

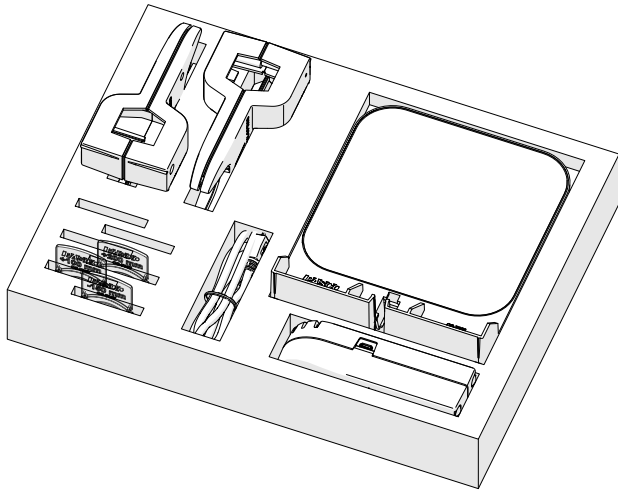
Meter Stick Optics Components Kit

OS-7053

About the product

This set includes the components needed to perform a variety of optics experiments with a meter stick. All the components are designed to work with the Aluminum Meter Stick (ME-7032), but are also compatible with most standard wood meter sticks.

What's included

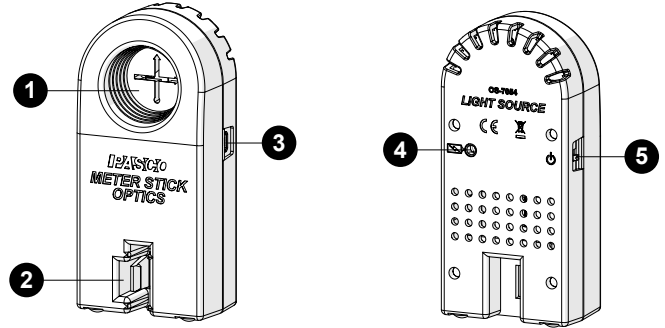



- Light Source (OS-7054)
Includes a USB cable for charging the battery.
- 2×Component Holder (OS-7055)
- Viewing Screen (OS-7056)
- Lens Set (OS-7057)
Includes three lenses: -150 mm, +100 mm, and +200 mm.
- Storage Box


Features

Light Source

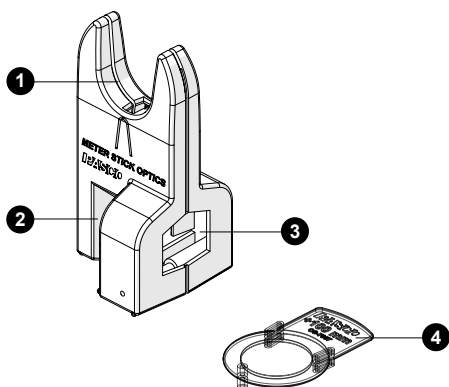
⚠ CAUTION: This device contains an intense LED light. Do not look directly into the light during operation.



- 1 Object**
The object is a backlit, translucent screen with crossed arrows printed on it. The pattern is asymmetrical so you can tell if the image is reversed or inverted. The horizontal and vertical arrows are 2 cm long. The horizontal arrow also includes two lines that are spaced 1 cm apart.
- 2 Meter stick slot**
Insert the zero end of the meter stick into this slot. This places the object at the zero-centimeter mark.
- 3 USB charging port**
Use the USB cable to connect the USB port to a USB wall charger to charge the battery.
- 4 Battery status light** 
The light indicates the battery level and charging status:

LIGHT	STATUS
Red, blink	Low battery level
Green, solid	Fully charged
Yellow, solid	Charging
- 5 Power switch** 
Use the switch to turn the light source on and off.

Component Holder and Lens



1 Component slot

Insert the lenses in this slot. Push the lens into the slot until it clicks into place.

2 Meter stick slot

When placed over the meter stick, you can slide the holder along the meter stick to different positions.

3 Viewing window

Look through the window to view the position of the lens on the meter stick. A small notch indicates the position on the meter stick.

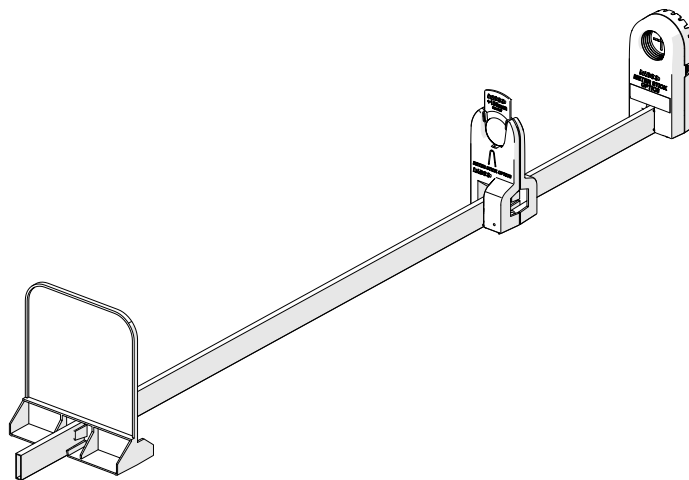
4 Lens handle

Hold the lenses by the handle to avoid getting fingerprints on the lens. The focal length is labeled on the handle.

Using the equipment

What's required

- Aluminum Meter Stick (ME-7032)
1. Place the narrow side of the meter stick on a flat surface. The numbers on the meter stick need to be upright.
 2. Attach the Light Source on the zero end of the meter stick. Push the meter stick in until you reach the end of the slot.
 3. Attach the Viewing Screen on the opposite end of the meter stick.
 4. Attach a Component Holder between the Light Source and the Viewing Screen. The holder's viewing window should face towards you.
 5. Insert a lens into the Component Holder. Hold the lens by the handle and push it into the holder's slot until it clicks into place.
 6. Turn on the Light Source.
 7. Slide the Component Holder and the Viewing Screen along the meter stick until a focused image forms on the screen.
 8. Measure the positions of the Component Holder and the Viewing Screen by viewing their position indicators on the meter stick.



Tip: If you need to move the equipment to another location, you can lift the entire apparatus by the meter stick. The components remain attached to the meter stick as you move the apparatus.

Using two lenses

You can attach two component holders to the meter stick for telescope and microscope experiments. If needed, you can reverse the direction of one of the component holders so that they can be separated by a short distance (about 4 cm minimum).

Experiments

Download one of several student-ready activities from the PASCO Experiment Library that use the Meter Stick Optics Components Kit. Experiments include editable student handouts and teacher notes. Go to [pasco.com/freelabs/OS-7053](https://www.pasco.com/freelabs/OS-7053) to access the files.

Specifications and accessories

Visit the product page at [pasco.com/product/OS-7053](https://www.pasco.com/product/OS-7053) to view the specifications and explore accessories. Experiment files and support documents can also be found on the product page.

Technical Support

Need more help? Our knowledgeable and friendly Technical Support staff is ready to provide assistance with this or any other PASCO product.

Phone (USA)	1-800-772-8700 (Option 4)
Phone (International)	+1 916 462 8384
Online	pasco.com/support

Warranty, Copyright, and Trademarks

Limited Warranty

For a description of the product warranty, see the Warranty and Returns page at www.pasco.com/legal.

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Product end of life disposal instructions



This electronic product is subject to disposal and recycling regulations that vary by country and region. It is your responsibility to recycle your electronic equipment per your local environmental laws and regulations to ensure that it will be recycled in a manner that protects human health and the environment. To find out where you can drop off your waste equipment for recycling, please contact your local waste recycle or disposal service, or the place where you purchased the product.

The European Union WEEE (Waste Electronic and Electrical Equipment) symbol on the product or its packaging indicates that this product must not be disposed of in a standard waste container.