Width (mm/in.)	171/6.7	171/6.7
Depth (mm/in.)	80/3.1	80/3.1
Weight (g/oz.)	2,420/85.4	2,505/88.4
Interpupillary distance adjustment (mm/in.)	58-78/2.3-3.1	
Dioptre Adjustment (m <sup>-1</sup> )	-6 to +4	-6 to +5
Туре	Roof (Abbe-Koenig)	

\* Apparent field of view is calculated based on the ISO 14132-1:2002 standard.

#### **Supplied Accessories**





Case strap



Cover-type objective lens caps



Cover-type eyepiece cap



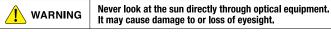
Neck strap

Tripod adaptor TRA-5

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