

nhbs BUYER'S GUIDE

Highlighting the very best conservation equipment

HAND LENSES

INTRODUCTION

A hand lens is an indispensable part of any nature enthusiast's or professional's kit bag. This seemingly simple tool allows you to focus in on the details of nature to help you identify anything from insects and flower parts to crystalline structures. But selecting the right lens is not as simple as choosing the cheapest - you need to consider your goals and objectives along with your work environment.

To view our full range of hand lenses, visit



www.nhbs.com

KEY FEATURES

When deciding which hand lens is suitable for you, you need to consider both their construction and magnification. Both of these factors will influence the cost and practical use of the lens.

Magnification: In the same way that binoculars use two sets of numbers to describe the power and viewing field, so do hand lenses. The first number describes the magnification. At NHBS, we have a selection of lenses ranging from 3× magnification to 20×. It is important to remember that the higher the magnification, the smaller the lens will be as the lens construction requires a more pronounced curvature to achieve the magnification. If you are going to be looking at larger objects, consider choosing a lower magnification with a greater field of view (see below).



Lens diameter: This is the second number that you will typically see in the product description of a hand lens. The diameter of the lens will affect the field of view when looking through it - the larger the diameter, the better the field of view.



**Opticron Hand Lens
23mm 10x Magnification**

#210079



**Opticron Hand lens,
18mm, 6x magnification**

#174484



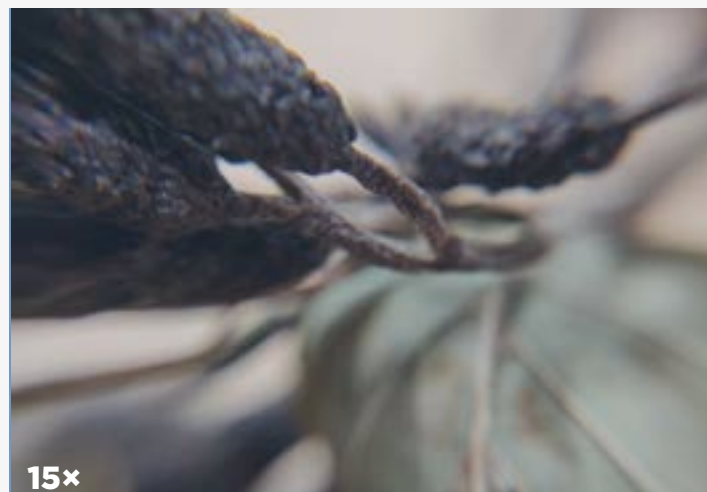
**Folding Metal Loupe
Magnifier with LED and
UV Light 10 x 21mm**

#258001

Field of view: The field of view is the area that you can see when looking through the lens. This is dictated by the magnification, diameter and construction of the lens. The lower the magnification, the greater the field of view.



Depth of field (DOF): This refers to how much of the object is in focus from the front to the back of the image when looking through the lens. Typically, multiple lens elements in the hand lens increases the DOF. For more information, see the lens construction section below.



Lens material: The lens can be made of glass or acrylic. The glass versions are better in quality and sharpness but they are heavier and more expensive. They are also more durable and scratch resistant. Acrylic (plastic) is cheaper and lighter.



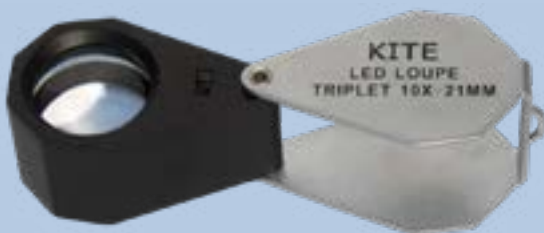
Working distance: This is the distance between the lens and subject. The higher the magnification, the closer the lens needs to be to the subject to bring it into focus. Move the lens closer to or further from your eye until the object comes into focus.

Lens construction: You may have noticed when looking at our range of hand lenses that there are three types: **singlet**, **doublet**, and **triplet**. This describes the number of glass/acrylic elements in the lens (not to be confused with the brand Triplet which is a singlet lens). This also influences the DOF; more elements typically describe a greater

DOF with the triplet design as being the best quality. If you are planning to use the hand lens in a humid or wet climate, however, you need to consider that doublet and triplet lenses have multiple glass elements that are glued together, and as such extra care should be taken in looking after your lens to prevent moisture getting in.

ADDITIONAL FEATURES

Getting enough light to view the subject can sometimes be a challenge; however, manufacturers incorporated an LED ring system into the mount of the lens to better illuminate the subject. As previously mentioned, when using a hand lens in humid or wet environments, extra care should be taken when replacing the battery.



LED Triplet Loupe Hand Lens

#227764



ENTRY-LEVEL



Singlet Loupe
10x, 21mm
#181284



Opticron Hand Lens
6x, 23mm
#210076

MOST POPULAR



Triplet Loupe Hand Lens
20x, 21mm
#202599



LED Triplet Loupe Hand Lens
10x, 21mm
#227764

ACCESSORIES AND SUGGESTED READING

Lanyard for Hand Lens
#218043



Petzl Tikkina Headtorch
#262197



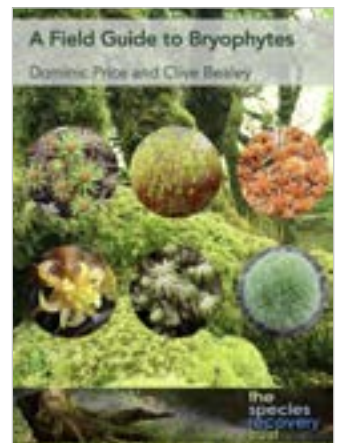
#248925



#249909



#248333



#258797

Explore the complete range of hand lenses on our website. If you have any questions about our range or would like some advice on the right product for you, then please contact us via email at customer.services@nhbs.com or phone on 01803 865913

