TFB15- May 13, 2019

Item # TFB15 was discontinued on May 13, 2019. For informational purposes, this is a copy of the website content at that time and is valid only for the stated product.

OPTICAL TABLES SHELVES, FREE-STANDING

► **Stable, Free-Standing Shelf Unit**
► **Shelving Spans the Length of the Table**
► **Versions for 2.0 m, 2.5 m, or 3.0 m Long Optical Tables**
► **Complete Line of Accessories Available**

Cable Racks Available Separately

PTA280
Overhead Shelving Unit
(Optical Table and Supports Not Included)

[Hide Overview](#)

OVERVIEW

Features

- Stable, Free-Standing Design Does Not Interfere with Vibration Isolation
- High-Load-Capacity Shelving Spans Table Length
- Shelf Height is Adjustable from 1.098 m to 1.96 m (43.21" to 77.28")
- Through Holes in Frame Allow for Easy Cable Management
- Compatible with 24-Outlet Power Distribution Strips

Thorlabs' Free-Standing Instrumentation Shelves provide two levels of storage space or mounting surfaces for instruments, power supplies, and other accessories. As a free-standing unit, the operation of the table's vibration isolation system is not affected. Three shelving units are available for compatibility with 2.0 m (6.5'), 2.5 m (8.2'), or 3.0 m (10') long optical tables. The shelf units are also compatible with all of our table supports, including our optical table workstations. The PTA280 and PTA281 each come with two 598 mm (23.5") wide Melamine-faced MDF (medium density fiberboard) shelves (one per level) that can each support up to 135.0 kg (297 lbs). The PTA282 comes with two 598 mm (23.5") wide Melamine-faced MDF shelves per level; each level can support up to 122.0 kg (269 lbs).

The vertical steel support struts feature a range of mounting points to allow height adjustment, and through holes are included in each corner of the frame for easy cable management. The shelves can be replaced with solid aluminum breadboards when using the optional mounting brackets (detailed below). Furthermore, the underside of each shelf is fitted with threaded inserts to allow our power distribution strips, LED light strips, and cable racks to be attached. Lean bars and a post-mounting adapter also facilitate the attachment of post-mounted accessories, such as a monitor mount. These accessories are shipped with all necessary hardware and are described in detail below.

Free-Standing Optical Table Shelves

Item #[a]	Shelf Length	Compatible Table Length	Shelf Width	Frame Height	Max Shelf Height	Max Load per Level[b]
PTA280	2.04 m (6.7')	2.0 m (6.5')	598 mm (23.5")	1.97 m (77.68")	1.96 m (77.28")	135.0 kg (297 lbs)
PTA281	2.65 m (8.69')	2.5 m (8.2')				135.0 kg (297 lbs)
PTA282	3.10 m (10.2')	3.0 m (10')				122.0 kg[c] (269 lbs)æ

a Please note that these shelves are delivered in a package that is at least 2.16 m (7.1 ft) long and weighs at least 196 kg (431.2 lbs).

b The maximum load is measured using an even distrubution across the length of the unit.

c The PTA282 comes with two MDF shelves per level as opposed to the PTA280 and PTA281, which each have one MDF shelf that spans the length of each level.

Part Number	Description	Price	Availability
PTA280	Optical Table Shelf, Free Standing, for 2.0 m (6.5') Long Optical Tables	$2,090.69	Today
PTA281	Optical Table Shelf, Free Standing, for 2.5 m (8.2') Long Optical Tables	$2,317.50	Today
PTA282	Customer Inspired! Optical Table Shelf, Free Standing, for 3.0 m (10') Long Optical Tables	$2,648.16	Lead Time

Side Lean Bars

▶ Protect the Work Area from Accidental Knocks

▶ Allows for Compatibility with Our Nexus Frame Accessories (See Table to the Right)

▶ Span the Width of the Optical Table

▶ Fit to the Free-Standing Shelf Unit Support Struts

▶ Supplied in Pairs to Fit One End of the Workstation

Compatible Accessories
Side Shelves
Breadboard Mounting Brackets
Keyboard Holder
Monitor Mount
Ø1.5" Posts
Computer Shelf
Instrument Shelves

These Side Lean Bars span the entire width of the optical table on the right or left side. They are sold as a package of two to fit one end of the table. The bars bolt to the support struts of the overhead shelf described above and shield the vibration-isolated tabletop from accidental contact. Once fitted, they allow our selection of our post-mounted Nexus table frame accessories to be used (see table to the right).

Part Number	Description	Price	Availability
TFB10	Nexus Table Frame Side Lean Bars, 1 m (3') Wide, Set of 2 for One End of the Frame	$160.74	Today
TFB12	Nexus Table Frame Side Lean Bars, 1.2 m (4') Wide, Set of 2 for One End of the Frame	$177.55	Today
TFB15	Nexus Table Frame Side Lean Bars, 1.5 m (4.8') Wide, Set of 2 for One End of the Frame	$193.31	Lead Time

Post Adapter for the Free-Standing Optical Table Shelves

▶ Compatible with Monitor Mounts, Instrument Shelves, Breadboard Brackets, or Component Trays

▶ Strong, Steel Construction

▶ Attaches Directly to the Overhead Shelf Uprights via Included M8 Bolts

Click to Enlarge
PSY121 Monitor Mount Shown Mounted on the TFA4 Adapter

The TFA4 Post Adapter allows you to attach post-mounted accessories to the free-standing overhead shelf's uprights. As shown in the photo to the right, the adapter is bolted to one of the uprights using two supplied M8 bolts. Once connected, the 75 mm (2.95") long Ø1.5" post can be used to attach various accessories, such as, such as our monitor mount, instrument shelves, breadboard brackets, or component trays.

Part Number	Description	Price	Availability
TFA4	Ø1.5" Post Adapter for TFS201, TFS251, PTA280, and PTA281 Overhead Shelving Units	$69.86	Today

Hide 24-Outlet Power Strips

24-Outlet Power Strips

▶ 24-Outlet, Surge-Protected Power Strips
▶ Three Outlet Types: US, EU, or UK
▶ Electrically Grounded Outlets

These 24-outlet, power strips are available with US-, EU-, or UK-style outlets. Each is designed for indoor use and is housed within an impact-resistant, sturdy metal case. They are fitted with clearance holes for standard 1/4"-20 or M6 cap screws for direct attachment to the underside or side edge of the shelving frame. The units are turned on and off with a rocker switch.

Item #	HDPS24-US	HDPS24-EU	HDPS24-UK
Electrical Specifications			
Voltage Rating	125 VAC	220 to 250 VAC	250 VAC
Current Rating	15 A	16 A	13 A
Frequency	50/60 Hz	50 Hz	60 Hz
Power Rating	1800 W	3680 W	3120 W
Full Surge Protection	3 kA for 1 µs	1.75 kA for 8/20 µs	
EMI / RFI Filtering	Yes		
CE Approved	Yes		
Physical Specifications			
Cord Length	9.83' (3.0 m)	3 m (9.8')	
Cord Gauge	1.5 mm^2 (16 AWG)		
Number of Outlets	24		
Body Material	Aluminum		
Dimensions (L x W x H)	(68.27" x 2.46" x 1.77") 1734.0 x 62.5 x 45.0 mm	1717 x 67.5 x 58.0 mm (67.6" x 2.66" x 2.28")	

Attention:

These power strips are designed for indoor use only. These devices should not be installed in wet or damp areas exposed to moisture. They are not recommended for use with aquariums. We do not recommend plugging one HDPS24 into another HDPS24 or similar surge-protecting device.

The HDPS24-UK 24-Outlet Power Strip is installed on the front of the overhead shelf of a free-standing shelf unit. It can also be installed to the underside of the shelf.

Part Number	Description	Price	Availability
HDPS24-EU	24-Outlet, Surge-Protected Power Strip, EU Plugs	$129.22	Today
HDPS24-UK	24-Outlet, Surge-Protected Power Strip, UK Plugs	$129.22	Lead Time
HDPS24-US	24 Outlet, Surge-Protected Power Strip, US Plugs	$129.22	Today

Hide LED Light Strips

LED Light Strips

▶ 850 mm (33.46") or 1828.5 mm (71.99") Long
▶ ON/OFF Switch

Item #	PSY240	TFA2
Brightness	1530 Lumens	3600 Lumens

# of LEDs	51	120
Power[a]	15.3 W	36 W
Voltage	12 VDC (Power Supply Included)	
Dimensions	850 mm x 17.4 mm x 8.2 mm (33.46" x 0.69" x 0.32")	1828.5 mm x 17.4 mm x 8.2 mm (71.99" x 0.69" x 0.32")

- Sturdy Aluminum Base Resists Warping
- Frosted Plastic Cover Ensures Even Spread of Light
- Shipped with 3 Spring Clips, 3 M6 Screws, and a Power Supply

- Power usage per LED is 0.3 W.

These rigid LED light strips are available in two lengths: 850 mm (33.46") or 1828.5 mm (71.99"). They are held in place by three spring clips that are easily fitted to a rack or a shelf, such as our Free-Standing Overhead Shelf or our Nexus Table Frame Overhead Shelves. The strip lights can also be mounted over a bench for general laboratory use.

Part Number	Description	Price	Availability
PSY240	850 mm (33.46") LED Light Strip	$101.91	Today
TFA2	1828.5 mm (71.99") LED Light Strip	$107.16	Today

Hide Cable Tray

Cable Tray

- Attach Underneath or to the Front of the Overhead Shelf Frame (Shown in Photo to the Right)
- Ideal for Keeping Electrical Cables and Fiber Optic Patch Cables Out of the Way
- Maximum Load Capacity (Evenly Distributed)
  - TFC100 and TFC125: 5 kg (11 lbs)
  - TFC200 and TFC250: 10 kg (22 lbs)
- Four Lengths Available:
  - TFC100: 1.0 m (3.29')
  - TFC125: 1.25 m (4.1')
  - TFC200: 2.0 m (6.56')
  - TFC250: 2.5 m (8.2')

Click to Enlarge
TFC100 and TFC200 Shown Fitted to a Nexus Table Frame and Being Used to Redirect Cables from a Power Supply and Oscilloscope

These cable trays are designed to be attached either underneath or to the edge of the overhead shelf frame, using the M6 bolts supplied. They are made from 3 mm (1/8") thick steel wire with a powder-coated plastic finish. Measuring 92.0 mm (3.62") high by 109.4 mm (4.31") deep, they are offered in four lengths: 1.0 m (3.29'), 1.25 m (4.1'), 2.0 m (6.56'), and 2.5 m (8.2'). The two shorter trays are supplied with two mounting brackets, while both the longer racks are shipped with three brackets.

Part Number	Description	Price	Availability
TFC100	Nexus Cable Tray, 1.0 m (3.29') Long	$105.06	Today
TFC125	Nexus Cable Tray, 1.25 m (4.1') Long	$143.93	Lead Time
TFC200	Nexus Cable Tray, 2.0 m (6.56') Long	$152.34	Today
TFC250	Nexus Cable Tray, 2.5 m (8.2') Long	$164.94	Lead Time

Hide Breadboard Mounting Brackets

Breadboard Mounting Brackets

- Supports Solid Aluminum Breadboards 300 mm to 600 mm (12" to 24") Wide
- Fits Over The Overhead Shelf Support Frame (Shown in Photo to the Right)
- Strong, All-Steel Construction

Click to Enlarge
Solid Aluminum Breadboard fitted to the overhead shelf frame and viewed from the underside.

These brackets allow any of our solid aluminum breadboards with a width from 300 mm to 600 mm (12" to 24") to be fixed to the frame of the overhead shelf mentioned above. Four brackets are supplied that attach to the underside of the breadboard using standard M6 or 1/4"-20 bolts (not supplied).

Part Number	Description	Price	Availability
TFA1	Breadboard Mounting Brackets (Set of Four)	$43.07	Today