

EDEN Quality binoculars

This document is a translation of the test report from ing. J.A. Meijerink, member of the 'Twentse Vogelwerkgroep'. (www.tvwg.nl) This is a Dutch organization that monitors bird populations and organizes various bird related activities. Jan Meijerink is testing binoculars for bird watching for many years and has published many test reports.



Eden Binoculars are part of the home brand of KATO Group. The brand is only available in their web shops. The equipment is obtained directly from manufacturers that are located in China and also produce for other well known brands. Through direct Internet retail to the consumer these binoculars can be offered at very attractive prices. The Webshop can be reached using the following link: www.knivesandtools.com/nl/ct/eden-quality-verrekiijkers.htm (note of the translator: <http://www.edenwebshops.co.uk/en/ct/binoculars.htm> for the U.K. customers)

The 25-year warranty on defects in material and workmanship indicates that the importer is convinced of the quality of the equipment. In case the binoculars fail, they will either be repaired or replaced.

The EDEN binoculars are available in 2 lines with different qualities:

- 1 HD Binoculars with aluminum casing, filled with Nitrogen
- 2 ED binoculars with light weight magnesium casing, filled with Argon

All binoculars are equipped with a black rubber cover that is pleasant to feel and come with a bag, neck strap, rain guard and covers for the objectives. The twist-up eye caps feature 2 intermediate stages but are not completely removable, as with the well know top brands. The binoculars all focus fast so you must take care not to turn the wheel to fast. Remarkably is the good color reproduction and, with the ED models, the very low deformation of the edge of the image.

The HD binoculars

The HD binoculars are available in 8x32, 8x42 and 10x42. Focusing goes smoothly. Diopter adjustment is done by rotating the ring around the right ocular.

Initially this ring is heavy to rotate, but once you have moved it, it rotates pretty easy. After some time the ring seems to lock it selves again, preventing unwanted rotation. This is possibly caused by a special type of lubricant.

The binoculars are filled with Nitrogen but when cooled down to -20 °C (xx FF) then binoculars show more fog than other models that we have tested. Because we have no experience with these binoculars we have to wait to see how air tight they are. Therefore, for this topic I give these binoculars a rating of 4 (out of 5). At -20°C the focusing is really hard (because the lubricant gets too thick). Therefore we do not recommend these binoculars for use under extreme cold circumstances.

The image sharpness of the 8x42 binoculars is really excellent. The other two models produce an image that is a little less sharp. At the 8x32 binoculars the image of the right tube was a little less sharp than that of the left tube, as a result of some astigmatism. For now I assume this is exemplary because the other models didn't have this problem.

The closest focusing distance of the binoculars is 1.2 to 1.4 meters, which makes these binoculars very suitable for studying of insects.

The ED 8x42 binoculars

These binoculars are the top of the EDEN binoculars. At -20 ° the inside of the binoculars remained completely free of fog. The focus wheel is running nice and smooth and the Diopter adjustment is done using a wheel behind the central focusing wheel. This wheel runs kind of light so it might happen that the adjustment accidentally changes, if the binoculars are carried under a coat.

The image sharpness is excellent and the secondary spectrum is well corrected, so only very narrow colored edges appear around high contrast objects. Also the edge sharpness is pretty good and is comparable with that of other binoculars in the sub-top.

The closest focusing distance is about 3,7 meters and is a little longer than that of the other binoculars, so for studying insects I would recommend the HD series.

The wide field of view of the ED 8x42 binoculars makes them very well suited for bird watching.

Test results

In the table you find the specifications (as measured by me) and the rating for the various topics. For your reference I included test data of two other sub-top binoculars, the Nikon Monarch 8x42 DCF and the Zeiss Conquest 8x40 BT*.

Summary and conclusions

The EDEN binoculars offer remarkable value for money. It won't be easy to find similar equipment for such relatively prices. The mechanical and optical qualities are very good and are comparable to sub-top binoculars from top brands.

Because we do not have experience with these binoculars that are produced in China, there is little to say about the quality on long terms. The 25-year warranty however gives us confidence.

The HD binoculars are very well suited for studying birds and insects.

The ED 8x42 binoculars are especially suited for bird watchers that are looking for high quality for the lowest possible price.

As a pair of spare binoculars for the ornithologist or as entry level binoculars for the young birders I can really recommend the EDEN binoculars.

TWENTSE VOGELWERKGROEP

Ing. J.A.Meijerink

TEST REPORT

EDEN Binoculars

May 2010	EDEN HD 8x32	EDEN HD 8x42	EDEN ED 8x42	EDEN HD 10x42	Nikon Monarch 8x42 DCF	Zeiss Conquest 8x42 BT*
Technical data (measured)						
Weight (gram.)	497	761	678	753	611	792
Max. height (mm.)	117	149	149	149	156	163
Max. width (mm.)	128	129	136	128	129	139
Diameter of exit pupil (mm.)	4.00	5.25	5.25	4.20	5.25	5.00
Effective eye-relief (mm.)	12.5	14.0	14.0	12.0	15.0	13.0
Interpupillary distance Min – Max (mm.)	58 - 76	58 - 76	56 - 74	58 - 76	55 - 74	53 - 74
Max. rotation focussing wheel (°)	260	360	340	360	450	?
Shortest focussing distance (m.)	1.20	1.40	3.70	1.30	2.00	2.80
Twilight factor	16.0	18.3	18.3	20.5	18.3	17.9
Field of view m / 1000m ft / 1000 y	128 / 384	125 / 375	140 / 420	111 / 333	108 / 324	122 / 366
Field of view (°)	7.32	7.15	8.06	6.35	6.18	6.98
Subjective field of view (°)	54.2	53.1	56.0 & 58.8	58.1	46.7	52.0
Retail price (€ / £)	110 / 96	149 / 129	279 / 245	152 / 131	± 260 / 230	1000 / 850
Optical qualities						
Sharpness of view	3.5 & 4.5	5	5	4	5	5
Contrast	4	4.5	4.5	4.5	5	5
Colored edges	4	3.5	4	3	3	3
Edge of field sharpness	3	3	3	3	3	3
Field of view	3.5	3.5	4.5	4.5	1.5	3
Color reproduction	4.5	4.5	4.5	4.5	5	5
Internal reflections	3	3.5	3	2	4	4
Deformation of view	4.5	4.5	4	4.5	4.5	3.5
Suitable for spectacle wearers	5	5	5	4.5	5	5
Mechanical qualities at +20°C & - 20°C (68 / -4 °F)						
Hinge / interpupillary distance adjustment	5 & 3	5 & 1	5 & 1	5 & 1	5 & 5	5 & 3
Focussing	5 & 3	5 & 2	5 & 2	5 & 2	5 & 1	5 & 3
Diopter adjustment	5 & 1	5 & 1	4 & 1	5 & 2	4 & 2	4 & 3
Eye caps	5 & 5	5 & 5	5 & 5	5 & 5	5 & 5	5 & 1
Dust and air tightness	4	4	5	4	5	5

Rating: 1=Bad 2=Not so good 3=Reasonable 4=Good 5=Excellent

Warranty: 25-year warranty on defects in material and workmanship

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