



# FS1-F - November 19, 2021

Item # FS1-F was discontinued on November 19, 2021. For informational purposes, this is a copy of the website content at that time and is valid only for the stated product.

## FACE SHIELD

- ▶ 0.02" Thick Clear PETG Plastic Face Shield
- ► Durable, Lightweight, and Reusable
- ► Replacement Foam Inserts Available





FS1
Protective Plastic Face Shield
with Removable Foam Insert

Contact Us for Donations

#### OVER VIEW

## **Features**

- Made from 0.02" Thick Clear PETG Plastic
- Durable, Lightweight, and Chemically Resistant
- One-Size-Fits-All Design
- Suitable for Repeated Use

Thorlabs' Face Shield is constructed from 0.02" thick clear PETG plastic, which provides good visual clarity and chemical resistance. A key feature of the face shield is the sloped top, which gives protection

from contaminates that may come over the top of the face shield while still allowing for breathability and resistance to fogging. Four grommets are incorporated into the design, ensuring that the lightweight construction withstands the rigors of everyday use.

A 1" wide elastic strap holds the face shield securely in place, and a removable latex-free foam insert along the forehead (approximately 1" wide x 4" long) provides added comfort when wearing the shield for an extended period of time. If desired, the foam insert, which is held in place on each end with a hook-and-loop fastener, can be removed and discarded should the mask need to be sanitized in a steam or chemical bath between uses. Replacement foam inserts are available for purchase separately.

the community that have acute needs for additional protection. Hence, we are making these face shields available to the general public when possible.

Given the increased worldwide demand for adequate there are shortages of materials at this time; we would not consider the community that have acute needs for additional protection. Hence, we are making these face shields available to the general public when possible.

While not formally submitted for clinical review, this protective face shield was developed to mimic the features and functionality of those used in the medical industry. The simple



Click to Enlarge
Face Shields are Made
from Clear Durable
PETG Plastic

#### A Bit About the Design and Our Approach

Amidst the Coronavirus pandemic, Thorlabs joined many other maker space groups and companies in taking on the challenge of supplying PPE to the people on the front lines. One result of those efforts was the FS1 Face Shield presented here. Our design goal was to meet the needs of healthcare workers while remaining manufacturable in significant quantities within our facility.

While the first 20,000 units manufactured are being donated to community hospitals and frontline workers involved in the response to COVID-19, we have found these shields to be useful in protecting our factory floor employees and others in the community that have acute needs for additional protection. Hence, we are making these face shields available to the general public when possible.

Given the increased worldwide demand for adequate PPE, there are shortages of materials at this time; we would ask that you only order what is critically needed so that as many people as possible can get the protection they require.

construction allows large quantities to be manufactured and distributed in a short period of time.

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For design specifications and a list of face shield materials, see the *Face Shield Design* tab above. In addition, we are pleased to provide assembly instructions free of charge as a means of increasing accessibility to this product; these can be found by clicking on the red documents icon

If you represent a charity and are interested in discussing a donation for healthcare professionals or frontline workers, please contact us here.

( ) next to the FS1 item number link below.

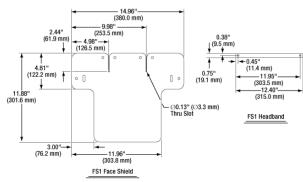
This face shield is being made available under the US Food and Drug Administration's (FDA's) emergency use authorization under Section 564(g)(2)(c) of the Act (21 USC 360bbb-3(g)(2)(c)), and as such is only available in the United States. Should you have any concerns when using of this face shield, please notify Tech Support.

#### FACE SHIELD DESIGN

#### **Face Shield Design**

Thorlabs' plastic face shields are assembled using only six components, outlined in the table below. For machine drawings and complete assembly instructions, please click on the red documents icon (





Click to Enlarge FS1 Face Shield and Headband Dimensions

Item Name	Quantity	Description		
Face Shield	1	PETG Plastic, 0.02" (0.5 mm) Thick		
Headband	1	PETG Plastic, 0.08" (2.0 mm) Thick 0.75" (19.1 mm) Wide, 12.4" (315 mm) Long		
Elastic Band	1	1" (25.4 mm) Wide, 12" (304.8 mm) Long		
Grommet	4	#0 Self-Piercing Brass Grommet		
Hook and Loop Fastener	2	Double-Sided Strip, 3" (76.2 mm) Long		
Foam Insert	1	Latex-Free Foam with Hook and Loop Back 1" (25.4 mm) Wide, 4" (101.6 mm) Long		

# **Face Shield**



- Constructed from Clear PETG Plastic
- One-Size-Fits-All Design
- Reusable, Lightweight, and Chemically Resistant

This plastic face shield has been modeled after those used in the healthcare industry and is designed to protect the user from airborne spray, liquid, or shavings. If desired, it can be worn with a cloth face mask, as shown in the image to the right, to provide additional protection.

The one-size-fits-all design has a 1" wide elastic strap to firmly secure the shield to the user's head. The shield includes a removable foam insert for comfort if wearing for an extended period of time. Additional foam inserts are available for purchase below. For complete design specifications, please see the *Face Shield Design* tab above.



Click to Enlarge One-Size-Fits-All Design Utilizes a 1" Wide Elastic Strap for Secure Fit



Click to Enlarge Each Face Shield is Shipped with Plastic Wrapping to Prevent Surface Damage During Transport

FS1 \$8.00 Lead Time	Part Number	Description	Price	Availability	
	FS1	Face Shield	\$8.00	Lead Time	

# **Replacement Foam Inserts**



- ▶ Replacement Latex-Free Foam Inserts (10 Pack)
- Designed to Enable Easy Replacement of Foam Insert



Click for Details
Foam Inserts can be Easily
Replaced

This 10-pack of latex-free foam inserts (1" wide x 4" long) allows for replacement of the one included with the purchase of an FS1 Face Shield should it become lost or must be discarded.

To replace the exisiting foam insert, simply attach the right and left edges of a new foam insert to the two fastener loops by firmly pressing the darker side of the foam insert onto the loop surface (see the image to the right).

Part Number	Description		Availability
FS1-F	10-Pack Replacement Foam Inserts	\$6.25	Today

