

**opticon**



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**PRODUCT GUIDE 10**



Thank you for considering Opticron as the supplier of your new Binocular or Telescope. We would like to take this opportunity to tell you a little more about us, our philosophy towards you the customer and the products and services we provide.

Founded thirty eight years ago, our aim continues to focus on providing the best mix of product choice, quality and value backed up with a customer service function worth the name.

**Choice**

As you will see we offer an extensive array of equipment designed to meet the varied demands of sometimes highly discriminating users. The reason for so many individual models and model variants is to maximise the opportunity for you to purchase the best instrument suited to you.

**Quality and Value** are two factors critical to the success of our business. Both have been developed and are maintained in partnership with a small number of Japan's elite optical manufacturers. The benefits of these relationships are best seen in the optical performance of the equipment, the guarantees offered and the value for money which we believe is second to none.

**Customer Service**

If you are a professional, enthusiast or occasional user of optical equipment, we have the knowledge and expertise to help you make the right choice based on price and application.

In addition to our network of Opticron stockists, you can contact us directly and purchase through our Mail Order Service if you are unable to purchase locally. We have on-site testing facilities for the entire Opticron range and operate a **UK based** service centre for all our equipment.

The Product Guide follows a logical pattern making it easy to compare the products, while comprehensive 'Chooser Guides' offer practical information and advice on the equipment illustrated.

For up to the minute information on new products please visit our online catalogue at [www.opticron.co.uk](http://www.opticron.co.uk)

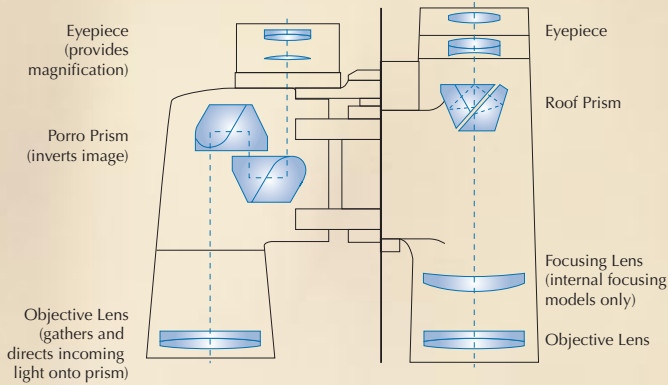
We hope you find the contents interesting and informative. If you have any comments we would be happy to hear from you.

| Contents                               | Page  |
|--|-------|
| Choosing Your Binocular                | 3     |
| Binoculars                             | 4-23  |
| Marine Binoculars                      | 24    |
| Specialist & Observation Binoculars    | 25    |
| Compact Binoculars                     | 26-29 |
| Monoculars                             | 30-31 |
| Choosing Your Telescope                | 32-33 |
| Telescopes                             | 34-43 |
| Telephotography                        | 44-45 |
| Eyepieces                              | 46    |
| UTA / Laser Rangefinder / CMOS Telecam | 47    |
| Tripods & Mounts                       | 48-50 |
| Accessories                            | 51    |

# CHOOSING YOUR BINOCULAR

The following information aims to give you a basic understanding of how binoculars work, the different specifications available and what they mean, plus some points to help you choose the best instrument suited to you.

**Specification** E.g. 8x42. The number '8' denotes the magnification and means an object appears to be 1/8th of its actual distance away. Using this rule an object 40m distant appears to be only 5m away. '42' is the diameter of the objective lens (the large end) in mm through which light enters the binocular.

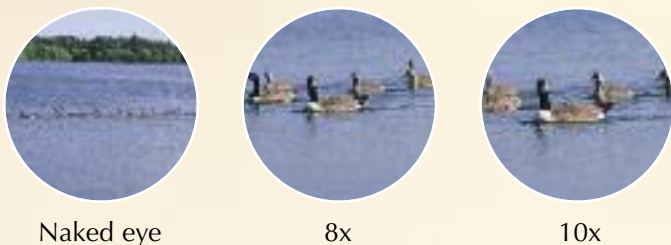


**Z** or **B** stand for **porro prism** binoculars. The basic optical design of these 'traditional-shape' instruments mean they tend to deliver better optical performance for your money compared to **roof prism (D)** binoculars, which are more compact but also more expensive.

The rise in popularity of roof prism binoculars is as a direct result of this system being favoured in the development of instruments with user oriented features. These include; internal focusing for waterproofing, long eyerelief eyepieces that enable the viewer to obtain the full field of view with or without glasses and close focus making them useful for watching butterflies and other insects.

**B** when seen on roof prism binoculars including Opticron **BGA** = full field of view for spectacle wearers. **GA** = rubber armouring and **W** or **WA** = wide angle vision. **CF**, (centre focusing) is more popular than **IF** (individual eyepiece focusing) especially when you need to focus at different distances under 50m. Most 'IF' binoculars are 7x magnification and have a large depth of focus which usually eliminates any need for focusing adjustment at distances over 50m.

**What magnification?** Within any given range of binoculars the higher the magnification relative to the objective lens diameter, the lower the apparent image quality. Images appear less sharp and have a lower 'relative' brightness and poorer colour contrast.



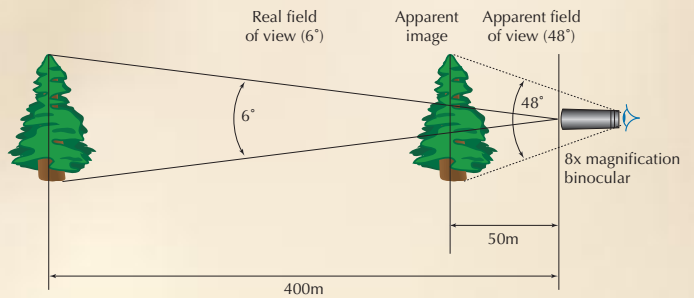
Higher magnification binoculars also;

- have a shallower depth of focus (distance in focus at any one focus setting), requiring more use of the focus wheel
- amplify natural hand-shake affecting the stability of the image being viewed.

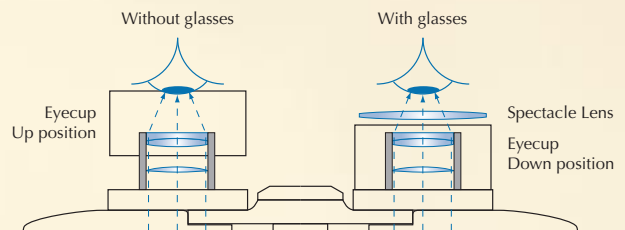
For general observation choose a 7x or 8x magnification. If you want binoculars of 10x or over try them first.

**What objective lens size?** The amount of light entering a binocular is directly related to the surface area of the objective lens (OG). A 50mm OG will admit 2.5x the light of a 30mm OG. The amount of light reaching the eye is known as the exit pupil diameter (EPD) and its size can be found by dividing the OG diameter by the magnification. For example the EPD of an 8x32 = 4mm while the EPD of an 8x56 = 7mm. As a general rule the iris dilates between 2 and 3 mm (bright sunlight) and 6 and 7 mm (twilight) and so a choice should be made on the type of use the binocular is being put to. For general use choose a 7x42 or 8x42 binocular with an EPD of +5mm.

**The field of view** of a binocular is dependent on the optical design and not simply a product of the magnification and objective lens diameter. It is expressed as either the width of panoramic view in metres from a distance of 1000 metres or in degrees where 1° is approximately 17.45m.



**Wearing glasses** Many binoculars provide the full field of view when wearing glasses by either folding down the rubber eyecups or by turning/pushing retractable eyecup assemblies to the 'down' position. As a general rule the longer the eyerelief - the distance between the surface of the eyepiece and the point where the pupil is positioned for full field of view - the better the instrument for spectacle wearers. If you think you want to wear glasses while using your binocular, choose one with an eyerelief of 15mm or over.



**Weight** For many people, small, lightweight binoculars that can be taken anywhere will be used much more than larger, heavier ones which tend to be left at home or in the car!

# AURORA® BGA

ROOF PRISM





The advantages are perfectly clear

# AURORA® BGA

## ROOF PRISM



8x42 BGA

The Aurora BGA is the latest example of putting our maxim “smaller, lighter, sharper” into practice.

Building on the strengths of the original BGA concept and models like the DBA Oasis, both the 8x42 and 10x42 resemble and handle like smaller 8x32/10x32 binoculars but with the performance advantages of a larger 42mm objective lens.

Designed and manufactured to be smaller, lighter and sharper with a wider field of view and better close focus compared to any previous BGA model, the Aurora delivers the ultimate balance between size and weight, resolution and field of view currently attainable from this roof prism format.

The optical design doesn't just reduce the overall dimensions and finished weights of the Aurora but delivers 7.2° (8x42) / 6.5° (10x42) field of view with stunning resolution guaranteed at under 4' for each and every binocular. Close focus is under 2m and the model is fully compatible with the 2.5x UTA.

Manufactured using a new lightweight alloy body and protected from heavy use and the elements in a beautifully finished textured rubber covering with patented shock-proof rubber objective lens protection, the Aurora feels very special in the hand, is perfectly balanced and comes with a focusing set-up other binoculars can only aspire to.



The Aurora BGA is available in a choice of colour combinations:

1. Green - see pages 4-5
2. Black - main
3. Black & Gunmetal - left

See table on opposite page for product codes and specifications.



**10x42 BGA**

Other features include:

- Fully nitrogen gas filled waterproof construction to a depth of 5m
- Internal focusing with 540° rotation allowing precise adjustment with sub 2m close focus
- The highest quality roof prisms featuring Oasis prism coating and phase correction coatings
- New Opticron S-type multi-coating that allows both models to achieve the highest possible clarity & colour contrast in the widest range of light conditions from early morning till dusk
- Durable alloy 4-stage locking rotating retractable eyecup assembly with 'click stop' dioptre adjustment
- Finished weights of under 670g
- Integral tripod adapter socket

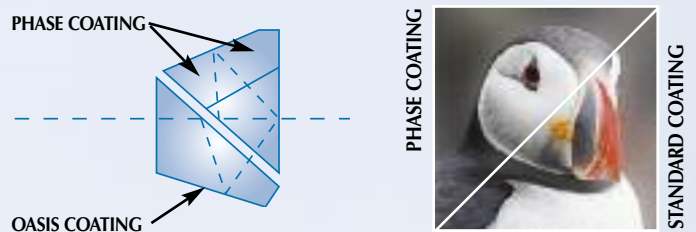
Available in 8x42 and 10x42 and a choice of finishes; black, green or black & gunmetal, each Aurora BGA is supplied complete with a comprehensive 30 year guarantee.



Oasis is the name given to a 64 layer coating process applied to the reflective surface of each roof prism. Oasis improves light emission to 99% over a broader spectrum at the reflective face when compared to silver coating traditionally used on many high quality roof prism binoculars. The result is a measurable increase in light transmission and overall image clarity.

**PC phase correction coating**

When light waves are reflected at the opposite faces of a roof prism, phase shift occurs resulting in marginal deterioration in sharpness. Phase corrected coatings are designed to correct this phase shift within the prism – increasing overall clarity and definition.



| Specifications     | 8x42    | 10x42   |
|--------------------|---------|---------|
| Product Code Bl    | 30490   | 30491   |
| Product Code Gr    | 30492   | 30493   |
| Product Code Bl/Gm | 30494   | 30495   |
| Field (m)          | 126     | 113     |
| Min Focus (m)      | 1.8     | 1.8     |
| Eyerelief (mm)     | 20      | 19      |
| IPD (mm)           | 58-76   | 58-76   |
| HxW (mm)           | 140x126 | 140x126 |
| Weight (g)         | 654     | 663     |

Models supplied in soft leather case with 31020 rainguard, neoprene bungee lanyard and removable integral objective lens caps

# DBA<sup>®</sup> OASIS<sup>®</sup> S-COAT

## ROOF PRISM



8x42 BGA



Recently updated with a brand new multi-coating, DBA Oasis S-Coat binoculars are among the very best compact roof prism binoculars available to today's birdwatcher, offering sublime performance and comfort in a class leading compact body.

Designed for the professional birdwatcher and wildlife enthusiast, principle features of the DBA Oasis S-Coat include:

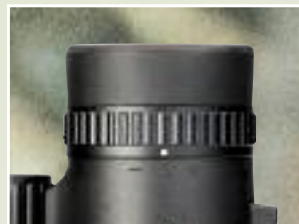
- Complex multi-element long eyerelief eyepieces with large diameter eye lenses that provide 7° (8x42) and 6° (10x42) fields of view with complete viewing comfort
- The highest quality roof prisms featuring Oasis prism coating and phase correction coating (see page 7)
- New S-type multi-coating helping both models achieve extremely high levels of clarity & colour contrast in a variety of light conditions
- Internal focusing (infinity to 2.2 metres close focus) with 500° rotation allowing precise adjustment



Opticron 'S-type' combination multi-coating on all air/glass surfaces



Large diameter eyepieces for viewing comfort



'Click-stop' dioptre adjustment



500° rotation wide wheel focusing infinity to 2.2m



**10x42 BGA**

Manufactured to deliver this high level of performance throughout the 30 year warranted lifetime each DBA Oasis S-Coat also benefits from:

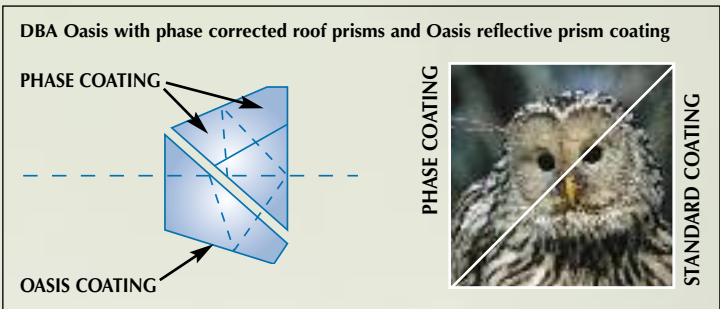
- Fully nitrogen gas filled waterproof construction to a depth of 5m
- Natural rubber armouring with contoured ribs on the main body and focus wheel to maximise comfort and handling with or without gloves
- Durable alloy 3 stage locking rotating retractable eyecup assembly with 'click stop' dioptre adjustment
- Finished weights of under 25oz with perfect balance
- Integral tripod adapter socket
- 2.5x UTA option (see page 47 for details)



**3 stage locking rotating retractable eyecup assembly**

| Specifications | 8x42    | 10x42   |
|----------------|---------|---------|
| Product Code   | 30307   | 30308   |
| Field (m)      | 122     | 105     |
| Min Focus (m)  | 2.2     | 2.2     |
| Eyerelief (mm) | 18      | 18      |
| IPD (mm)       | 57~77   | 57~77   |
| HxW (mm)       | 152x128 | 152x128 |
| Weight (g)     | 691     | 707     |

Models supplied in soft leather case with 31020 rainguard, neoprene bungee lanyard and removable integral objective lens caps



# IMAGIC® BGA SE

## ROOF PRISM

8x32 BGA



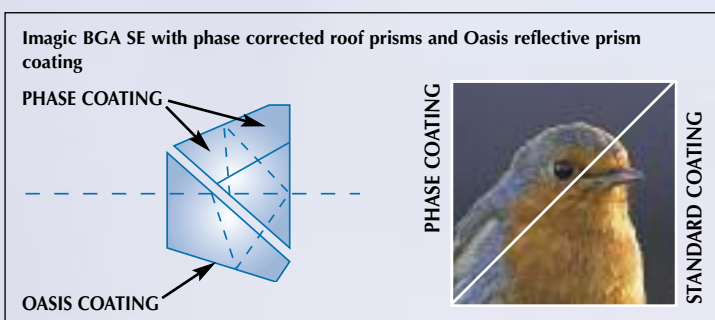
The 6th generation Imagic BGA will challenge any preconceptions you may have regarding the quality and performance you can expect when spending £400 on a roof prism binocular. Remaining true to the original design concept; a range of compact, lightweight and ergonomically sound instruments packed with the latest features, the Imagic BGA SE steps-up the challenge to premium roof prism binoculars offering outstanding performance and value for money.

Designed and manufactured to feel as good as they look, these highly durable instruments are available in four specifications to suit individual requirements including:

- A 7x42 with large depth of focus and extraordinary low light performance for hunting and woodland viewing
- The popular 8x42 and 10x42 most often selected for general birdwatching and wildlife observation
- A 'pocket size' 8x32 with a wide field of view and extreme close focus making them perfect for watching butterflies and other insects

Optically the Imagic BGA SE's feature:

- All new eyepiece designs that offer class leading fields of view 8° (8x32), 7° (7/8x42), 6.5° (10x42)
- Large diameter long eyerelief eyepieces that guarantee a really comfortable viewing experience with or without glasses
- 'PGK' glass prisms with PC phase correction coating and Oasis prism coating (see page 7)
- Opticron F-type combination multi-coating constructed to maximise colour contrast in poor light so often associated wildlife observation in N. Europe





7x42 BGA  
 8x42 BGA  
 10x42 BGA

Mechanically the binoculars:

- Feature a new lightweight magnesium body
- Are nitrogen gas filled and waterproof to 3 metres
- Are internally focused with close focus to 2 metres
- Are covered in a revised and lightly textured natural rubber armouring contoured to deliver a truly positive handling experience with or without gloves
- Include 4 stage twist type retractable eyecup assembly
- Feature a wide wheel focusing with an easy-grip rib pattern
- Provide a connection to a photo/video tripod using 31022 or 31012 binocular mounts

Each Imagic BGA SE is supplied with a 30 year guarantee.

| Specifications | 8x32    | 7x42    | 8x42    | 10x42   |
|----------------|---------|---------|---------|---------|
| Product Code   | 30477   | 30478   | 30479   | 30480   |
| Field (m)      | 140     | 122     | 122     | 113     |
| Min Focus (m)  | 1.5     | 2       | 2       | 2       |
| Eyerelief (mm) | 17      | 24      | 22      | 21      |
| IPD (mm)       | 58~74   | 58~74   | 58~74   | 58~74   |
| HxW (mm)       | 133x121 | 152x124 | 152x124 | 152x124 |
| Weight (g)     | 657     | 669     | 698     | 706     |

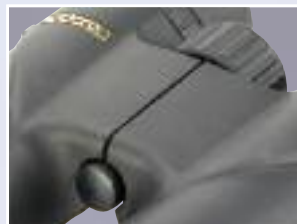
Models supplied in soft leather case with 31028 rainguard and 29014 neoprene lanyard



Long eyerelief eyepieces with 4 stage rotating retractable eyecup assembly



Moulded thumb grips for optimum handling



Wide wheel focusing infinity to 2m Tripod adapter socket



Optional Extra: 2.5x UTA (see page 47 for details)

# VERANO® BGA PC OASIS®

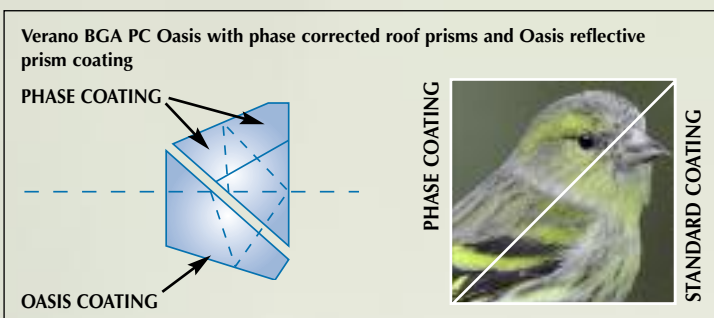
## ROOF PRISM

8x42 BGA  
10x42 BGA



Named after the Spanish word for summer, the 2010 Verano BGA PC Oasis builds on the strengths of previous models offering unbeatable performance and value in a brand new super lightweight polycarbonate and alloy body. The design is both elegant and simple and delivers a range of Opticron BGA models with finished weights between just 524g and 654g.

Fitting neatly between the Imagic BGA SE and Countryman BGA T PC in terms of overall optical performance and specification, the three models; 8x32, 8x42 and 10x42 utilise a fully multi-coated, internally focused roof prism optical system which has been 'balanced-out' to deliver optimum colour contrast across a wide range of different light conditions. The combination of high quality PC phase corrected prisms and Oasis high reflection prism coatings maximise light transmission and resolution while the complex multi-element eyepiece designs ensure comfortable vision for spectacle wearers with minimal edge distortion.





**8x32 BGA**

Mechanically the Verano benefits from:

- Internal focusing with close focus to 1.8 metres or under
- Nitrogen waterproof construction to a depth of 3 metres
- Highly durable textured rubber covering for comfort and grip
- Revised Opticron 'house style' wide wheel focusing
- Smooth action aluminium twist type eyecup assemblies

Verano BGA PC Oasis models offer full compatibility with the Opticron 2.5x UTA (see page 47 for details) and benefit from a comprehensive 30 year guarantee.

| Specifications | 8x32    | 8x42    | 10x42   |
|----------------|---------|---------|---------|
| Product Code   | 30500   | 30501   | 30502   |
| Field (m)      | 131     | 109     | 105     |
| Min Focus (m)  | 1.5     | 1.8     | 1.8     |
| Eyerelief (mm) | 18      | 21      | 19      |
| IPD (mm)       | 56~74   | 56~74   | 56~74   |
| HxW (mm)       | 120x122 | 142x125 | 142x125 |
| Weight (g)     | 524     | 654     | 653     |

Models supplied in soft neoprene case with rainguard and 29014 neoprene lanyard



Long eyerelief eyepieces with rotating eyecup assembly and right side dioptre adjustment



Wide wheel focusing



Lightweight ergonomic polycarbonate and alloy body



Tripod adapter socket

# HR WP

## PORRO PRISM

8x42 BCF.GA



In a market segment dominated by the roof prism binocular, the HR WP re-thinks, re-works and re-packages the porro prism binocular for today's more demanding user.

Designed for both the enthusiast and those seeking the very highest optical resolution for their money, the HR WP successfully combines the inherent qualities of both traditional porro prism and modern roof prism formats into a single multi-purpose, user friendly, high performance field glass.

Available in 8x42 and 10x42, each optical system uses the enlarged 'B' porro prism format in combination with internal focusing and long focal length long eyerelief eyepieces. Each glass component is of a very high quality and all air-to-glass surfaces are fully multi-coated to minimise light loss throughout the system.



Rotating retractable eyecup assembly



Centrally located locking dioptre adjustment wheel



Ergonomic shoulder design with high contact rubber covering



Wide wheel focusing Tripod adapter socket



**10x42 BCF.GA**

To keep weight at a minimum while maintaining rigidity, the chassis is built using a mix of aluminium, magnesium and plastics. Hermetically sealed, each instrument is fully nitrogen waterproof to a depth of 3m and is guaranteed for 30 years against manufacturing defects.

The bold and innovative design is finished in a smooth natural rubber covering with a high contact surface pattern for extra grip. The models also feature Opticron house-style focusing wheel covering, twist type retractable eyecups and left side dioptre adjustment controlled on the centre focus wheel.

For truly high resolution optics in a modern form, look no further than the HR WP.



| Specifications | 8x42    | 10x42   |
|----------------|---------|---------|
| Product Code   | 30090   | 30091   |
| Field (m)      | 112     | 89      |
| Min Focus (m)  | 3       | 3       |
| Eyerelief (mm) | 20      | 17      |
| IPD (mm)       | 56-73   | 56-73   |
| HxW (mm)       | 126x183 | 126x183 |
| Weight (g)     | 715     | 725     |

Models supplied in soft case with 31025 rainguard and wide lanyard

# COUNTRYMAN® BGA T PC OASIS®

## ROOF PRISM

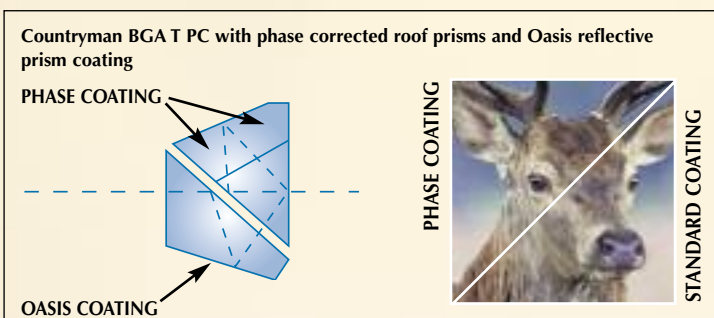


8x42 BGA  
10x42 BGA

The new Countryman BGA T PC Oasis binoculars are a range of rugged, lightweight roof prism binoculars offering all the advantages of internal focusing so popular with today's wildlife observer. Upgraded for 2010 with a brand new soft touch textured rubber finish for extra grip and featuring a revised 3-stage retractable eyecup assembly, these Japanese made models punch above their weight for resolution, light transmission and colour contrast.

Specifications and features include:

- Fully multi-coated optical system, including high quality PC phase corrected prism units and Oasis prism coating
- Long eyerelief eyepieces giving full field of view for glasses wearers
- Nitrogen filled construction for waterproofing to a depth of 3 metres





**10x50 BGA**

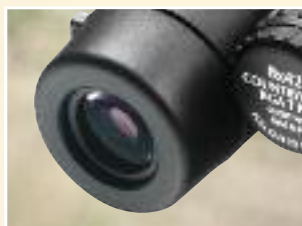
- Durable textured 'natural' rubber armoring delivering comfort and grip
- Wide wheel glide-action focusing with right hand side dioptre adjustment
- 3-stage alloy retractable eyecup assemblies
- Tripod adapter socket
- Comprehensive 10 year guarantee

| Specifications | 8x42    | 10x42   | 10x50   |
|----------------|---------|---------|---------|
| Product Code   | 30505   | 30506   | 30507   |
| Field (m)      | 109     | 88      | 88      |
| Min Focus (m)  | 2.9     | 2.7     | 4       |
| Eyerelief (mm) | 19      | 18      | 19      |
| IPD (mm)       | 56~74   | 56~74   | 56~74   |
| HxW (mm)       | 138x126 | 138x126 | 167x131 |
| Weight (g)     | 654     | 664     | 797     |

Models supplied in soft case with 31020 rainguard, wide lanyard and objective lens caps



Fully multi-coated optics (all air/glass surfaces)



Rotating retractable eye cup assembly



Wide wheel focusing with centrally located locking dioptre adjustment wheel



Tripod adapter socket

# BGA CLASSIC 7x36

## ROOF PRISM



7x36 BGA



Fifth generation BGA offering superior performance to the enthusiast looking for a compact, well balanced, easy to use wide-angle binocular with large depth of field and 2m close focus.

With an optical system designed to deliver comfortable viewing for long periods, specifications include Oasis prism coating (see page 7), PC phase correction for optimum resolution and Opticron N-type multi-coating for superb colour contrast.

Delivering a wide-angle 7.2° field of view with long eyerelief for full field of view with glasses, the binocular features 3-stage rotating retractable eyecups and click-stop right dioptre adjustment. Focusing is via glide-action wide wheel geared for 540° or 1.5 turn from 2 metres to infinity.

Mechanically the instrument uses an alloy and polycarbonate main body structure and is nitrogen filled and fully waterproof to a depth of 5 metres.

Finished in contoured natural rubber armour shaped to reduce weight wherever possible but ensuring a good level of protection, the BGA Classic 7x36 is supplied with a comprehensive 30 year guarantee.

| Specifications | 7x36    |
|----------------|---------|
| Product Code   | 30208   |
| Field (m)      | 126     |
| Min Focus (m)  | 2       |
| Eyerelief (mm) | 19      |
| IPD (mm)       | 57-77   |
| HxW (mm)       | 138x128 |
| Weight (g)     | 623     |

Model supplied in soft leather case with 31020 rainguard and neoprene lanyard



'B' specification eyepieces for full field with spectacles



Rotating retractable eyecups with 'click stop' right eyepiece adjustment



Moulded thumb grips for optimum handling

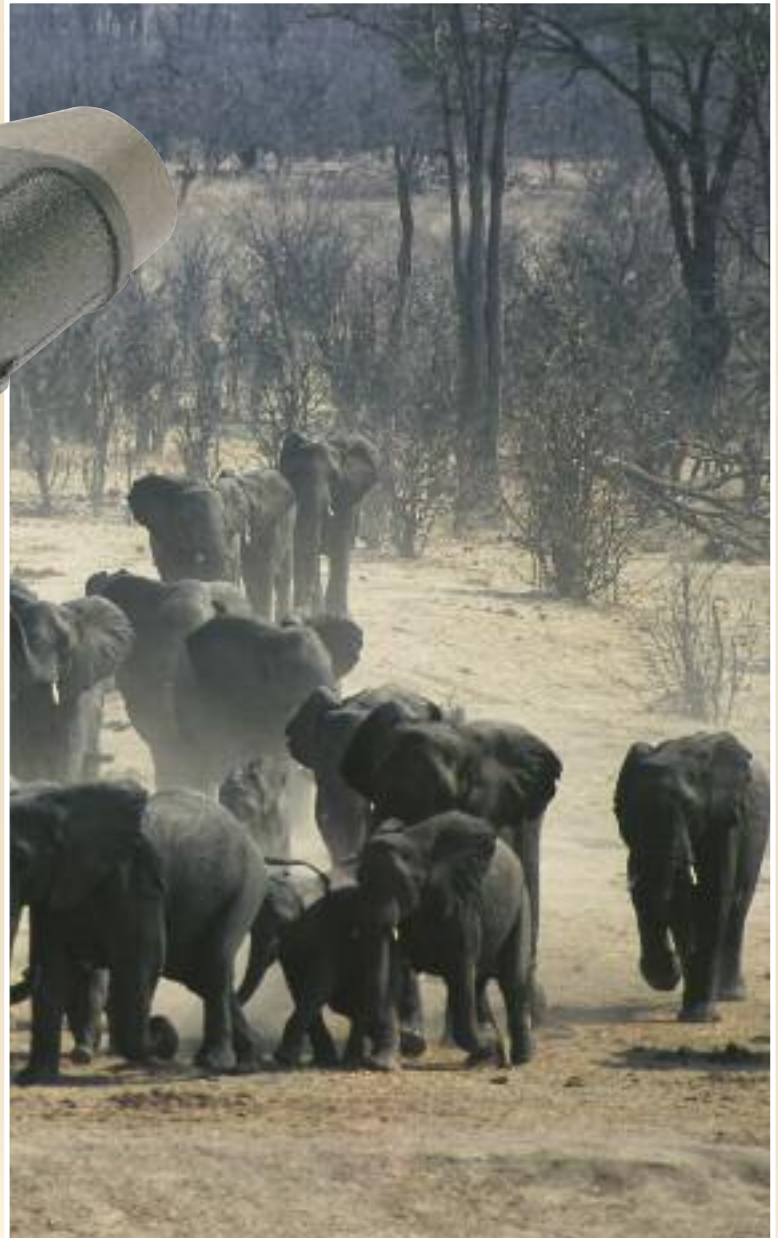


Wide wheel focusing infinity to 2m  
Tripod adapter socket

# TRAVELLER® BGA

## ROOF PRISM

- 6x32 BGA
- 8x32 BGA
- 10x32 BGA



Each Traveller BGA is a small, lightweight 'take anywhere' binocular encompassing all the features of traditional roof prism instruments, wrapped up in a body weighing under 460g (17oz) and standing only 10cm (4") off the table.

An excellent compromise for the outdoor enthusiast preferring the capability of a 40/42mm OG instrument but wanting the portability of a compact pocket binocular, the Traveller uses an internally focused roof prism design and is fully nitrogen gas waterproof to a depth of 3 metres.

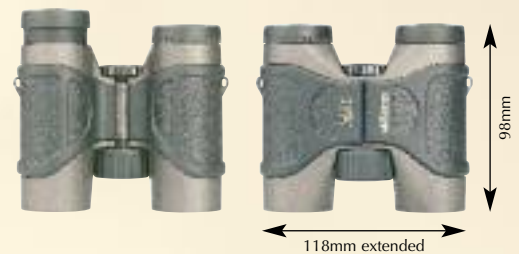
Other specifications include:

- Fully multi-coated optical system with BAK4 PC phase corrected roof prisms with HLT coatings
- Long eyerelief eyepieces for full field with or without glasses
- Push/pull retractable eyecups
- Close focus to under 2 metres
- Wide wheel focusing (positioned at the base of the focusing shaft)
- Main body rubber cover for comfort and grip
- Hinge lock system to maintain IPD while in use

Traveller BGA binoculars are supplied with a comprehensive 30 year guarantee.

| Specifications | 6x32    | 8x32    | 10x32   |
|----------------|---------|---------|---------|
| Product Code   | 30397   | 30398   | 30399   |
| Field (m)      | 141     | 111     | 90      |
| Min Focus (m)  | 1.5     | 1.5     | 1.5     |
| Eyerelief (mm) | 19      | 19      | 16      |
| IPD (mm)       | 57~71.5 | 57~71.5 | 57~71.5 |
| HxW (mm)       | 98x118  | 98x118  | 98x118  |
| Weight (g)     | 450     | 460     | 445     |

Models supplied in soft case with 31025 rainguard and padded lanyard



Push/pull retractable eye cup assembly



Hinge lock to maintain a constant IPD



Wide wheel focusing



Rubber covering for comfort and grip

# SR.GA®

## PORRO PRISM

An up-rated version of the original Opticron HR, the SR.GA offers the highest standards of optical performance and manufacturing quality in a traditional porro prism format.

Simplicity of design coupled with high-grade glass components mean that both models deliver stunning resolution – matching any roof prism binocular costing twice the price. In addition the instruments benefit from a combination multi-coating meaning different coating types are applied individually to different components within the optical system. More costly than a universally applied single multi-coating, the process has an appreciable effect, improving colour contrast in bright sunlight at midday or low light at dawn and dusk.

Finished in contoured natural rubber for positive handling with or without gloves, the 8x32 features wide-angle eyepieces, the 10x50 long eyerelief.

SR.GA binoculars are supplied with a comprehensive 30 year guarantee.



8x32 ZWCF.GA



10x50 ZCF.GA

| Specifications | 8x32    | 10x50   |
|----------------|---------|---------|
| Product Code   | 30320   | 30325   |
| Field (m)      | 144     | 87      |
| Min Focus (m)  | 4       | 7.5     |
| Eyerelief (mm) | 13      | 19      |
| IPD (mm)       | 58~72   | 58~72   |
| HxW (mm)       | 101x160 | 174x175 |
| Weight (g)     | 546     | 820     |

Models supplied in soft leather case with rainguard and wide lanyard



# IMAGIC® TGA WP

## PORRO PRISM

Designed to look and feel exceptional, Imagic TGA Waterproof binoculars are guaranteed to outperform similarly priced roof prism models delivering class winning clarity and definition.

Lightweight, well balanced and nitrogen gas filled to protect against problems of misting up in wet weather, each body is covered in a natural rubber armouring specially designed with unique mouldings that maximise grip and comfort in the hand. Features include:

- BAK4 prisms and fully multi-coated optics
- Long eyerelief for spectacle wearers with rotating retractable eyecup assembly with extension lock & click stop
- Integral tripod adapter socket
- 30 year guarantee



7x42 ZCF.GA  
8x42 ZCF.GA  
10x42 ZCF.GA

| Specifications | 8x32    | 7x42    | 8x42    | 10x42   | 7x50    | 10x50   |
|----------------|---------|---------|---------|---------|---------|---------|
| Product Code   | 30550   | 30551   | 30552   | 30553   | 30554   | 30555   |
| Field (m)      | 122     | 126     | 114     | 97      | 105     | 93      |
| Min Focus (m)  | 2.5     | 4       | 2.9     | 2.9     | 4.9     | 4.5     |
| Eyerelief (mm) | 21      | 22      | 21      | 21      | 21.5    | 19.5    |
| IPD (mm)       | 57~73   | 57~73   | 57~73   | 57~73   | 57~73   | 57~73   |
| HxW (mm)       | 114x165 | 142x180 | 142x180 | 142x180 | 173x191 | 173x191 |
| Weight (g)     | 614     | 682     | 682     | 687     | 805     | 834     |

Models supplied in soft case with rainguard and wide lanyard



8x32 ZCF.GA

7x50 ZCF.GA  
10x50 ZCF.GA

# EXPLORER® BGA

## ROOF PRISM

Designed to meet and exceed the demands of today's wildlife watcher looking for a quality field binocular for around £200, the Explorer BGA delivers class leading figures for resolution and brightness combined with better than average colour contrast.

The long eyerelief eyepieces offer 6.7° 8x42 and 6.1° 10x42 fields of view with a refreshing lack of edge distortion - both left to right & top to bottom. The wide wheel swift-focus system brings infinity focus to 2m in half a turn with close focus rated at just 1.5m.

Other features include:

- Nitrogen waterproof construction
- PC phase corrected prisms integrated into a fully multi-coated optical system
- Multi-stage retractable eyecups
- 10 year guarantee

Models available in Black or Dark Green full body rubber armour.

| Specifications  | 8x42    | 10x42   |
|-----------------|---------|---------|
| Product Code BI | 30020   | 30021   |
| Product Code Gr | 30022   | 30023   |
| Field (m)       | 117     | 106     |
| Min Focus (m)   | 1.5     | 1.5     |
| Eyerelief (mm)  | 25      | 16      |
| IPD (mm)        | 55~76   | 55~76   |
| HxW (mm)        | 155x132 | 155x132 |
| Weight (g)      | 757     | 743     |



Models supplied in soft case with rainguard and wide padded lanyard



# DISCOVERY WP PC

## ROOF PRISM

Using an ultra-compact optical design, the Discovery WP PC series are among the smallest waterproof roof prism binoculars available on the market today. With a host of features including WA eyepieces; 7.5° (8x32), 7.5° (8x42) 6.0° (10x42) plus excellent close focus ability, each Discovery WP PC offers the value conscious customer a stylish user friendly field glass.

Features include:

- Nitrogen waterproof construction
- Lightweight magnesium bodies (8x42, 10x42 & 8x50)
- Super lightweight plastic body (8x32)
- Fully coated optics with PC phase corrected prisms
- Long eyerelief for spectacle wearers with twist type eyecups
- Click stop right dioptre adjustment
- Close focus to under 2m
- 5 year guarantee



| Specifications | 8x32    | 8x42    | 10x42   | 8x50    |
|----------------|---------|---------|---------|---------|
| Product Code   | 30452   | 30458   | 30459   | 30457   |
| Field (m)      | 131     | 131     | 105     | 122     |
| Min Focus (m)  | 1.2     | 1.5     | 1.5     | 1.5     |
| Eyerelief (mm) | 17      | 22      | 17      | 21      |
| IPD (mm)       | 57~75   | 56~74   | 58~75   | 58~75   |
| HxW (mm)       | 108x117 | 133x126 | 133x126 | 145x133 |
| Weight (g)     | 391     | 703     | 696     | 797     |

Models supplied in soft case with rainguard and wide lanyard



8x32 DWCF.GA



8x50 DCF.GA

# TRAILFINDER® II

## ROOF PRISM

New for 2009, the Trailfinder II replaces the Countryman MC T porro prism offering similar standards of performance in a more compact roof prism body that offers nitrogen waterproofing and long eyerelief on both models.

With superior specification and optical quality over the entry level Oregon LE WP, the T2's combination of 7.2° 8x42 and 6.5° 10x42 fields of view, lightweight magnesium alloy body (protected in a choice of black or dark green durable textured rubber) and positive focus system all go to create a field glass that is both reassuringly comfortable and easy to use.

Other features include;

- Fully multi-coated optical system including BAK prisms and PC phase correction coatings
- Long eyerelief, wide angle<sup>1</sup> eyepieces fitted with twist type retractable eyecups
- Internal focusing with close focus to 1.5m
- 5 year guarantee

<sup>1</sup>10x42

| Specifications  | 8x42    | 10x42   |
|-----------------|---------|---------|
| Product Code Bl | 30035   | 30037   |
| Product Code Gr | 30036   | 30038   |
| Field (m)       | 125     | 113     |
| Min Focus (m)   | 1.5     | 1.5     |
| Eyerelief (mm)  | 21      | 16      |
| IPD (mm)        | 58~77   | 58~77   |
| HxW (mm)        | 140x128 | 140x128 |
| Weight (g)      | 748     | 737     |

Models supplied in soft case with rainguard and padded lanyard



8x42 DCF.GA  
10x42 DWCF.GA



# OREGON LE WP

## ROOF PRISM

Budget nitrogen waterproof series delivering solid performance and good value for money for people wanting the advantages of roof prism design. Recently updated with high-contact focus wheel, textured eyecups and dioptre adjustment ring, features include:

- BAK 4 - fully multi-coated optical system
- Long eyerelief and twist type retractable eyecup assembly
- 'Sandblast' rubber armoured finish
- Wide wheel focusing
- Wide-angle 8x32 with 8° field of view
- Close focus to 1.8m (8x32), under 4m (8/10x42)
- 5 year guarantee



8x32 DWCF.GA

| Specifications | 8x32    | 8x42    | 10x42   |
|----------------|---------|---------|---------|
| Product Code   | 30447   | 30448   | 30449   |
| Field (m)      | 141     | 114     | 101     |
| Min Focus (m)  | 1.8     | 4       | 4       |
| Eyerelief (mm) | 15      | 22      | 19      |
| IPD (mm)       | 58~73   | 56~74   | 56~74   |
| HxW (mm)       | 109x118 | 150x125 | 150x125 |
| Weight (g)     | 515     | 730     | 730     |

Models supplied in soft case with rainguard and wide lanyard



8x42 DCF.GA  
10x42 DCF.GA

# ASPHERIC WA

## PORRO PRISM

An excellent 'starter' binocular for birdwatching and general wildlife observation, the Aspheric WA has been awarded Best Buy in both *Birdwatching* and *BBC Wildlife* magazines. Recently upgraded with twist type eyecups, features include:

- Super wide angle 8.2° FOV
- Good eyerelief for some spectacle wearers
- BAK4 prisms plus fully multi-coated optical system (all air/glass surfaces)
- Rubber armoured body
- Wide band focusing
- Close focus to under 3m
- 2.5x UTA option (see page 47 for details)
- 5 year guarantee

| Specifications | 8x40    |
|----------------|---------|
| Product Code   | 30343   |
| Field (m)      | 143     |
| Min Focus (m)  | 2.9     |
| Eyerelief (mm) | 14      |
| IPD (mm)       | 59-71   |
| HxW (mm)       | 145x172 |
| Weight (g)     | 700     |

Model supplied in soft case with wide lanyard



# VEGA II

## PORRO PRISM

100% made in Japan and featuring fully coated optics and wide wheel focusing choosing a VEGA II guarantees you good all round performance and value from the compact 8x30 to the highly competent 8x56 astronomical model.

Each model delivers excellent image quality for its price, while the extensive choice on offer means you won't be compromised in yours whether for holidays, sports or general wildlife observation.

Features and options include integral tripod adapter socket, 2.5x UTA (see page 47 for details) and 5 year guarantee.



8x30 ZCF.GA



8x40 ZCF.GA  
10x40 ZCF.GA



7x50 ZCF.GA  
10x50 ZCF.GA  
12x50 ZCF.GA  
8x56 ZCF.GA



| Specifications | 8x30    | 8x40    | 10x40   | 7x50    | 10x50   | 12x50   | 8x56    |
|----------------|---------|---------|---------|---------|---------|---------|---------|
| Product Code   | 30138   | 30137   | 30136   | 30135   | 30134   | 30133   | 30214   |
| Field (m)      | 149     | 149     | 123     | 123     | 123     | 105     | 113     |
| Min Focus (m)  | 4.2     | 4.6     | 4.8     | 5.7     | 7       | 8       | 5       |
| Eyerelief (mm) | 11      | 12      | 11      | 21      | 12      | 12      | 17      |
| IPD (mm)       | 60-72   | 60-72   | 60-72   | 60-72   | 60-72   | 60-72   | 60-72   |
| HxW (mm)       | 110x170 | 134x180 | 134x180 | 170x184 | 170x184 | 170x184 | 170x184 |
| Weight (g)     | 550     | 630     | 630     | 740     | 750     | 750     | 800     |

Models supplied in hard case with lanyard

# MARINE BINOCULARS

## PORRO PRISM

Marine series binoculars exemplify our commitment to provide quality, innovation and choice.

Whichever model you choose, each instrument has been specifically designed and manufactured to meet the toughest performance criteria demanded by the enthusiast and professional user.

All four models have 7x50 specification, enlarged porro prisms and anti-reflective coatings. They are all fully waterproof & nitrogen gas filled to eliminate 'misting' – have long eye relief eyepieces, large depth of focus and are protected with thick rubber armouring.



Pro Series II  
7x50 BIF.GA/C



Pro Series II  
7x50 BIF.GA



Marine-3  
7x50 BIF.GA



Marine-3  
7x50 BIF.GA/C

### Marine Binoculars with Compass

Pro Series II 7x50 BIF.GA/C and Marine-3 7x50 BIF.GA/C come equipped with integrated compass and distance scale for use in the northern hemisphere marked 1 in the diagram below. Compasses for other world regions can be fitted to order.



| Specifications | PSII 7x50<br>BIF.GA/C | PSII 7x50<br>BIF.GA | M3 7x50<br>BIF.GA | M3 7x50<br>BIF.GA/C |
|----------------|-----------------------|---------------------|-------------------|---------------------|
| Product Code   | 30129                 | 30128               | 30056             | 30057               |
| Field (m)      | 126                   | 126                 | 124               | 124                 |
| Eyerelief (mm) | 24                    | 24                  | 18                | 18                  |
| IPD (mm)       | 58~74                 | 58~74               | 56~75             | 56~75               |
| HxW (mm)       | 195x205               | 195x205             | 188x205           | 188x205             |
| Weight (g)     | 1265                  | 1241                | 1095              | 1113                |

Pro Series II 7x50 BIF.GA and 7x50 BIF.GA/C are supplied in semi-rigid multi-purpose case with neoprene lanyard, rainguard & integral objective lens caps. 30 year guarantee.

Marine-3 7x50 BIF.GA and 7x50 BIF.GA/C are supplied in soft case with wide lanyard, rainguard & integral objective lens caps. 10 year guarantee.

# WP OBSERVATION

A range of three high quality 80mm objective lens binoculars designed specifically for outdoor use, the WP Observation series are fully nitrogen waterproof and can be used in the rain or left unprotected on a tripod during showers without the worry of water penetration.

In addition to waterproofing, the binoculars are protected with durable natural rubber covering and have twist type retractable eyecups, wide wheel focusing and retractable lens hoods to eliminate problems of solar-glare or water falling onto the objective lenses.

Featuring a high specification fully multi-coated porro prism optical system, the clarity and field of view derived from the 16x80 makes it an excellent choice for astronomy, while the higher magnification 20x80 and 30x80 are geared more toward long range terrestrial observation and specialist outdoor applications such as aircraft observation.

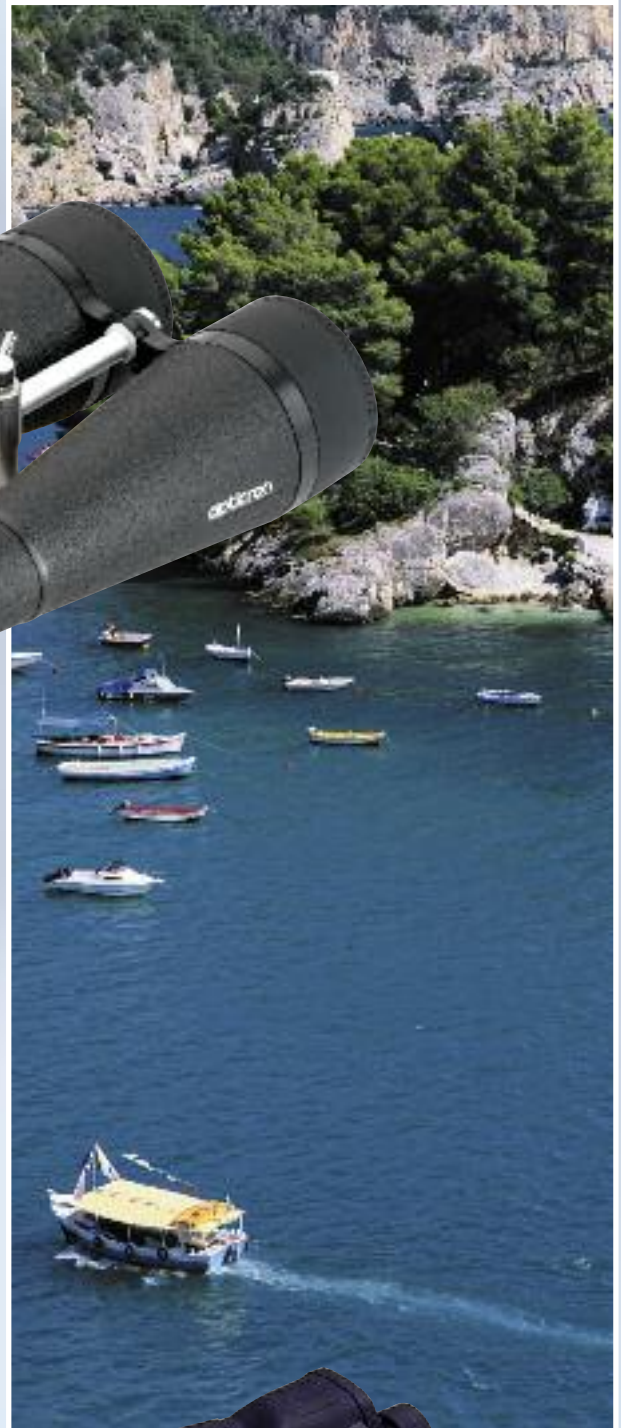
All three models deliver full field of view with or without spectacles and are supplied with a 30 year guarantee.

| Specifications | 16x80   | 20x80   | 30x80   |
|----------------|---------|---------|---------|
| Product Code   | 30097   | 30098   | 30099   |
| Field (m)      | 75      | 61      | 40      |
| Eyepiece (mm)  | 17      | 16      | 18      |
| IPD (mm)       | 55-72   | 55-72   | 55-72   |
| HxW (mm)       | 316x220 | 316x220 | 316x220 |
| Weight (g)     | 2390    | 2390    | 2390    |

Models supplied in hard carrying case with lanyard



Model Illustrated  
20x80 BCF.GA



# OBSERVATION

A range of three large objective lens binoculars, the Observation series are most effective at combining the advantages of high magnifications with enhanced 3D viewing and deliver some of the best images of any 80mm binoculars available on the market today.

Superior clarity, light gathering and field of view make the 11x80 and 15x80 the most popular specifications for astronomy while the higher magnification 20x80 is the preferred choice for tripod mounted terrestrial observation.

Models 11x80 and 15x80 provide full field of view with spectacles. All models benefit from multi-coated optics, are fully rubber armoured and feature integral tripod adapter socket positioned at the base of the focusing shaft. Observation binoculars are guaranteed for 30 years.

| Specifications | 11x80   | 15x80   | 20x80   |
|----------------|---------|---------|---------|
| Product Code   | 30196   | 30197   | 30184   |
| Field (m)      | 73      | 61      | 47      |
| Eyepiece (mm)  | 21      | 15.5    | 11      |
| IPD (mm)       | 59-72   | 59-72   | 59-72   |
| HxW (mm)       | 286x233 | 286x233 | 286x233 |
| Weight (g)     | 2450    | 2450    | 2450    |

Models supplied in hard carrying case  
For suitable large 'L' mount adapter see p51



Model Illustrated  
20x80 BCF.GA

# COMPACT POCKET BINOCULARS

As a result of advances in design and material technology modern compact pocket binoculars can offer a serious alternative to larger objective lens instruments. Widely available in either porro prism (Z) or roof prism (D) body types, the size and weight advantages make them a popular choice for general wildlife observation, taking to sporting events or travelling on holiday.

## DBA® OASIS®

Setting the standard for affordable high quality pocket binoculars, each DBA Oasis compact provides the discerning user with an unrivalled combination of optical specification and user orientated features.

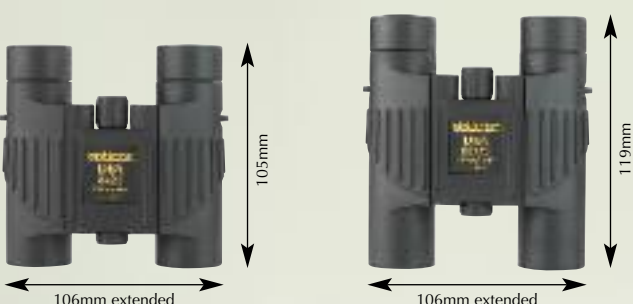
Offering the highest overall performance of any Opticron compact, the design centres on creating a range of instruments that, for their individual specifications are capable of providing a high quality, comfortable and versatile viewing experience in a pocket sized format. In essence, binoculars that can be taken anywhere and used effortlessly in a wide range of different and even demanding field conditions.

General features and specifications include:

- Compact roof prism design. Model 8x21 folds up to just 105mm x 68mm
- The successful combination of a wide field of view with long eyerelief. Model 8x21 delivers a class leading 7.5° FOV combined with an eyerelief of 17mm allowing comfortable full field vision with or without spectacles
- Nitrogen gas waterproof construction to a depth of 3 metres
- The latest roof prism technology including PC phase correction, Oasis prism coating, and full Opticron N-type multi-coating (For more information about Oasis coating see page 7)
- 19mm diameter eye lenses to maximise viewing comfort
- Fully rubber armoured body (including focus wheel) with ergonomic 'ribbed' design to deliver a positive feel with or without gloves
- 4 stage locking rotating retractable eyecup assembly to provide maximum control in the optimum positioning of the eye with respect to the eye lens



- Close focus to under 3 metres
- Integral lugs providing connection to a specially designed neoprene lanyard or other strap of your choice
- Comprehensive 30 year guarantee



| Specifications | 8x21    | 10x25   |
|----------------|---------|---------|
| Product Code   | 30380   | 30381   |
| Field (m)      | 131     | 105     |
| Min Focus (m)  | 1.8     | 2.4     |
| Eyerelief (mm) | 17      | 17      |
| IPD (mm)       | 37-72   | 37-72   |
| HxW (mm)       | 105x106 | 119x106 |
| Weight (g)     | 330     | 347     |

Models supplied in soft leather case with 31021 rainguard and 29010 neoprene lanyard

# BGA T PC OASIS®



8x24



10x28



12x30

An excellent alternative to quality conventional sized binoculars, and available in 8x, 10x or 12x magnifications, BGA T PC Oasis roof prism compacts feature high definition optics with PC phase correction and Oasis prism coating (see page 7).

The lightest binoculars in our range, the instruments are fully rubber covered and nitrogen-gas filled waterproof ensuring 100% reliability in the field. The 8x24 is the smallest Opticron roof prism, folding down to just 95x67mm.

All three models feature full 'B' specification eyepieces, rotating retractable eyecup assemblies, offer close focus to under 4 metres and come complete with a comprehensive 30 year guarantee.

| Specifications | 8x24   | 10x28   | 12x30   |
|----------------|--------|---------|---------|
| Product Code   | 30015  | 30016   | 30017   |
| Field (m)      | 110    | 86      | 76      |
| Min Focus (m)  | 2.5    | 3.9     | 4.5     |
| Eyerelief (mm) | 15     | 15      | 15      |
| IPD (mm)       | 36~71  | 36~71   | 36~71   |
| HxW (mm)       | 95x103 | 106x105 | 123x106 |
| Weight (g)     | 240    | 260     | 290     |

Models supplied in soft leather case with 31000 lanyard

## VERANO® BGA PC

Distinctively stylish long eyerelief binoculars, the Verano BGA PC roof prism compacts are manufactured using a single hinge body structure allowing for easy one hand operation. Protected in natural rubber armour and featuring a high-contact aluminum focus wheel, main features include:

- Nitrogen gas filled waterproof construction (internal focusing)
- PC Phase corrected prisms with full multi-coating to all air/glass surfaces
- Twist type retractable eyecup assembly and long eyerelief eyepieces giving full field of view with spectacles
- Close focus to under 2m
- 30 year guarantee



| Specifications | 8x25    | 10x25   | 12x25   |
|----------------|---------|---------|---------|
| Product Code   | 30025   | 30026   | 30027   |
| Field (m)      | 110     | 87      | 75      |
| Min Focus (m)  | 2       | 2       | 2       |
| Eyerelief (mm) | 19      | 19      | 19      |
| IPD (mm)       | 55~75   | 55~75   | 55~75   |
| HxW (mm)       | 110x106 | 110x106 | 110x106 |
| Weight (g)     | 320     | 322     | 326     |

Models supplied in soft case with 31000 lanyard



8x25  
10x25  
12x25

# HR WP

Designed and engineered to provide class leading optical clarity and viewing comfort, these single hinge porro prisms feature 5 element long eyerelief eyepieces for viewing comfort and 26mm dia. objective lenses for maximum brightness. Features include:

- Long eyerelief eyepieces with durable alloy twist-type retractable eyecups
- Nitrogen waterproof to a depth of 3 metres
- Fully multi-coated optical system with Opticron F-type multi-coating to eyepieces and objective lenses
- Twin texture natural rubber covering and easy-grip focusing wheel
- 10 year guarantee



| Specifications | 8x26    | 10x26   |
|----------------|---------|---------|
| Product Code   | 30094   | 30095   |
| Field (m)      | 96      | 87      |
| Min Focus (m)  | 3.5     | 3.5     |
| Eyerelief (mm) | 18      | 15      |
| IPD (mm)       | 58~73   | 58~73   |
| HxW (mm)       | 105x123 | 105x123 |
| Weight (g)     | 396     | 399     |

Models supplied in soft case with 31000 lanyard



8x26  
10x26

# ASPHERIC LE WP

A classically designed range of roof prism compacts featuring Aspheric lens technology combined with long eyerelief eyepieces for spectacle wearers', twist-type eyecup assembly & PC Phase corrected coatings for maximum clarity. Other features include:

- Silver coated roof prisms to maximise light transmission through the prism
- Nitrogen waterproofing to protect against spray, damp or mist
- Full body rubber armouring
- Integral lanyard
- Close focus to 2 metres
- 10 year guarantee



| Specifications | 8x25    | 10x25   |
|----------------|---------|---------|
| Product Code   | 30358   | 30359   |
| Field (m)      | 91      | 87      |
| Min Focus (m)  | 2       | 2       |
| Eyerelief (mm) | 16      | 16      |
| IPD (mm)       | 32~74   | 32~74   |
| HxW (mm)       | 111x104 | 111x104 |
| Weight (g)     | 291     | 292     |

Models supplied in soft case



8x25  
10x25

# TAIGA

Recently updated with a new body, the Taiga successfully combines a sophisticated outer design with excellent optical performance. The benefits of the 25mm objective lens, long eyerelief eyepieces and fully coated porro prism configuration cannot be overstated and the Taiga delivers the best performance to price ratio in its class.

Finished in twin textured soft black rubber covering, other features include twist-type eyecup assemblies, good close focus and 10 year guarantee.



| Specifications | 8x25    | 10x25   | 12x25   |
|----------------|---------|---------|---------|
| Product Code   | 30382   | 30383   | 30384   |
| Field (m)      | 105     | 91      | 79      |
| Min Focus (m)  | 3       | 3       | 3       |
| Eyerelief (mm) | 16      | 16      | 16      |
| IPD (mm)       | 56~72   | 56~72   | 56~72   |
| HxW (mm)       | 112x100 | 112x100 | 112x100 |
| Weight (g)     | 299     | 304     | 304     |

Models supplied in neoprene case with lanyard



8x25  
10x25  
12x25

# SAVANNA '54



8x23  
10x23

A highly competent porro prism compact, the Savanna delivers bright and sharp images with a good depth of field in a lightweight and very compact body. The binoculars feature long eyerelief eyepieces, fully coated optics and good close focus.

Current models feature a specially reduced IPD (interpupillary distance) of just 54mm so children as young as 7 years can take advantage of the easy-to-use single hinge design. Clothed in 'soft touch' natural protective rubber armouring with additional objective lens protection to guard against knocks and bumps, each Savanna is supplied with comprehensive 10 year guarantee.

| Specifications | 8x23    | 10x23   |
|----------------|---------|---------|
| Product Code   | 30373   | 30374   |
| Field (m)      | 113     | 91      |
| Min Focus (m)  | 2.5     | 2.5     |
| Eyerelief (mm) | 16      | 16      |
| IPD (mm)       | 54-72   | 54-72   |
| HxW (mm)       | 100x110 | 100x110 |
| Weight (g)     | 295     | 297     |



Models supplied in neoprene case with lanyard

## IMIA



8x25  
10x25

The Imia offers distinctive design in a lightweight roof prism body. Features include:

- Fully multi-coated internal optical assemblies with good eyerelief for viewing with or without spectacles
- ABS plastic body with rubberised paint finish
- Wide wheel focusing
- Close focus to under 2.5 metres (8x25)
- Twist-type retractable rubber eyecup assemblies
- 5 year guarantee

| Specifications | 8x25    | 10x25   |
|----------------|---------|---------|
| Product Code   | 30408   | 30409   |
| Field (m)      | 143     | 114     |
| Min Focus (m)  | 2.5     | 3.5     |
| Eyerelief (mm) | 12      | 12      |
| IPD (mm)       | 36-74   | 36-74   |
| HxW (mm)       | 103x106 | 103x106 |
| Weight (g)     | 300     | 300     |



Models supplied in soft case with lanyard

## VEGA



8x25  
10x25  
12x25

The compact Vega is an excellent choice if you are looking for an affordable, easy to use rubber armoured compact binocular with long eyerelief for viewing with glasses.

Great for all general applications and including a high magnification 12x25, they feature fully multi-coated lenses, good close focus and twist-type large diameter rubber eyecups for viewing comfort.

Supplied complete with 5 year guarantee.

| Specifications | 8x25    | 10x25   | 12x25   |
|----------------|---------|---------|---------|
| Product Code   | 30001   | 30002   | 30003   |
| Field (m)      | 110     | 91      | 70      |
| Min Focus (m)  | 2.2     | 2.2     | 2.7     |
| Eyerelief (mm) | 17      | 17      | 17      |
| IPD (mm)       | 62-76   | 62-76   | 62-76   |
| HxW (mm)       | 100x110 | 100x110 | 100x110 |
| Weight (g)     | 328     | 330     | 327     |



Models supplied in soft case with lanyard

# MONOCULARS

Often perceived as inferior to binoculars, monoculars can provide a superior viewing alternative to many compact or pocket size binoculars of similar price.

Opticron monoculars are designed for specialist applications such as entomology as well as being compact, quality field glasses for the space and weight conscious. They come in a variety of sizes and formats and include some useful accessories dedicated to both the macro study of wildlife and long range high magnification observation.

## DBA OASIS® S-COAT

Simply the best monoculars of their type, DBA Oasis are designed for the professional wildlife enthusiast, offering the very highest performance and specification in a compact roof prism design.

Unique features include:

- Complex multi-element long eyerelief eyepieces with large diameter eye lenses that provide 7° (8x42) and 6° (10x42) FOV with total viewing comfort
- The highest quality Oasis coated roof prisms with the addition of phase correction coating (see page 7 for more information on Oasis)
- Unique S-type multi-coating designed specifically to the strengths of the optical system allowing both models to achieve extremely high clarity & colour contrast in all light conditions from early morning till dusk
- Internal focusing with close focus to under 3 metres
- Fully nitrogen gas filled waterproof construction to a depth of 5 metres
- Natural rubber armoured with contoured ribs on the main body focus wheel to maximise comfort and handling with or without gloves
- 3 stage locking rotating retractable eyecup assembly for spectacle wearers

DBA Oasis monoculars are supplied complete in soft leather case with neoprene monocular lanyard and 30 year guarantee.



8x42 BGA  
10x42 BGA

## BGA

Choosing a BGA monocular guarantees you one of the best field monoculars available on the market today. The combination of a large objective lens, high quality Morita roof prism plus a long eyerelief eyepiece means that unlike smaller monoculars, a BGA monocular delivers a viewing experience akin to a pair of average size roof prism binoculars in a pocket size instrument measuring only 43mm x 136mm.

Produced in 8x42 and 10x42 formats with fully specified multi-coated internally focused optics and the added assurance of nitrogen waterproof construction to a depth of 3 metres, model features include:

- 'B' specification long eyerelief eyepieces for full field of view with or without spectacles
- Twist type retractable eyecup assembly
- Wide band focusing
- Close focus to around 2 metres
- 30 year guarantee



8x42 BGA  
10x42 BGA

Models supplied in soft case with lanyard.

### POCKET TELESCOPE CONVERSION FOR DBA AND BGA MONOCULARS

A dedicated push fit conversion (product code 30442) which increases the magnification of each monocular by a factor of 2.5x creating a pocket telescope for long range observation. For more information on the 2.5x UTA and connectivity within the Opticron range see page 47.

### TRIPOD MOUNT FOR DBA AND BGA MONOCULARS

A bespoke sleeve mount providing a secure connection to any photo/video panhead with a 1/4" thread. Mount secures over objective lens housing. Size: 70x70mm Weight: 67g Product codes: 30444 Tripod mount DBA, 30443 Tripod Mount BGA



# WATERPROOF

Fully multi-coated compact models offering nitrogen gas filled waterproof construction and thick rubber covering with finger grooves for easy one hand operation, these are excellent all-purpose 'take-anywhere' field glasses. Models 5x30 and 8x32 LE feature a long eyerelief eyepiece giving full field of view with spectacles. Models 5x30 and 8x30 finished in dark green. Model 8x32 LE finished in black. All three models supplied in soft case with lanyard and 10 year guarantee.



5x30  
8x30



8x32 LE

## GALLERY SCOPE

(Mis) named with the art enthusiast in mind, each Gallery scope is an excellent tool for macro study of wildlife as well as a quality field monocular that fits unnoticed into a shirt pocket.

Available in a range of different Mag/FOV specifications to suit different applications with close focus ranging from 30cm (8x20) to 20cm (4x12), each instrument has the option of conversion to a microscope using either the 30265 Microstand or 30259 Microstand with LED illuminator. These conversions increase basic monocular magnification by a factor of 3.



8x20



4x12 6x16 8x20

Other features include:

- Quality Japanese-made assembly with fully coated roof prism optical system
- Fold down rubber eyecup
- Anodised gloss black finish
- 30 year guarantee

Models supplied in soft case with lanyard.

**30265 3x Microstand** (not illus)

Base area 62x55mm. Height 88mm. Weight 55g

**30259 3x Microstand with LED illuminator**

Base area 62x55mm. Height 88mm. Weight 68g



### Choosing the right Gallery scope for you

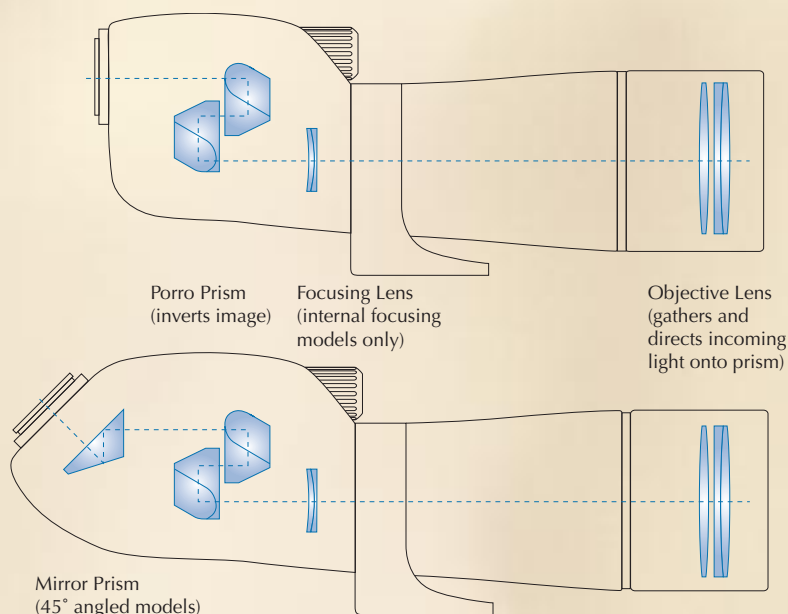
Chart showing field of view at different focusing distances with and without Microstand

| Model      | Field | Close focus | Field at 1.0m | Field at 0.3m | Field at 0.23m | Field at 0.2m | Max Field with 30259/65 | Optimum Field with 30259/65 |
|------------|-------|-------------|---------------|---------------|----------------|---------------|-------------------------|-----------------------------|
| 30172 4x12 | 12.5° | 0.2m        | 21.9cm        | 6.6cm         | 5cm            | 4.4cm         | 16.5mm (12x)            | 80~90%                      |
| 30173 6x16 | 9.3°  | 0.23m       | 16.3cm        | 4.9cm         | 3.7cm          | n/a           | 13mm (18x)              | 70~80%                      |
| 30165 8x20 | 6.8°  | 0.3m        | 11.9cm        | 3.5cm         | n/a            | n/a           | 10mm (24x)              | 50~60%                      |

| Specifications | 8x42 DBA | 10x42 DBA | 8x42BGA | 10x42BGA | 5x30 WP | 8x30WP | 8x32LE WP | 4x12G | 6x16G | 8x20G |
|----------------|----------|-----------|---------|----------|---------|--------|-----------|-------|-------|-------|
| Product Code   | 30445    | 30446     | 30440   | 30441    | 30344   | 30345  | 30348     | 30172 | 30173 | 30165 |
| Field (m)      | 122      | 105       | 110     | 89       | 122     | 131    | 131       | 219   | 163   | 119   |
| Min Focus (m)  | 2.5      | 2.75      | 2       | 2        | 4       | 5      | 5         | 0.2   | 0.23  | 0.3   |
| Eyerelief (mm) | 21       | 19        | 19      | 16       | 25      | 11     | 16        | 14    | 11    | 11    |
| HxW (mm)       | 143x52   | 143x52    | 136x43  | 136x43   | 139x49  | 139x49 | 139x49    | 58x32 | 70x32 | 94x34 |
| Weight (g)     | 343      | 349       | 285     | 285      | 252     | 252    | 274       | 49    | 56    | 105   |

# CHOOSING YOUR TELESCOPE

The majority of terrestrial telescopes are prismatic and as such follow the basic design of a large monocular (half a binocular) usually between 50mm and 100mm in diameter, designed for use with a range of different magnification eyepieces. These prismatic telescopes are often called spotingscopes or fieldscopes.



**Specifications** Opticron telescopes are generally supplied in 'body only' format e.g. MM2 52, HR 66, ES 80. These models have objective lens diameters of 52mm, 66mm and 80mm respectively, no built-in eyepiece and as such allow the choice of eyepiece to be made separately.

**Eyepieces** are denoted according to their magnification, whether they are wide angle (WW or WA) or variable zoom eg. 20-60x. A 20x eyepiece allows the object being viewed to appear 1/20th of its actual distance away when compared to the naked eye. Using this rule an object 500m distant appears to be only 25m away. A 30x eyepiece makes the object appear 16.7m distant while a zoom eyepiece set at 60x means the same object appears to be just over 8m away.

**What magnification?** Terrestrial telescopes are most commonly used for high magnification viewing over long distances in daylight. Image quality at different magnifications will depend on the optical system, the quality of glass used and the coatings applied to the surfaces of each lens. There are however a few general rules that can be applied in determining the right specification for your needs. Firstly, the relationship between magnification, objective lens dia. and the size of the eye pupil, and secondly the quality of the optics inside the 'scope.

In normal daylight, when the pupil is dilated to between 2 and 3mm, a 66 mm telescope will deliver optimum performance, (the balance between magnification and image brightness) between 22x and 35x magnification i.e. when the exit pupil diameter equals that of the iris. In low light when the pupil becomes larger, dilating to between 5 and 7mm depending on age, optimum performance can only be obtained by using a lower magnification eyepiece or using a larger objective lens telescope such as an 80mm or 100mm.





The higher the magnification, the greater the image and colour distortion. These effects can be dramatically reduced by using ED or Fluorite combination objective lenses that minimise chromatic aberration, but are expensive. At magnifications of 30x or lower, the benefits of these objective lenses are hardly noticeable when compared to conventional glass objectives.

**Field of view** is usually expressed as the width in metres of the image when viewing at a distance of 1000m and is directly related to the magnification. Generally the greater the magnification, the smaller the field of view. There are exceptions, namely wide-angle eyepieces which are designed specifically to provide greater fields of view. For more information on Opticron eyepieces see page 46. It is important to note that the objective lens, irrespective of diameter has no influence over the field of view.

**Light transmission** The best way to assess the actual brightness of any telescope and eyepiece combination when choosing for daytime terrestrial use, (assuming equal optical systems) is to calculate the exit pupil diameter in the same way as with a binocular and making a trade-off between image brightness and magnification desired. For general daytime terrestrial observations good compromise magnifications are between 20x and 30x for a 60mm, 25 to 35x for a 66mm and 25 to 40x for an 80mm.

**Resolution** As a general rule a good telescope should be able to resolve two black dots 1.5mm distance apart on a white surface, in bright daylight from a distance of 50m.

**Eyerelief** This is the distance between the eye lens and the point where the pupil is positioned for full field of view and varies from eyepiece to eyepiece. In some cases the eyerelief is shorter than that required by spectacle wearers to obtain the full field of view, especially at higher magnifications. If it is important that you obtain the full field of view with spectacles please choose any of the following eyepieces: SDL, HDF T, HDF, HR; 40812, 40930, 40931, 40932, 40933, IS; 40916, 40918, 40919, HR.MM2; 40909. Remember, rubber eyecups although fitted to many eyepieces are no guarantee that the full field of view is obtainable when set in the 'down' position and used with glasses.

**Straight-through or 45° angled** Common advantages of an angled telescope are that: i) the back, shoulders and neck are in a more relaxed position when looking through the 'scope, ii) the tripod can be set at a lower position making it easier for people of different heights to use and the equipment more stable in outdoor conditions. Straight-through telescopes are easier to use when following fast moving objects, using the instrument from the confined spaces of a hide or vehicle, or when hand-held.

**Our advice** Compare different models side-by-side at the same magnification if possible. Product reports are generally subjective and are no substitute for individual testing. If you are unable to test before you make a purchase, contact us for information and advice on the best model to suit your needs.

Lastly, suitable tripods for any given telescope will, on average, be around the same weight as the 'scope. Therefore if you are thinking of walking any distance with your chosen telescope, pick it up together with the tripod you are intending to support it with and take the combination for a 'test walk' to see how far you can comfortably carry it.

# HIGH RESOLUTION ED FIELDSCOPES

Smaller, lighter and sharper the new HR ED fieldscopes offer a host of improvements over preceding models and have been re-designed without compromise to deliver truly exceptional optical performance combined with sublime handling and complete reliability.

Aimed squarely at the serious fieldscope user, the models are built to withstand extremes in temperature, to operate unaffected by rain, cold or humidity and as such can be used anywhere from equatorial rainforests to the poles. The choice of body types, viewing eyepieces and dedicated accessories for observation and photography are unparalleled and combine to create the most versatile and complete range of fieldscopes we have ever produced.

The reconfigured optical systems deliver the highest resolution of any Opticron telescope and are matched directly to the SDL zoom eyepiece for constant focus across the magnification range 18-54x (66)/24-72x (80). Both the 66mm and 80mm feature a high definition 5 element apochromat objective lens system with 2 separate ED elements, and the entire system utilises Opticron N-type multi-coating. This combination maximises resolution and colour contrast especially at higher magnifications under a range of different light conditions.

Mechanically the HR ED feature a new lightweight magnesium body complete with large footprint tripod adapter with +/- 90 degree rotation. Fully nitrogen gas filled waterproof and hermetically sealed against penetration from dust and moisture, the models are protected with a textured and highly durable natural rubber armouring. Other features include a centrally positioned rubber armoured focusing wheel for optimum accessibility plus a new retractable rubber covered lens hood with integrated rubber objective lens cap. HR ED fieldscopes are supplied with a comprehensive 30 year guarantee.

## The advantages of 'ED'

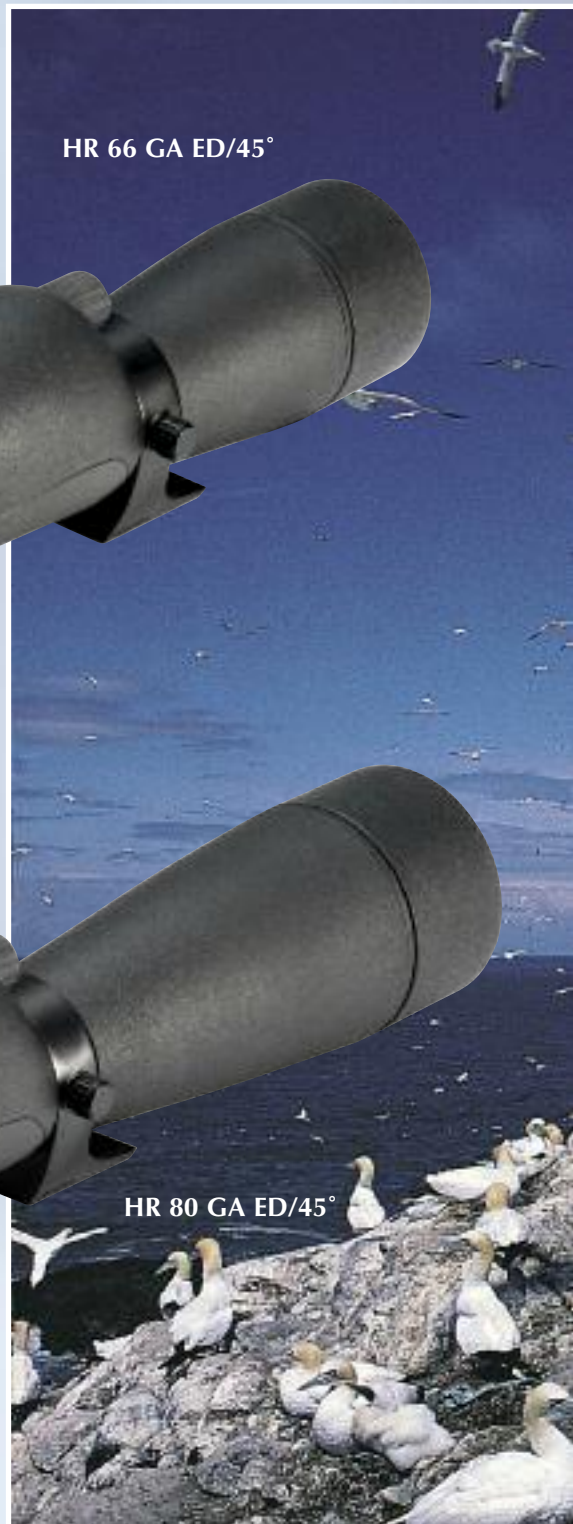
By using ED or 'extra low dispersion' glass elements in the primary objective system, these fieldscopes provide a higher degree of colour correction compared to conventional glass objectives.

More apparent at higher magnifications and under certain light conditions (e.g. when looking over water on a bright warm day) the image appears sharper and colours remain truer to life across the magnification range. The

ability to bring into clear and sharp focus indistinct objects such as coloured identification rings or shades of plumage in poor light over long distances are the hallmarks of an HR ED fieldscope. This extra optical clarity combined with all the features and exceptional build quality make them the definitive choice for the professional ornithologist.



In addition to improved viewing capability at higher magnifications, the benefits of using an HR ED fieldscope for telephotography with either compact digital or SLR cameras cannot be overstated. The 41110 Telephoto HDF conversion for SLR (1000mm - HR66 / 1350mm - HR80) is designed to meet the demands of the amateur wildlife photographer and when used in conjunction with an HR ED fieldscope ensures the very best definition and colour reproduction. For more information on telephotography see pages 44-45.



Telephoto lens conversion for SLR cameras (see page 44 for details)



Telephotography with compact digital cameras/camcorders featuring 40849 UDCA (see page 45 for details)



HR 66 GA ED

## HR 66 GA ED

Weighing just over 1200g and 290mm in length, the 08 model HR 66 really lives up to its reputation delivering arguably the highest resolution of any comparable compact prismatic fieldscope on the market today.

It's not just the resolution that makes this 'scope really special. When fitted with the HDF T 20xWW, 28xWW, 38xWW 'flat field' or the SDL 18-54x eyepieces, viewing comfort is unparalleled - an essential quality when viewing for long periods or in poor light.

## HR 80 GA ED

With a 570mm focal length objective and outstanding low light performance, the HR 80 GA ED comfortably maintains superb colour contrast even in the poorest field conditions. The long focal objective lens provides the unique opportunity of using long eyerelief, high power, wide angle HDF T 27xWW, 38xWW & 52xWW eyepieces plus the stunning SDL 24-72x for superb long range viewing.

HR 80 GA ED

| Specifications | 66ED  | 66ED/45 | 80ED  | 80ED/45 |
|----------------|-------|---------|-------|---------|
| Product Code   | 41002 | 41003   | 41006 | 41007   |
| OG Dia (mm)    | 66    | 66      | 80    | 80      |
| Min Focus (m)  | 5     | 5       | 8     | 8       |
| Length (mm)    | 290   | 330     | 370   | 405     |
| Weight (g)     | 1210  | 1278    | 1635  | 1703    |

For more information on SDL, HDF and HR eyepieces see page 46

| EYEPIECES           | • SDL  | • HDF | • HR/HR2 |       |       |       |       |        |       |       |       |       |         |
|---------------------|--------|-------|----------|-------|-------|-------|-------|--------|-------|-------|-------|-------|---------|
| Product Code        | 40935  | 40810 | 40809    | 40858 | 40859 | 40860 | 40861 | 40862  | 40812 | 40930 | 40931 | 40932 | 40933   |
| Magnification HR 66 | 18-54x | 20xWW | 28xWW    | 38xWW | 44xWA | 70xWA | 88x   | 18-54x | 20x   | 23xWA | 30xWA | 42x   | 20-60x  |
| Magnification HR 80 | 24-72x | 27xWW | 38xWW    | 52xWW | 60xWA | 95xWA | 120x  | 24-72x | 27x   | 31xWA | 41xWA | 57x   | 27-80x  |
| Field/1000m HR 66   | 36/20  | 52    | 45       | 31    | 26    | 17.5  | 13    | 30/17  | 43    | 49    | 40    | 20    | 35/17.5 |
| Field/1000m HR 80   | 29/16  | 39    | 33.3     | 23    | 20    | 13    | 7     | 29/13  | 31    | 40    | 30    | 12    | 27/15   |

# ES v3 FIELDSCOPES

Featuring an upgraded optical system for improved colour contrast and apparent resolution, ES v3 fieldscopes are designed and manufactured to deliver 'best in class' optical performance combined with rugged dependability and real user comfort.

Available in three variants; 80mm SD, 80mm ED and 100mm ED the instruments excel in the most important area for the majority of users: image quality. The reduction of almost all visible chromatic aberration at 60x magnification with the 80 SD sets the standard for both definition and tonal quality further improved upon with the 80 ED and 100 ED.

Main features include:

- Tri-element high definition objective lens (SD or ED) with Opticron F-type multi-coating that visibly increases both colour contrast and clarity over standard multi-coatings
- Magnesium, aluminium and polycarbonate body protected in textured rubber armour
- Nitrogen waterproofing to eliminate condensation

Weight is kept to a minimum and the 'scopes are well balanced for effective use on a tripod. Other features include a retractable lens hood, integrated rubber objective lens cover, conveniently positioned wide band focusing wheel and rotating tripod sleeve to enable maximum versatility in hides or viewing from a sitting or prone position. Fully compatible with SDL, HDF and HR eyepieces the models offer an exciting array of viewing options of 20x to 100x (80mm) and 30x to 134x (100).

For even greater magnification a 2.5x Tele-adapter is available for SDL, HDF and HR eyepieces (see page 47 for details).

ES models can be converted for use with SLR cameras for telephotography and are supplied complete with a 30 year guarantee.

## ES 80 GA SD/45°

The suffix SD for standard belies the quality of this tri-element F500 viewing platform. Utilising Opticron F-type high refractive index multi-coating complete with BK 7 prisms the ES 80 GA SD/45° demands serious consideration for anybody interested in an 80mm fieldscope. Image texture is slightly softer than sister ED model but the instrument deals competently with a range of interspersed colours in varying light conditions up to 60x magnification, combined with accurate focusing and a welcome lack of colour distortion.

## ES 80 GA ED/45°

The latest optical upgrades, superior RI F-type multi-coating system and ED objective lens that virtually eliminates the distorting effects of chromatic aberration over 35x magnification all combine to further enhance the performance of this our most popular 80mm model. Images are vibrant and 'true to life' and what's more - reproduced consistently across the magnification range.



### Telephotography with ES

Stonechat photographed using Opticron-Samsung i6 with ES 80 GA ED and 40810E HDF T 23xWW. Distance c. 20m (image has been cropped)  
Camera magnification 1x  
Combined magnification 23x



Telephoto lens conversion for SLR cameras (see page 44 for details)



Telephotography with compact digital cameras/camcorders featuring 40849 UDCA (see page 45 for details)



## ES 100 GA ED/45°

The advantages of a 100mm diameter objective lens become clear when viewing at magnifications over 50x. Having a surface area 1.5x that of an 80mm OG fieldscope, the ES 100 is easily able to outperform similarly specified 80mm (ED and Fluorite models) delivering brighter images with a higher resolving power.

For terrestrial use, better definition and higher colour contrast mean more accurate and more enjoyable long range viewing. Preferred eyepieces include the HDF 42xWW, 27-80x and SDL 27-80x.

For Astronomy the ES 100's versatility as a compact F650mm 4" refractor with erected image viewing should also be considered. Magnification options for this application include HDF 6mm and 5mm long eyerelief eyepieces delivering 107x and 134x respectively.

ES 100 GA ED/45°

| Specifications | 80 SD/45 | 80 ED/45 | 100 ED/45 |
|----------------|----------|----------|-----------|
| Product Code   | 40895    | 40890    | 40893     |
| OG Dia (mm)    | 80       | 80       | 100       |
| Min Focus (m)  | 6        | 6        | 10        |
| Length (mm)    | 390      | 390      | 497       |
| Weight (g)     | 1484     | 1591     | 2800      |

For more information on SDL, HDF and HR eyepieces see page 46

| EYEPIECES     | • SDL  | • HDF  | • HR/HR2 |        |        |        |        |        |        |        |        |        |        |        |
|---------------|--------|--------|----------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Product Code  | 40935E | 40810E | 40809E   | 40858E | 40859E | 40860E | 40861E | 40862E | 40812E | 40930E | 40931E | 40932E | 40933E |        |
| Magnification | 20-60x | 23xWW  | 32xWW    | 44xWW  | 50xWA  | 80xWA  | 100x   | 20-60x | 23x    | 27xWA  | 34xWA  | 50x    | 23-69x |        |
| Magnification | ES 100 | 27-80x | 30xWW    | 42xWW  | 58xWW  | 67xWA  | 107xWA | 134x   | 27-80x | 30x    | 36xWA  | 46xWA  | 65x    | 30-90x |
| Field/1000m   | ES 80  | 32/18  | 45       | 36     | 28     | 23     | 16     | 10     | 35/16  | 38     | 41     | 33     | 18     | 29/15  |
| Field/1000m   | ES 100 | 25/14  | 33       | 27     | 20     | 16     | 12     | 7      | 29/12  | 28     | 32     | 25     | 10     | 23/11  |

# GS FIELDSCOPES

Introduced in response to increasing demand for quality lightweight telescopes of all sizes, GS series fieldscopes set the standard for users wanting to takeout and walkabout with their equipment - whether for birdwatching or general wildlife observation.

Designed to deliver class leading performance combined with superior functionality and ease of use, features include:

- Superior light transmission derived from Ø52mm, Ø66.5mm and Ø81.5mm objectives
  - High quality fully multi-coated optical systems with the option of standard<sup>1</sup> or ED 'extra low dispersion glass' element objective lenses
  - Lightweight construction: GS 665 from 976g, GS 815 from 1280g
  - Nitrogen gas filled construction for 100% waterproofing
  - Full body natural rubber armouring with integrated rubber objective lens cap
  - Centrally positioned rubber covered focusing wheel to allow easy access for both right and left handed users
  - Built-in 9:1 ratio fine focus adjustment for greater focusing accuracy at higher magnification settings
  - Large footprint tripod sleeve with  $\pm 90^\circ$  each-way rotation and  $45^\circ$  incremental 'stops'
  - Retractable lens hood (665 and 815 only)
  - Full compatibility with Opticron SDL, HDF & HR Eyepieces and Telephotoadapters
  - 30 year guarantee
- <sup>1</sup> 665 & 815 only

## GS 52 GA ED

Setting new standards for light transmission, resolution and colour contrast, the GS 52 GA ED offers a practical and versatile alternative to larger heavier telescopes in situations where size and weight are an issue. Fitted with the HDF T 12-36x eyepiece set between 12x and 18x, images are exceptionally bright with a large depth of field - perfect for either hand held or tripod mounted observation at close range. Unlike other telescopes of similar size, the full size prism units allow the instrument to retain its performance right up to 36x, delivering superior colour fidelity for longer range viewing even in comparatively low light.

Images are not just brighter they are sharper too and the GS 52 GA ED compares well with the GS 665 GA for resolution at magnifications up to 30x. Field of view is also enhanced with certain eyepieces; +30% against the smaller MM2 52 ED with the HDF T 13xWW, and +20% with the HDF T 18xWW. For garden birdwatching and photography close focus is just 2.5m.



GS 52 GA ED



### Telephotography with GS

Cormorant and Mute Swan photographed using GS 665 GA ED and 41110 HDF telephotoadapter connected to a Nikon D200 body. Distance c. 15m (images have been cropped). Combined magnification 27x (1350mm)



GS 52 GA ED/45°



Telephoto lens conversion for SLR cameras  
(see page 44 for details)



GS 665 GA/45°  
GS 665 GA ED/45°

GS 815 GA/45°  
GS 815 GA ED/45°

## GS 665 GA & GS 665 GA ED

The GS 665 GA is designed for people who desire the optimum balance between size/weight and overall optical performance. With finished weights around 1000g they are light by any standard, but the larger objective lens compared to a standard 65mm 'scope means images are comparatively brighter and sharper. The GS 665 GA ED offers higher resolution and contrast compared to the standard model at magnifications over 30x, resolving finer detail on high contrast and subtly shaded targets.

The relatively low focal length to aperture ratios mean the GS 665 GA are a good choice for combining viewing and digi-scoping with the HDF T 18xWW, 25xWW or 16-48x zoom eyepieces.



GS 665 GA  
GS 665 GA ED

## GS 815 GA & GS 815 GA ED

These models are the preferred choice for those wishing to maximise light transmission at magnifications between 30x and 60x. The GS 815 GA offers the size and weight conscious user extra light-gathering and definition compared to the smaller 665 for a modest increase in size and weight. The GS 815 GA ED delivers the brightest and sharpest images at the highest magnifications and distances making it the perfect proposition for the user wanting an extra few minutes viewing at the end of a day.



GS 815 GA  
GS 815 GA ED

| Specifications | 52ED  | 52ED/45 | 665   | 665/45 | 665ED | 665ED/45 | 815   | 815/45 | 815ED | 815ED/45 |
|----------------|-------|---------|-------|--------|-------|----------|-------|--------|-------|----------|
| Product Code   | 40956 | 40957   | 40960 | 40961  | 40962 | 40963    | 40965 | 40966  | 40967 | 40968    |
| OG Dia (mm)    | 52    | 52      | 66.5  | 66.5   | 66.5  | 66.5     | 81.5  | 81.5   | 81.5  | 81.5     |
| Min Focus (m)  | 2.5   | 2.5     | 3.8   | 3.8    | 3.8   | 3.8      | 5.8   | 5.8    | 5.8   | 5.8      |
| Length (mm)    | 200   | 200     | 326   | 326    | 326   | 326      | 362   | 362    | 362   | 362      |
| Weight (g)     | 754   | 754     | 976   | 980    | 1049  | 1053     | 1280  | 1280   | 1349  | 1353     |

For more information on  
SDL, HDF and HR  
eyepieces see page 46

| EYEPIECES     | • SDL               | • HDF  | • HR/HR2 |        |        |        |        |        |        |        |        |        |                     |
|---------------|---------------------|--------|----------|--------|--------|--------|--------|--------|--------|--------|--------|--------|---------------------|
| Product Code  | 40935G <sup>1</sup> | 40810G | 40809G   | 40858G | 40859G | 40860G | 40861G | 40862G | 40812G | 40930G | 40931G | 40932G | 40933G <sup>1</sup> |
| Magnification | GS 52               | 12-36x | 13xWW    | 18xWW  | 24xWW  | 28xWA  | 45xWA  | 57x    | 12-36x | 13x    | 15xWA  | 20xWA  | 28x                 |
| Magnification | GS 665              | 16-48x | 18xWW    | 25xWW  | 35xWW  | 40xWA  | 60xWA  | 80x    | 16-48x | 18x    | 21xWA  | 27xWA  | 38x                 |
| Magnification | GS 815              | 20-60x | 23xWW    | 32xWW  | 44xWW  | 50xWA  | 80xWA  | 100x   | 20-60x | 23x    | 27xWA  | 34xWA  | 50x                 |
| Field/1000m   | GS 52               | 58/32  | 75       | 66     | 49     | 43     | 30     | 20     | 62/29  | n/a    | 74     | 59     | 29                  |
| Field/1000m   | GS 665              | 40/22  | 50       | 47     | 35     | 29     | 19.5   | 12.5   | 42/20  | 46     | 49     | 39     | 18                  |
| Field/1000m   | GS 815              | 32/18  | 43       | 36     | 26     | 24     | 16     | 8      | 35/17  | 38     | 39     | 33     | 15                  |

<sup>1</sup>40934 eyepiece adapter required

# IS WP FIELDSCOPES

The IS WP series are designed for the first-time user, frequent traveller and those on a budget. Available in three objective sizes; 50mm, 60mm and 70mm with the option of straight-through and 45° angled viewing, these interchangeable eyepiece fieldscopes offer excellent value for money delivering high levels of performance and versatility in extremely compact and lightweight bodies.

Features and options include; nitrogen waterproof construction, 4 element fully multi-coated objective lenses with BK7 fully multi-coated prisms and internal focusing, rotating tripod sleeve for use with photo/video tripods and bipods, retractable lens hood to protect against glare, accessories for SLR telephotography plus a comprehensive 10 year guarantee.

## IS 50 WP TRAVELSCOPE

At just 205mm (8") long<sup>1</sup> and weighing under 600g, the IS 50 is designed and engineered to be a competent fieldscope in its own right as well as a brilliant travelscope for the space conscious birdwatcher, shooter or archer. The quality of both optical and mechanical components ensures the IS 50 WP performs well against many current 60mm OG spottingscopes of similar price.

<sup>1</sup>IS 50



IS 50

## IS 60 WP

An excellent all-rounder delivering good resolution and depth of field, the IS 60 WP is easy to use and transport either on a lightweight tripod or bipod. Matched to one of the three dedicated IS long eyerelief eyepieces, (40916S 25xWA, 40918S 18-54x and 40919S IS Pro 15-45x), the model is an excellent choice for the first-time birdwatcher moving up from 'binocular-only' bird watching as well as the shooter or archer looking for accuracy at distances around 100m.



IS 60



IS 50/45°

IS 60/45°

# IS WP FIELDSCOPES FOR TARGET ARCHERY & SHOOTING



The IS 60 WP delivers sharper, brighter images in a smaller, lighter body compared to a traditional 22x60 spottingscope and is the perfect choice for accurate target observation up to 100m.

Fitted with either of the IS zoom eyepieces or 40933 HR2 16-48x for even higher resolution, the 'scope connects to the 40314 bipod via the tripod sleeve and can be rotated round its central axis for precise positioning. For even greater positional flexibility the 40316 ball and socket panhead is available as an optional extra (See pg 50).





IS 70/45°

## IS 70 WP

This Japanese designed IS 70 WP weighs in at 909g<sup>2</sup> and offers remarkable performance for its sub £200 price tag. Featuring an F400mm, 4 element objective with a surface area 35% greater than the IS 60 WP, both straight-through and 45° angled viewing models deliver remarkably bright and sharp images with good colour contrast across a wide range of magnifications.

<sup>2</sup>IS 70/45



IS 70

Recommended eyepieces include 40916S 26xWA and 40919S 16-48x. The models are also fully compatible with HR2<sup>3</sup> and HDF<sup>3</sup> eyepieces.

<sup>3</sup>Eyepiece adapters required. See Table



Telephoto lens conversion for SLR cameras (see page 44 for details)



Telephotography with compact digital cameras/camcorders featuring 40849 UDCA (see page 45 for details)

For more information on SDL, HDF, HR and IS eyepieces see page 46

| Specifications             | 50    | 50/45 | 60    | 60/45 | 70    | 70/45 |
|----------------------------|-------|-------|-------|-------|-------|-------|
| Product Code               | 40980 | 40981 | 40982 | 40983 | 40984 | 40985 |
| OG Dia (mm)                | 50    | 50    | 60    | 60    | 70    | 70    |
| Min Focus (m) <sup>4</sup> | 5     | 5     | 7     | 8     | 10    | 9     |
| Length (mm)                | 205   | 210   | 250   | 255   | 295   | 300   |
| Weight (g)                 | 583   | 591   | 689   | 705   | 890   | 909   |

<sup>4</sup>40916S eyepiece

| EYEPIECES           | IS     |        |        |
|---------------------|--------|--------|--------|
| Product Code        | 40916S | 40918S | 40919S |
| Magnification IS 50 | 20xWA  | 15-45x | 12-36x |
| Magnification IS 60 | 25xWA  | 18-54x | 15-45x |
| Magnification IS 70 | 28xWA  | 20-60x | 16-48x |
| Field/1000m IS 50   | 58     | 37/17  | 49/31  |
| Field/1000m IS 60   | 46     | 31/15  | 41/26  |
| Field/1000m IS 70   | 41     | 28/13  | 36/23  |

| EYEPIECES           | • SDL • HDF |        |        | • HR/HR2 |        |        |        |        |        |        |        |        |        |
|---------------------|-------------|--------|--------|----------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Product Code        | 40935S      | 40810S | 40809S | 40858S   | 40859S | 40860S | 40861S | 40862S | 40812S | 40930S | 40931S | 40932S | 40933S |
| Magnification IS 50 | 12-36x      | 14xWW  | 20xWW  | 26xWW    | 30xWA  | 48xWA  | 60x    | 12-36x | 14x    | 16xWA  | 21xWA  | 29x    | 14-42x |
| Magnification IS 60 | 15-45x      | 17xWW  | 23xWW  | 32xWW    | 36xWA  | 58xWA  | 72x    | 15-45x | 17x    | 20xWA  | 25xWA  | 35x    | 16-48x |
| Magnification IS 70 | 16-48x      | 18xWW  | 25xWW  | 35xWW    | 40xWA  | 60xWA  | 80x    | 16-48x | 18x    | 21xWA  | 27xWA  | 38x    | 18-54x |
| Adapter required    | 40927S      | 40925S | 40925S | 40925S   | 40925S | 40925S | 40925S | 40927S | 40925S | 40925S | 40925S | 40925S | 40928S |
| Field/1000m IS 50   | 54/30       | 77     | 64     | 47       | 38     | 26     | 15     | 58/26  | 64     | 67     | 55     | 27     | 49/28  |
| Field/1000m IS 60   | 43/24       | 64     | 52     | 38       | 32     | 20     | 14     | 46/21  | 52     | 58     | 47     | 20     | 45/23  |
| Field/1000m IS 70   | 38/22       | 45     | 42     | 33       | 27     | 19     | 11     | 41/19  | 44     | 45     | 41     | 19     | 40/11  |

# MM2 V2 MIGHTY MIDGET TRAVELSCOPES

A revolutionary spotting scope created to optimise the balance between optical performance and size, the MM2 Mighty Midget is an ideal choice for the space and weight conscious user.

Designated a 'Travelscope', and available in either standard glass or high performance ED glass formats, the design utilises an extendable objective lens system that allows the unit to be retracted to just under 18cm<sup>1</sup> for optimum portability. Fully extended the body measures just under 22cm.<sup>1</sup>

<sup>1</sup>excluding eyepiece

Available in straight-through and 45° angled bodies, construction is a mix of tough plastics, alloys and rubber, creating finished weights under 480g - lighter than many 32mm binoculars.



**MM2 52/45°**  
Extended

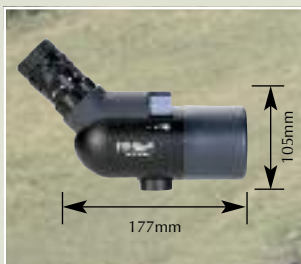


**MM2 52**  
Extended

Close focus is an impressive 3.5 metres - perfect for high magnification detailed observation at close range.

Eyepiece options include the MM2 25x and HR MM2 13-39x. The models also accept the full range of HR, HDF and SDL eyepieces allowing Opticron fieldscope owners to use their existing eyepieces with a new MM2 body.

Current v2 models incorporate a 'click-stop' on the draw tube for easier use with the impressive 40862M HDF 12-36x zoom, one of the recommended eyepieces when choosing an ED model.



Travelscope for existing Opticron users. Model shown 52/45 with 40909M zoom



Telephoto lens conversion for SLR cameras (see page 44 for details)



Water resistant multi-layer padded case



Model 52 with 40906 Grippa Strap



Other features and options include:

- 52mm objective & fully multi-coated optical system
- Eyepiece cavity store for MM2 eyepiece (rear) not illustrated
- Retractable lens hood
- 1/4" thread connection to photo/video tripod, clamp or monopod
- 10 year guarantee
- Telephotoadapter option
- Choice of protective water resistant cases or grippa strap



**MM2 52 ED/45°**  
Extended



**MM2 52 ED**  
Extended

| Specifications             | 52     | 52/45 | 52 ED | 52 ED/45 |
|----------------------------|--------|-------|-------|----------|
| Product Code               | 40900  | 40901 | 40907 | 40908    |
| OG Dia (mm)                | 52     | 52    | 52    | 52       |
| Min Focus (m) <sup>1</sup> | 3.5    | 3.5   | 3     | 3.5      |
| Length (mm)                | OPEN   | 217   | 217   | 217      |
|                            | CLOSED | 177   | 177   | 177      |
| Weight (g)                 | 460    | 450   | 478   | 468      |

| EYEPIECES     | •HR MM2 | • MM2  |
|---------------|---------|--------|
| Product Code  | 40909M  | 40902M |
| Magnification | 13-39x  | 25x    |
| Field/1000m   | 49/30   | 38     |

For more information on SDL, HDF, HR and MM2 eyepieces see page 46

<sup>1</sup>MM2 25x eyepiece

| EYEPIECES     | • SDL               | • HDF  | • HR/HR2 |        |        |        |        |        |        |        |        |        |                     |
|---------------|---------------------|--------|----------|--------|--------|--------|--------|--------|--------|--------|--------|--------|---------------------|
| Product Code  | 40935M <sup>2</sup> | 40810M | 40809M   | 40858M | 40859M | 40860M | 40861M | 40862M | 40812M | 40930M | 40931M | 40932M | 40933M <sup>2</sup> |
| Magnification | 12-36x              | 13xWW  | 18xWW    | 24xWW  | 28xWA  | 45xWA  | 57x    | 12-36x | 13x    | 15xWA  | 20xWA  | 28x    | 13-39x              |
| Field/1000m   | 58/32               | 60     | 60       | 49     | 43     | 30     | 20     | 60/29  | 58     | 60     | 58     | 29     | 49/30               |

<sup>2</sup>40934 eyepiece adapter required

# TELEPHOTOGRAPHY WITH OPTICRON TELESCOPES

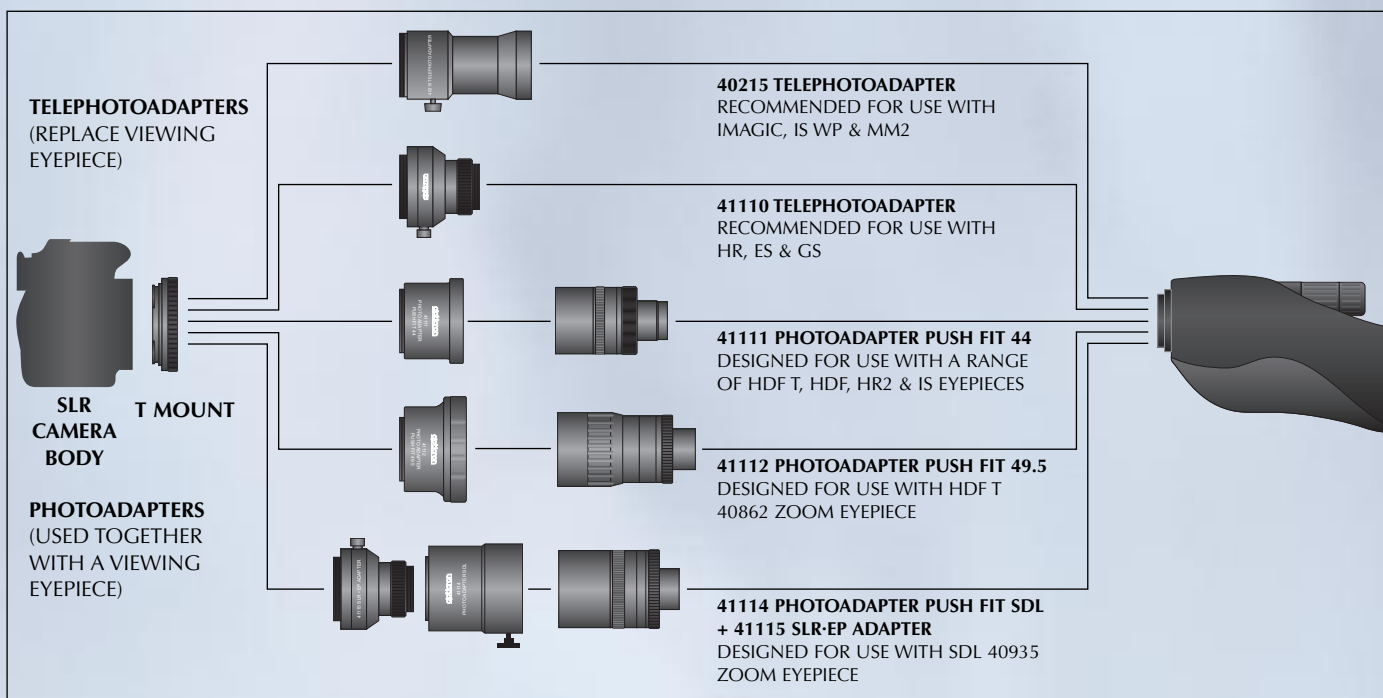
Telephotography (taking high magnification photographs) is now easier than ever to enjoy using Opticron telescopes in conjunction with either SLR cameras (digital or film), or digital compact cameras and camcorders. In addition to wildlife observation, images can be taken, edited, printed and stored with relative ease, enabling the creation of a unique personal library to be shared in print or via a PC. The two main options open to the prospective telephotographer are to

- combine a telescope with an SLR or D-SLR camera
- use a telescope together with a compact digital camera or camcorder.



## Telephotography with SLR and D-SLR Cameras

In this system the camera lens is substituted for the telescope and coupled directly to the SLR camera body using either a telephotoadapter or an eyepiece+photoadapter combination. T mounts, available for nearly all makes of SLR cameras are also needed to connect the scope assembly to the camera body. The chart below shows the current range of telephotoadapters and photoadapters available to enable you to convert your Opticron telescope into a long focal length telephoto lens.



### 40215 TELEPHOTOADAPTER

Equivalent focal lengths<sup>(1)</sup>  
**HR 66** 800mm/f.12  
**HR 80** 900mm/f.11.3  
**ES 80** 950mm/f.11.9  
**ES 100** 1250mm/f.12.5  
**GS 665** 750mm/f.11.3  
**GS 815** 950mm/f.11.7  
**IMAGIC 65** 780mm/f.12  
**IMAGIC 80** 985mm/f.12.3  
**IS WP 50** 585mm/f.11.7<sup>(2)</sup>  
**IS WP 60** 700mm/f.11.7<sup>(2)</sup>  
**IS WP 70** 780mm/f.11.1<sup>(2)</sup>  
**MM2 52** 530mm/f.10

<sup>(2)</sup> Optional 40927S close focus adapter

### 41110 TELEPHOTOADAPTER

Equivalent focal lengths<sup>(1)</sup>  
**HR 66** 1000mm/f.15  
**HR 80** 1350mm/f.16.8  
**ES 80** 1150mm/f.14.4  
**ES 100** 1500mm/f.15  
**GS 665** 900mm/f.13.5  
**GS 815** 1150mm/f.14.1

### 41111 PHOTOADAPTER PUSH FIT 44

Equivalent focal lengths with HR, ES & GS scopes fitted with either HDF T 40810 eyepiece or HR2 40933 eyepiece at lowest magnification setting and using a 35mm SLR camera<sup>(1)</sup>

**HR 66** 1000mm/f.15  
**HR 80** 1350mm/f.16.8  
**ES 80** 1150mm/f.14.4  
**ES 100** 1500mm/f.15  
**GS 665** 900mm/f.13.5  
**GS 815** 1150mm/f.14.1

#### Fitting smaller dia. eyepieces

The 41111 Photoadapter push fit 44 can be used with smaller dia. eyepieces by replacing the inner sleeve supplied with one of the following reducer sleeves;

- 41117 reducer 44~40 enabling connection to HR2 40930, 40931 & IS 40916S, 40918S eyepieces.
- 41118 reducer 44~37 enabling connection to fold down rubber eyecup versions of HDF eyepieces 40810 and 40809.

#### Using smaller dia. HR (MK1) eyepieces

For customers wishing to use HR 40812, 40813 and 40815 eyepieces we offer the 41111 Photoadapter push fit 44 short with 41119 reducer 44~33. Please email or phone for further information.

### 41112 PHOTOADAPTER PUSH FIT 49.5

Equivalent focal lengths with HR, ES & GS scopes fitted with HDF T 40862 zoom eyepiece at lowest magnification setting and using a 35mm SLR camera<sup>(1)</sup>

**HR 66** 900mm/f.13.7  
**HR 80** 1200mm/f.15  
**ES 80** 1000mm/f.12.5  
**ES 100** 1350mm/f.13.5  
**GS 665** 800mm/f.12  
**GS 815** 1000mm/f.12.3

### 41114 PHOTOADAPTER PUSH FIT SDL + 41115 SLR-EP ADAPTER

(Magnification factor 1.37x)  
 Equivalent focal lengths with HR, ES & GS scopes fitted with SDL zoom eyepiece at lowest magnification setting and using a 35mm SLR camera<sup>(1)</sup>

**HR 66** 1230mm/f.13.7  
**HR 80** 1640mm/f.15  
**ES 80** 1370mm/f.12.5  
**ES 100** 1850mm/f.13.5  
**GS 665** 1100mm/f.12  
**GS 815** 1370mm/f.12.3

<sup>(1)</sup> These are approximate figures based on 35mm SLR cameras. D-SLR cameras use different size image sensors compared to 35mm and so an equivalent conversion figure must be calculated separately.

### T MOUNTS

Needed to connect telephoto & photoadapters to SLR camera bodies

- 40601 Olympus OM**
- 40602 Pentax / Praktica** - 42mm screw
- 40603 Pentax K** - bayonet fitting
- 40604 Minolta MD** - manual focus
- 40605 Minolta AF / Sony α** - auto focus
- 40606 Canon FD** - manual focus
- 40607 Canon EOS** - auto focus
- 40608 Nikon**
- 40609 Fourthirds - Olympus E**

**Notes.** Focusing is facilitated on the telescope. Camera may need to be operated in manual mode with shutter locks disengaged where necessary.

The high magnification to aperture ratios result in slower shutter speeds compared with conventional telephoto lenses so ISO 400+ settings are suggested when using D-SLRs. For 35mm SLRs 400/800 ASA film is recommended.

If possible use a cable release or remote control to reduce camera shake when operating the shutter.



## Telephotography with Digital Compact Cameras and Camcorders

The nature of image capture with digital cameras allows Opticron telescopes to be used as long focal length telephoto lenses for wildlife photography. There are some limitations to this application however as viewing eyepieces are not designed for taking photographs with digital cameras. As a result it is often difficult for a viewing eyepiece to project a large enough diameter path of light into the camera lens and onto the CCD within. This results in a partial image being created in the camera and a condition known as vignetting or circular image within the available rectangular image frame. Vignetting can be 'cropped out' of the final image using photo editing software, but the resulting image will be equivalent to using a very narrow field eyepiece.

To get the best results:

1. Choose a camera with a small lens diameter. The smaller the lens diameter the more of its surface area will be covered by light exiting from the eyepiece. Commonly camera lenses of diameter less than 20mm give best results and camera lenses over 30mm in diameter will require you to use the optical zoom to attain anything close to a 'full frame' image.
2. Use the optical zoom function on the camera/camcorder to effectively reduce the aperture of the lens to 'match up' with light exiting from the eyepiece. Remember the higher the optical zoom setting, the higher the magnification of the final image. E.g. 20x eyepiece plus 3x optical zoom = 60x\* magnification \*assuming 1x setting on camera = 1x magnification.

As a general rule, the following eyepieces provide the best overall images with a wide range of different compact digital cameras. To help they have been graded according to particular requirement.

1. Overall image quality: **HDF 40810** or **HR 40812**
2. Flexibility across the widest range of different magnifications: **SDL 40935 zoom** or **HDF 40862 zoom**
3. Taking pictures at lower magnifications: **HDF 40937** or **DTL 40929**

**Note.** In addition to eyepiece magnification and camera lens diameter, variables such as eyepiece eyerelief and field of view together with individual camera zoom lens mechanisms all play an important role in achieving the best overall 'set-up' for this type of telephotography. There is therefore no substitute for individual testing.

### Taking pictures at lower magnifications: HDF 40937 or DTL 40929

These eyepieces are designed to maximise the diameter of the path of light exiting the telescope and being projected into the camera lens. As such they allow full frame photographs to be taken on more types of cameras at their lowest zoom setting. The eyepieces screw directly onto HR, GS and ES bodies.

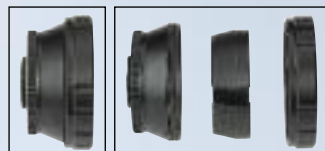
| MODEL  | 40937 | 40929  |
|--------|-------|--------|
| HR 66  | 16x   | 10.5x  |
| HR 80  | 22x   | 14x    |
| GS 665 | 15x   | 9.5x   |
| GS 815 | 19x   | 12.5x  |
| ES 80  | 19x   | 12.5x  |
| ES 100 | 25x   | 16.25x |

### Digital Compact Camera Adapters

(50065 DCC adapter & 50064 SDL DCC adapter)

The DCC adapter is designed to provide a secure connection between selected Opticron eyepieces and digital compact cameras that feature screw threads normally associated with fitting teleconverters or lens hoods.

Each DCC adapter is a 2 piece aluminium assembly fitted with a flexible delrin insert or set of inserts that pushes over and locks down onto the eyepiece. Connection to any given camera is via a 28mm external thread, a suitable tube for which should be sourced separately.



### 40849 Universal Digital Camera Adapter

The Universal Digital Camera Adapter is designed to allow you take high magnification photographs using Opticron telescopes and eyepieces in conjunction with most digital compact cameras and some digital camcorders using eyepiece projection.

Many digital compact cameras do not have screw threads on the lens housing to allow for direct coupling, so the UDCA is designed as a three-way adjustable balance plate that fixes directly to the telescope eyepiece. The camera is fixed onto the UDCA and can be adjusted on three planes to enable correct positioning with respect to the eyepiece.

The vertical position of the balance plate can be 'fixed' using the Vertical Locking Ring (VLR) accessory. This enables the camera + balance plate to be swung in and out of position allowing you to alternate between taking pictures and viewing through the eyepiece in the normal way.



**Note.** Mounting the UDCA requires an eyepiece dia. less than or equal to 56mm and fixed (non rotating) eyepiece tube length of 15mm.

For more information on the 40849 UDCA, DCC adapters and current camera kits please contact us by telephone or visit [www.opticron.co.uk](http://www.opticron.co.uk) and look for TELEPHOTOGRAPHY.

# EYEPIECES

A wide range of eyepieces are available for use with Opticron HR, GS, ES, IS and MM2 fieldscopes. Choosing the best eyepiece is often confusing but making the right choice will depend on price and application. It is important to remember that the eyepiece is an integral part of the whole set up and opting for a lower quality lens will affect overall image quality. Eyepieces are listed with their generic code. For magnification with individual telescope bodies please refer to the tables on each telescope page.

## SDL Eyepiece

An F24 - F8, 5-group 8-element 'super' zoom, the 40935 SDL is designed to maximise the performance gains inherent in Opticron ED objective lens fieldscopes at higher magnifications. Offering an optimum ratio between field of view and resolution, the main viewing characteristics of the eyepiece are superior cross-field definition at all magnifications coupled with exceptional viewing comfort. Mechanically the eyepiece is waterproof, uses the M41.5 collar thread attachment, features a 90° rotation between high and low magnification settings plus a rotating eyecup that can be positioned to match individual needs. Supplied in soft padded case.

**40935** Eyereief (mm) 27-22 Eyelens dia (mm) 26 Length (mm) 68 Weight (g) 246



## HDF Eyepieces

The preferred choice for image quality, HDF eyepieces have large diameter eye lenses and offer 'walk-in' field of vision. The eyepieces are long eyerelief to enable the full field of view to be obtained with or without spectacles and fixed magnification models are wide angle. Four of the seven eyepieces also feature a twist type retractable eyecup assembly that enables individual eye to eyepiece distance adjustment.



**40810**  
Eyereief (mm) 22  
Eyelens dia (mm) 25  
Length (mm) 40  
Weight (g) 151



**40809**  
Eyereief (mm) 18  
Eyelens dia (mm) 23  
Length (mm) 51  
Weight (g) 173



**40858**  
Eyereief (mm) 17  
Eyelens dia (mm) 23  
Length (mm) 61  
Weight (g) 212



**40859**  
Eyereief (mm) 15  
Eyelens dia (mm) 21  
Length (mm) 49  
Weight (g) 77



**40860**  
Eyereief (mm) 15  
Eyelens dia (mm) 18  
Length (mm) 61  
Weight (g) 87



**40861**  
Eyereief (mm) 16  
Eyelens dia (mm) 17  
Length (mm) 66  
Weight (g) 84



**40862**  
Eyereief (mm) 22-17  
Eyelens dia (mm) 24  
Length (mm) 76  
Weight (g) 206

## HR Eyepieces

A good choice as either a supplementary eyepiece in combination with HDF or single eyepiece for the more value conscious user requiring long eyerelief for use with glasses.



**40812**  
Eyereief (mm) 18  
Eyelens dia (mm) 19  
Length (mm) 45  
Weight (g) 61



**40930**  
Eyereief (mm) 18  
Eyelens dia (mm) 21  
Length (mm) 38  
Weight (g) 83



**40931**  
Eyereief (mm) 17  
Eyelens dia (mm) 21  
Length (mm) 39  
Weight (g) 92



**40932**  
Eyereief (mm) 20  
Eyelens dia (mm) 24  
Length (mm) 61  
Weight (g) 158



**40933**  
Eyereief (mm) 18-14  
Eyelens dia (mm) 18  
Length (mm) 55  
Weight (g) 149



**HDF 40937**  
Eyereief (mm) 25  
Eyelens dia (mm) 28  
Length (mm) 45  
Weight (g) 115



**DTL 40929**  
Eyereief (mm) 38  
Eyelens dia (mm) 31  
Length (mm) 45  
Weight (g) 122

## Low Magnification

Optional low magnification lenses for digital telephotography using compact cameras/camcorders. Best suited for use with HR, GS and ES models.

## MM2 • HR MM2 Eyepieces

Dedicated eyepieces for MM2 bodies and the most popular choice as a first eyepiece.



**40902M**  
Eyereief (mm) 10  
Eyelens dia (mm) 14  
Length (mm) 23  
Weight (g) 34



**40909M**  
Eyereief (mm) 18-14  
Eyelens dia (mm) 18  
Length (mm) 65  
Weight (g) 148

## IS Eyepieces

Dedicated long eyerelief eyepieces for IS WP models and best overall choice as a first eyepiece.



**40916S**  
Eyereief (mm) 18  
Eyelens dia (mm) 21  
Length (mm) 48  
Weight (g) 102



**40918S**  
Eyereief (mm) 34-18  
Eyelens dia (mm) 20  
Length (mm) 75  
Weight (g) 143



**40919S**  
Eyereief (mm) 27-16  
Eyelens dia (mm) 20  
Length (mm) 82  
Weight (g) 241

# UNIVERSAL TELE-ADAPTER (UTA)

## 2.5x FOR BINOCULARS & TELESCOPES



The Opticron Universal Tele-Adapter enables you to increase the magnification of your Opticron binocular or telescope+eyepiece combination by a factor of 2.5x. Easily fitted to a binocular, the UTA converts one half of the instrument into a higher powered long eyerelief monocular. The UTA also connects to Opticron SDL, HDF, HR, IS and MM2 eyepieces.



Naked eye

8x Binocular

8x Binocular with 2.5x Tele-Adapter giving 20x magnification

Featuring a long eyerelief eyepiece for use with or without spectacles and fitted with a twist type retractable eyecup, the UTA can be used with a wide range of binoculars with different eyepiece diameters as it is supplied as two separate components:

- i. 2.5x adapter complete with optical assembly
- ii. connection ring to fit over the eyepiece

See Table below for connectivity within the Opticron range.

UTA fitted with 40947 connector: Height 76mm. Diameter 46mm. Weight 110g (varies slightly for other connection rings)



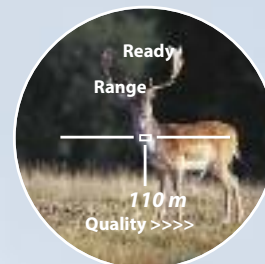
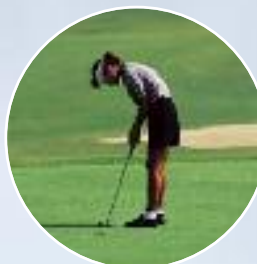
| Code   | 40941  | 40942   | 40943 cont.   | 40944  | 40945  | 40947  | 40948                                   |
|--|--|---|---|--|--|--|---|
| Internal dia. (mm)   | 42.5-41.3  | 42-41.3   | 44.3  | 40   | 34.6   |  | 50-49.5                                 |
| Connection rings to fit 40940 UTA to Opticron Binoculars, Monoculars and Telescope eyepieces | Aurora BGA<br>DBA Oasis<br>BGA Classic<br>Oregon LE WP<br>Observation <sup>1</sup> | C/Man BGA T PC<br>Imagic TGA WP<br>Mono 8x30<br>Mono 8x32LE<br>Oregon 15x70 | Verano BGA PC<br>Oasis<br>Discovery WP PC (42mm)<br>Trailfinder II<br>Aspheric WA<br>HDF T 40809<br>HDF T 40858<br>HDF T 40810<br>HR2 40933 | HR WP<br>Traveller<br>Vega II<br>Oregon 20x80 <sup>2</sup><br>Oregon LER <sup>3</sup><br>IS 40916S<br>IS 40918S<br>HR2 40930<br>HR2 40931<br>HR2 40932 | SR.GA<br>(Fixed magnification)                               | (40940+40947 coded as 30442)<br>DBA Mono<br>BGA Mono | HDF T 40862<br>IS 40919S+<br>R/E 40862T |
|  |  |   |   |  | 40946<br>33.3  |  | 40949<br>52.5-51.26                     |
|  |  | 40943<br>44.3   |   |  | HDF 40859<br>HDF 40860<br>HDF 40861<br>HR 40812<br>MM 40903M |  | SDL 40935                               |
|  |  | Imagic BGA SE<br>Explorer BGA   |   |  |  |  |   |

1. POST 2002 MODELS ONLY 2. PHONE FOR DETAILS 3. USE WITH EYECUP IN FOLD DOWN POSITION  
For information on suitable connection rings for other Opticron binoculars and telescope eyepieces please contact us on 01582 726522.

# TRACKER 660



The Tracker 660 is a high quality, easy-to-use eye safe Laser Rangefinder designed for a range of outdoor activities such as golf, hunting, site surveying, walking and rambling. A precision instrument it provides accurate measurements of speed and distance up to a range of 700 metres. The unit also doubles as a 6x23 monocular with a 7° field of view.



Designed for easy one hand operation, the lightweight body (185g) is shaped to fit comfortably into the palm and is covered in a protective gloss black finish.

Model supplied in a soft carry case with neck & shoulder strap, CR2 Lithium battery, lens cloth and 2 year limited warranty.

# CMOS WIRELESS TELECAM



Fitted directly to the telescope in place of a conventional viewing eyepiece, the CMOS Wireless Telecam transmits high magnification real-time images from HR, ES & GS 'scopes directly to a TV or PC Notebook fitted with an analogue TV card. As such it provides the opportunity to show real-time footage to groups in public spaces as well as offering the visually impaired an easier way of viewing through a telescope.

The unit features cable or wireless connection for flexibility in the positioning of the telescope in a hide or viewing area. Images relayed to a TV can be recorded directly to video while images relayed to a PC can be recorded if the TV card supports this option. Please contact us for more information.



# TRIPODS & ACCESSORIES

## 42625 Traveller Carbon Fibre v3

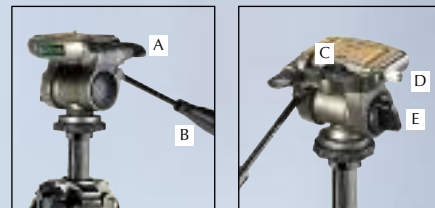
Compact and lightweight carbon fibre tripod designed for use with fieldscopes to 80mm OG, photo and video equipment. Model comes complete with lightweight 42800 magnesium panhead and 42607 tripod strap connector. Main features include:

- 3 section carbon fibre tubular legs giving a usable height without raising centre column of 1365mm (53 3/4")<sup>1</sup> for maximum panning stability
- 42800 3-way magnesium panhead with 360° panning and +90° to -60° tilt plus 90° side tilt for use with telescopes not fitted with rotating tripod sleeves. Panhead also features QR plate side locking screw for extra rigidity
- Integral quick release plate (1/4" thread) with locating pin
- 300mm sliding c/column with collar lock
- Twist-type leg locks and rubber/spiked feet
- Level indicator on canopy
- Leg angles: 25°, 60°, 85°
- Height extended: 1665mm (65 1/2")<sup>1</sup>
- Height retracted: 25° - 640mm (25 1/4")<sup>1</sup>, 60° - 520mm (20 1/2")<sup>1</sup>, 85° - 405mm (16")<sup>1</sup>
- Weight: 1834g
- 5 year guarantee

<sup>1</sup>inch conversions are approximate

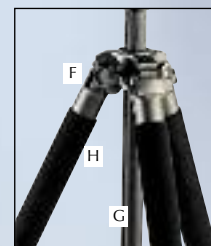


## 42800 Magnesium Panhead (inc)<sup>2</sup>



- A Locking screw for 90° side tilt
- B Vertical movement locking handle
- C Integral quick release plate (1/4") with locating pin (removable)
- D QR plate side locking screw
- E Locking screw for horizontal panning
- F Centre column locking screw
- G 300mm sliding centre column
- H Foam hand grip

<sup>2</sup> This panhead is also available separately



## 42636 Traveller Carbon Fibre Pro v3

As 42625 but fitted with 42637 Manfrotto 701HDV 2-way composite fluid panhead. Suited for use with ES 80/100 and HR 80 telescopes.

Specifications and features include:

- Maximum load rating 4kg
- +15mm to -15mm sliding top plate for accurate balancing of equipment
- Integral quick release plate (1/4" & 3/8" fittings) included
- Usable height without raising centre column 1375mm (54")
- Height extended: 1675mm (66")<sup>1</sup>
- Height retracted: 25° - 650mm (25 1/2")<sup>1</sup>, 60° - 530mm (21")<sup>1</sup>, 85° - 415mm (16 1/2")<sup>1</sup>
- Weight: 2142g
- 5 year guarantee

<sup>1</sup>inch conversions are approximate

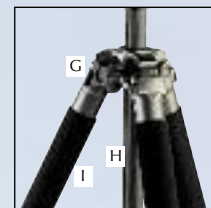


## 42637 701HDV Composite Panhead (inc)<sup>2</sup>



- A Panhandle
- B Sliding QR plate locking screw
- C Vertical movement locking screw
- D Sliding QR plate (1/4", 3/8") with locating pin (removable)
- E QR plate release button
- F Horizontal panning locking screw
- G Centre column locking screw
- H 300mm sliding centre column
- I Foam hand grip

<sup>2</sup> This panhead is also available separately



## 42626 Traveller Carbon Fibre v3



As 42625 but w/o panhead

- Height extended: 1580mm (62 1/4")<sup>1</sup>
- Height retracted:  
25° - 555mm (21 3/4")<sup>1</sup>  
60° - 435mm (17")<sup>1</sup>  
85° - 320mm (12 1/2")<sup>1</sup>
- Weight: 1310g

<sup>1</sup>inch conversions are approximate



## Tripod Harness



**40507** Simple design in nylon and leather c/w 3 loop fasteners and belt clip. Doubles as a standard carry strap.

# TRIPODS & ACCESSORIES

## 42804 Birdwatcher's

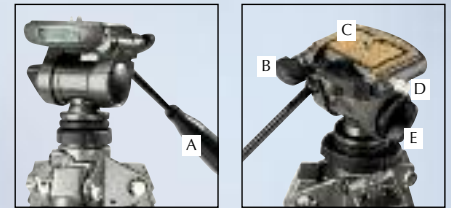
Lightweight, rigid tripod designed for use with fieldscopes, photo & video equipment. Model comes with sliding removable centre column for simple conversion to a hide mount using 42611 clamp (see page 50). Supplied with 42800 magnesium panhead and 42607 tripod strap connector. Main features include:

- Extended 3 section tubular legs giving a usable height without raising centre column of 1410mm (55 1/2")<sup>1</sup> for panning stability at high magnifications
- 42800 3-way magnesium panhead with 360° panning and +90° to -60° tilt plus 90° side tilt for use with telescopes not fitted with rotating tripod sleeves. Panhead also features QR plate side locking screw for extra rigidity
- Integral quick release plate (1/4" thread) with locating pin
- 300mm centre column
- Clip-type leg locks and rubber feet
- Height extended: 1710mm (67 1/4")<sup>1</sup>
- Height retracted: 650mm (25 1/2")<sup>1</sup>
- Weight: 2180g
- 5 year guarantee

<sup>1</sup>inch conversions are approximate

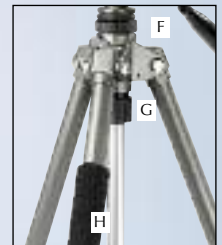


## 42800 Magnesium Panhead (inc)<sup>2</sup>



- A Vertical movement locking handle
- B Locking screw for 90° side tilt
- C Integral quick release plate (1/4" thread) with locating pin (removable)
- D QR plate side locking screw
- E Locking screw for horizontal panning
- F Centre column collar lock
- G 300mm sliding centre column with stability ring
- H Foam hand grip

<sup>2</sup> This panhead is also available separately



## 42831 Birdwatcher's Pro

As 42804 but fitted with 42637 Manfrotto 701HDV 2-way composite fluid panhead. Suited for use with ES 80/100 and HR 80 telescopes.

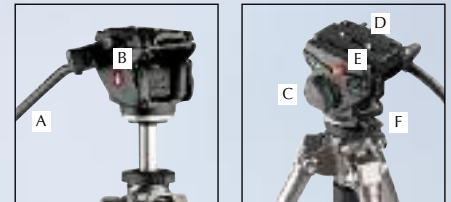
Specifications and features include:

- Maximum load rating 4kg
- +15mm to -15mm sliding top plate for accurate balancing of equipment
- Integral quick release plate (1/4" & 3/8" fittings) included
- Usable height without raising centre column 1420mm (56")
- Height extended: 1720mm (67 3/4")<sup>1</sup>
- Height retracted: 660mm (26")<sup>1</sup>
- Weight: 2488g

<sup>1</sup>inch conversions are approximate

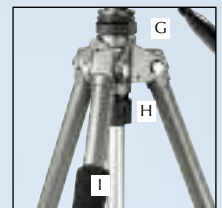


## 42637 701HDV Composite Panhead (inc)<sup>2</sup>



- A Panhandle
- B Sliding QR plate locking screw
- C Vertical movement locking screw
- D Sliding QR plate (1/4", 3/8") with locating pin (removable)
- E QR plate release button
- F Horizontal panning locking screw
- G Centre column collar lock
- H 300mm sliding centre column with stability ring
- I Foam hand grip

<sup>2</sup> This panhead is also available separately



## Tripod Straps



**40505**

40mm nylon with loop fasteners



**40506**

55mm neoprene with loop fasteners and 25mm webbing

## 42604L Birdwatcher's (Canopy, legs and centre column only)

As 42804 but w/o panhead

- Height extended 1625mm (64")<sup>1</sup>
- Height retracted 565mm (22 1/4")<sup>1</sup>
- Weight 1656g

<sup>1</sup>inch conversions are approximate



# MOUNTS

## BC-2 Clamping System

### 42605 BC-2 Hide Clamp

Lightweight & rigid bench clamp support specially designed for use with fieldscopes, photo & video equipment.

Features include:

- 42800 3-way magnesium panhead with 360° panning and +90° to -60° tilt plus 90° side tilt for use with telescopes not fitted with rotating tripod sleeves
- Integral QR plate with 1/4" thread and removable locking pin
- QR plate side locking screw for extra rigidity
- 500mm sliding centre column adjustment
- Maximum jaw width 45mm
- Maximum height extended 510mm (20")<sup>1</sup>
- Minimum height retracted 90mm (3 1/2")<sup>1</sup>
- Weight 960g
- 5 year guarantee

<sup>1</sup>inch conversions are approximate



### 42610 BC-2 Clamp & 500mm centre column

(as 42605 but w/o panhead)  
Combines with 42800 panhead to convert to a hide clamp.  
Weight 436g  
5 year guarantee



### 42611 BC-2 Clamp

Fits directly onto tripod centre column to convert to a hide clamp.  
Supplied complete with Ø21/22mm, 23/24mm and Ø25/26mm reducer sleeves. Weight 267g  
5 year guarantee



## Mounts

### 42100 Monopod

All purpose monopod support for use with lightweight fieldscopes, photo & video equipment.

4 section extendable with twisting leg lock system

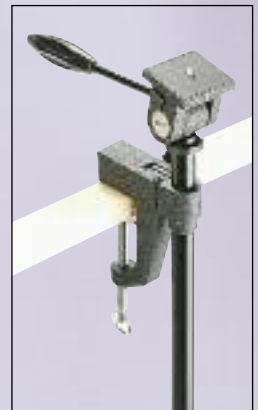
- Height extended 1470mm (58")
- Height retracted 470mm (18 1/2")
- Integral 1/4" thread allowing connection to 42800 panhead or a panhead of your choice
- Durable foam hand grip
- Wrist strap
- Rubber foot
- Weight 695g
- 5 year guarantee



### 40503 Universal II - Hide Mount

Lightweight bench clamp with 400mm extension pole.

- 2-way one lever operated panhead with integral 1/4" thread
- Maximum panning height 450mm
- Maximum jaw width 45mm
- Optional quick release plate & shoe
- Dim (mm) 450x60x95
- Weight 845g
- 5 year guarantee



### 40502 Car Window Mount

- 2-way one lever operated panhead with integral 1/4" thread
- Maximum panning height 80mm
- Protective rubber jaw pads
- Optional quick release plate & shoe
- Dim (mm) 205x60x85
- Weight 555g
- 5 year guarantee



### 40501 Universal Mount

Designed to clamp horizontally or vertically onto a wide range of objects.

- 2-way one lever operated panhead with integral 1/4" thread
- Maximum panning height 80mm
- Maximum jaw width 45mm
- Optional quick release plate & shoe
- Dim (mm) 210x60x70
- Weight 597g
- 5 year guarantee



## 40314 Bipod & Carry Ball

Lightweight rigid bipod manufactured from aluminium and finished in matt black.

Main assembly folds out rigid without any need for locking to a height of 225mm (8 3/4") and collapses back quickly and easily. Centre column allows for height adjustments between ground level and 470mm (18 1/2") with 1/4" screw thread connection to either a telescope tripod mount, cradle or ball and socket panhead.

With a footprint measuring just 30cmx30cmx43cm, the bipod is equally at home on a table or bench where the 270mm extension pole extends maximum height to 740mm (29"). Guarantee 5 years. Weight c/w extension pole 1502g



### 40316 Ball & Socket Panhead

Designed for use with 40314 bipod and spottingscopes without rotating tripod sleeves.  
Height 76mm  
Weight 107g



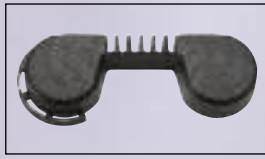
**Note.** 40314 Bipod & Carry ball + 40316 Ball & socket head are available as a kit.  
Product code 40315

# ACCESSORIES

## Binocular Rainguards & Objective Lens Covers



**Binoculars Plastic**  
**31025** Int ø to 37mm  
**31020** Int ø to 43mm  
**31028** Int ø to 45.5mm



**31021 Compact Binoculars Plastic**  
 Int ø to 34mm



**Rubber Objective Lens Covers**  
**31031** for 32mm OG  
**31023** for 42mm OG  
**31024** for 50mm OG

## Microfibre Cleaning Cloth



**30277**  
 20x20cm superior quality cloth for high performance cleaning of external lenses. Supplied in protective pouch.

## Binocular Tripod Mounts



**'L' Shape**  
 A **31026** Compacts to 30mm OG  
 B **31004** Small to 50mm OG  
 C **31022 DCF/BGA** roof prism models  
 D **31005** Large over 50mm OG



**31012 BGA Roof Prism**  
 For use with BGA roof prism models



**31006 Centre Focus**  
 Secures over focus shaft

## Binocular Cases



Available in leather or vinyl  
 Quote model when ordering

## Binocular & Monocular Lanyards



Lanyards are fully adjustable and feature loop fasteners  
 Models from top down:  
**31000** 16mm nylon (compact binoculars)  
**29009** 14mm neoprene (monoculars)  
**29010** 16mm neoprene (compact binoculars)  
**31001** wide nylon (binoculars)  
**29014** 30mm neoprene (binoculars)  
**29011** 40mm neoprene (binoculars)  
**31002** 40mm ribbed edge neoprene bungee (binoculars)

## 31018 Harness



Leather and nylon  
 c/w quick release

## Telescope Cases



**Stay-on-the-scope waterproof in Black**  
 Water resistant multi-layer padded cases individually designed to fit and protect each model whilst connected to a tripod/clamp and in use. All models include removable end caps and adjustable padded carry strap.  
 Available for: GS, ES 80, IS WP and MM2 models.



**Stay-on-the-scope waterproof in Khaki Green**  
 As Black models but featuring a zippered prism housing section providing easier access when changing eyepieces, focus flap retention stud allowing better access to the focus wheel plus deluxe neoprene carry strap for extra comfort.

Currently available for HR ED, GS 665/45, GS 815/45 & ES models.



**Traveller**  
 Semi rigid padded case manufactured from water resistant material with central zip fastener, adjustable straps and loop attachments to carry a tripod.  
 Two sizes;  
**40847** 60-70mm OG.  
 Int. dim: 420x150~100x60mm  
**40848** 75-80mm OG.  
 Int. dim: 470x190~110x80mm



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