

# ThinkStation P3 Tiny

## Remote Solution HyperShelf User Guide

ThinkStation P3 Tiny Gen1

ThinkStation P3 Tiny Gen2

Lenovo



# Table of Contents

Section 1 - Abstract.....	3
Section 2 - Hardware Overview.....	3
Remote Solution Components.....	3
HyperShelf Kit Components.....	4
P3 Tiny Power Supply Consideration.....	7
HyperShelf Power Demand.....	7
Section 3 - Hardware Installation.....	8
HyperShelf Rack Installation.....	8
Cable Management Arm Installation.....	10
Installing P3 Tiny Workstations Power Adapters.....	12
Installing P3 Tiny Workstations.....	13
Final HyperShelf Assembly.....	15
Section 4 - Software Recommendations.....	16
Management Recommendations.....	16
Making a TGX Connection.....	16
Making an RDP Connection.....	17
Connection Broker Recommendation.....	18
Revision History.....	21

## Section 1 - Abstract

This document contains details intended to guide users with the correct steps to assemble and deploy the ThinkStation P3 Tiny Remote Solution HyperShelf into a standard data center rack.

## Section 2 - Hardware Overview

### Remote Solution Components

The ThinkStation P3 Tiny Remote Solution HyperShelf requires the following components.

Table 1. P3 Tiny Remote Solution Components

Remote Solution Components	Quantity
<a href="#">P3 Tiny HyperShelf Kit</a>	1
<a href="#">ThinkStation P3 Tiny Workstation</a>	up to 12
P3 Tiny Power Supply	
Ethernet Cables (10ft Recommended)	
<a href="#">Blanking Panel</a> (Recommended)	1 per empty slot

Note: The P3 Tiny HyperShelf supports up to 12 systems, if using less than 12 it is recommended to fill empty spaces with Blanking Plates.

# HyperShelf Kit Components

Table 2. HyperShelf Kit Components

HyperShelf Kit	
(1) HyperShelf	
(1) Rail Kit	
(1) Fan Hardware Kit	
(1) Cable Kit C14 to Fan	
(1) Cable Management Arm Kit	
Rail Kit	
(1) Rail Assembly Pair	
(4) 8-32 x .250 Truss Head Screw	

Fan Hardware Kit	
(1) Fan Power Cord	
(2) 50" Velcro Wrap	99
Cable Kit C14 to Fan	
(1) C14 (Female) to Fan (Male) Plug with Ground Screw	
(2) 50" Velcro Wrap	99

Cable Management Arm Kit	
(1) Cable Management Arm Assembly	
(1) 50" Velcro Wrap	
(6) 11" Cable Tie	
(10) 8-32 x .500 Truss Head Screw	
(2) 10-32 Cage Nut	

## P3 Tiny Power Supply Consideration

The P3 Tiny does not have an internal power supply. Instead, it is powered by an external power adapter as shown in Figure 1. There are different power adapters available for both generations of the P3 Tiny.

Each P3 Tiny will come with the correct power adapter. However, if components are upgraded, please refer to the power configurators below as guides to help make the best decisions when choosing the correct power adapter for your hardware configuration.

[ThinkStation P3 Tiny Gen 1 Power Configurator](#)

[ThinkStation P3 Tiny Gen 2 Power Configurator](#)

Figure 1 – P3 Tiny Workstation Power Adapter



## HyperShelf Power Demand

A fully populated P3 Tiny HyperShelf Remote Solution consisting of the highest configuration P3 Tiny Workstations would have a maximum power requirement of 3970 watts. Please ensure demanded wattage does not exceed circuit supply.

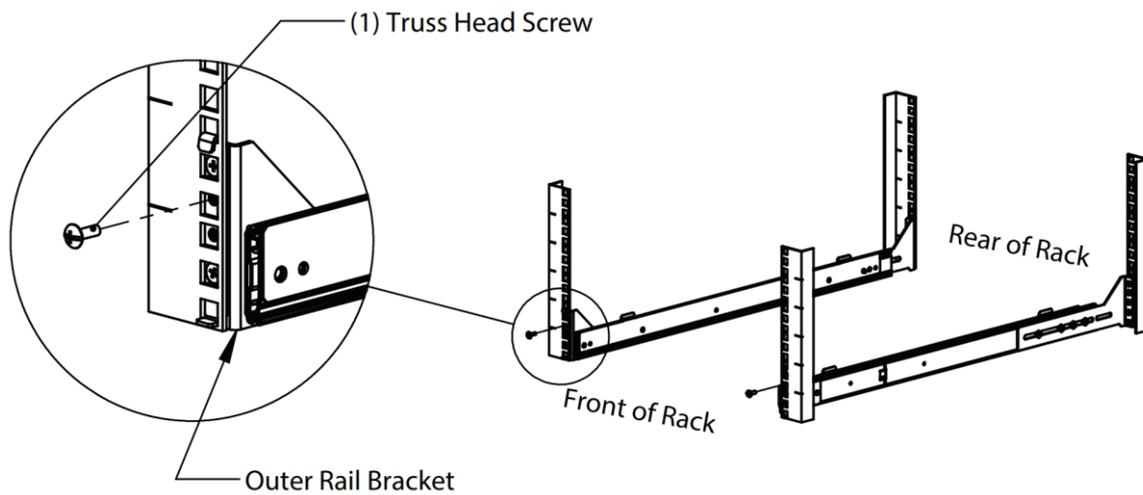
- **P3 Tiny Workstations:** Require up to a total of **3960 watts**
- **Ventilation Fans:** Require **9.5 watts**
- **Total Power Recommendation:** **3970 watts**

## Section 3 - Hardware Installation

### HyperShelf Rack Installation

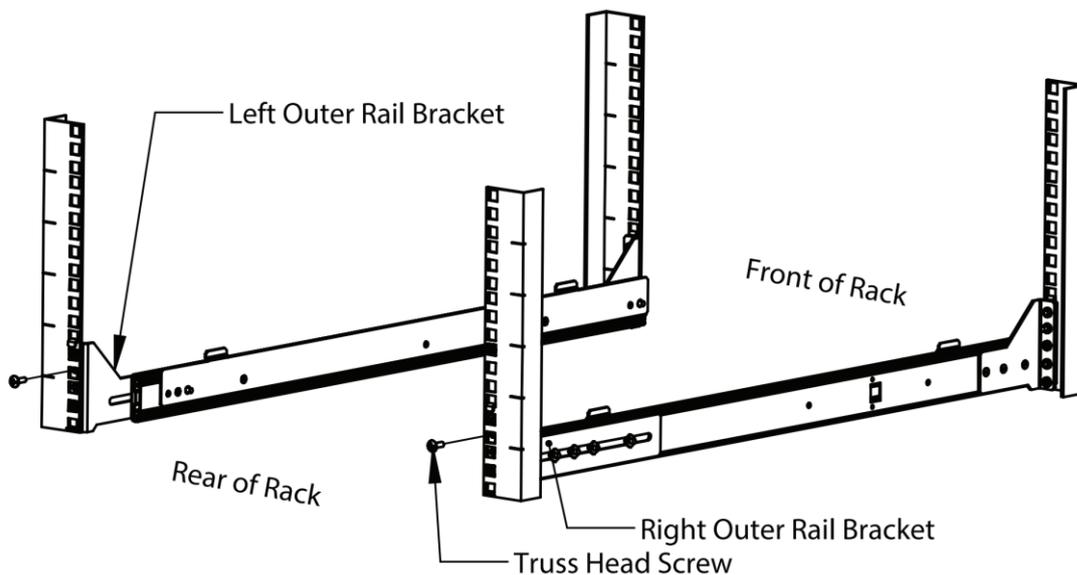
Attach the rail assemblies from the HyperShelf rail kit to the rack by hooking the top of the Outer Rail Bracket into the top of the "U" space. Secure the rails by installing (1) 8-32 x .500 Truss Head Screw per side into the Outer Rail Bracket.

Figure 2 – Attaching HyperShelf Rail Assemblies to the Rack



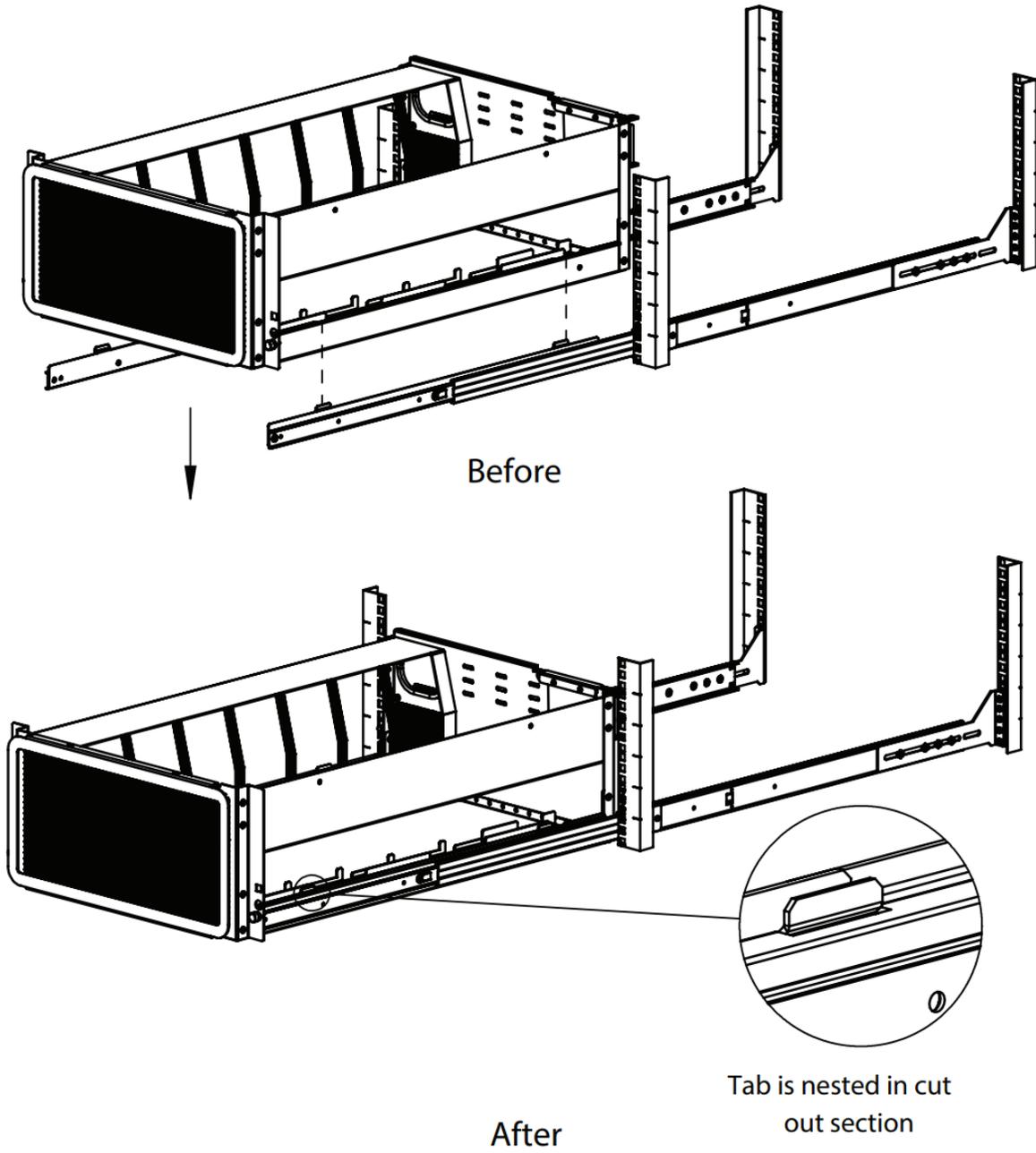
Secure the rear of the rail assemblies by installing (1) 8-32 x .500 Truss Head Screw into the right and left Outer Rail Bracket.

Figure 3 – Securing the HyperShelf Rail Assemblies to the Rack



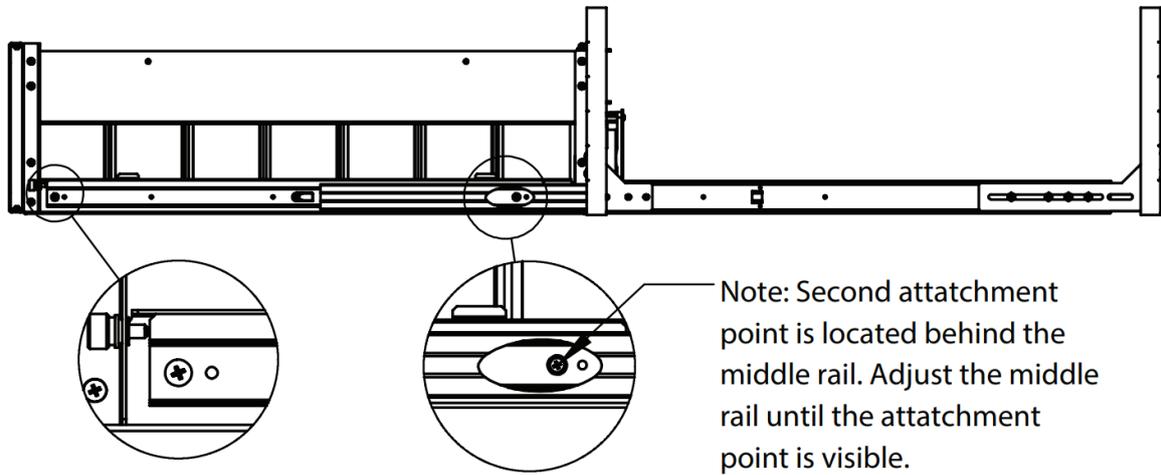
Install the HyperShelf into the rack. The rails should be fully extended, and side panels removed, Align the shelf with the rail side tabs and place the shelf on the rails.

Figure 4 – Installing the HyperShelf into the Rack



Secure the HyperShelf by installing (2) 8-32 x .250 Truss Head Screw provided in the Rail Kit into the inner rail attachment points on each side of the shelf.

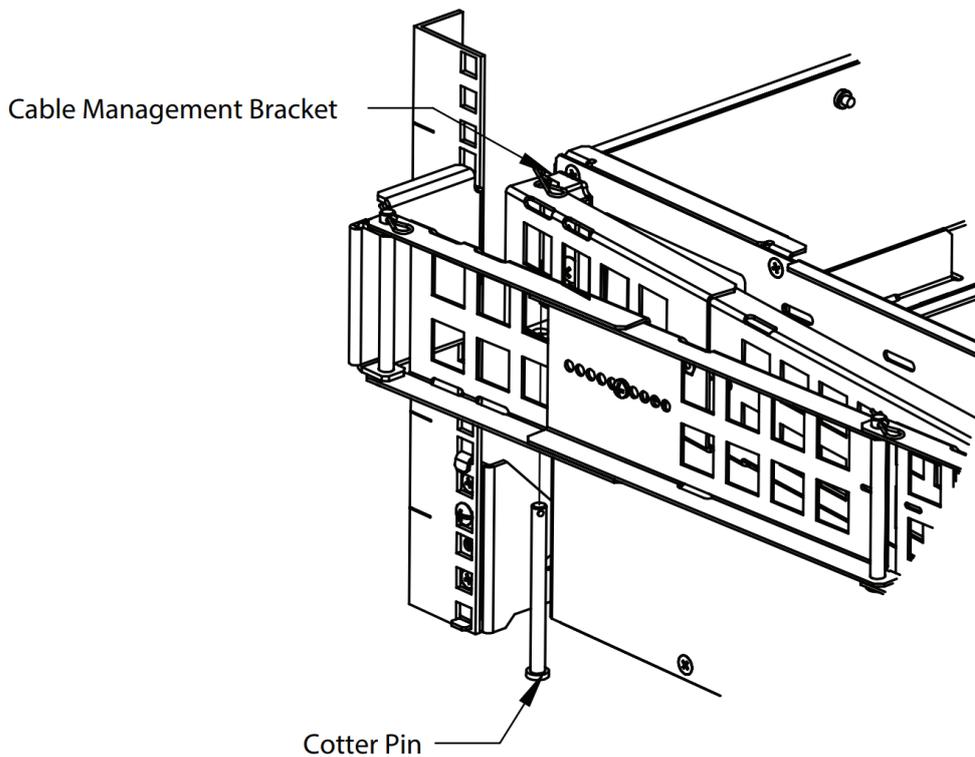
Figure 5 – Securing the HyperShelf to its Rails



### Cable Management Arm Installation

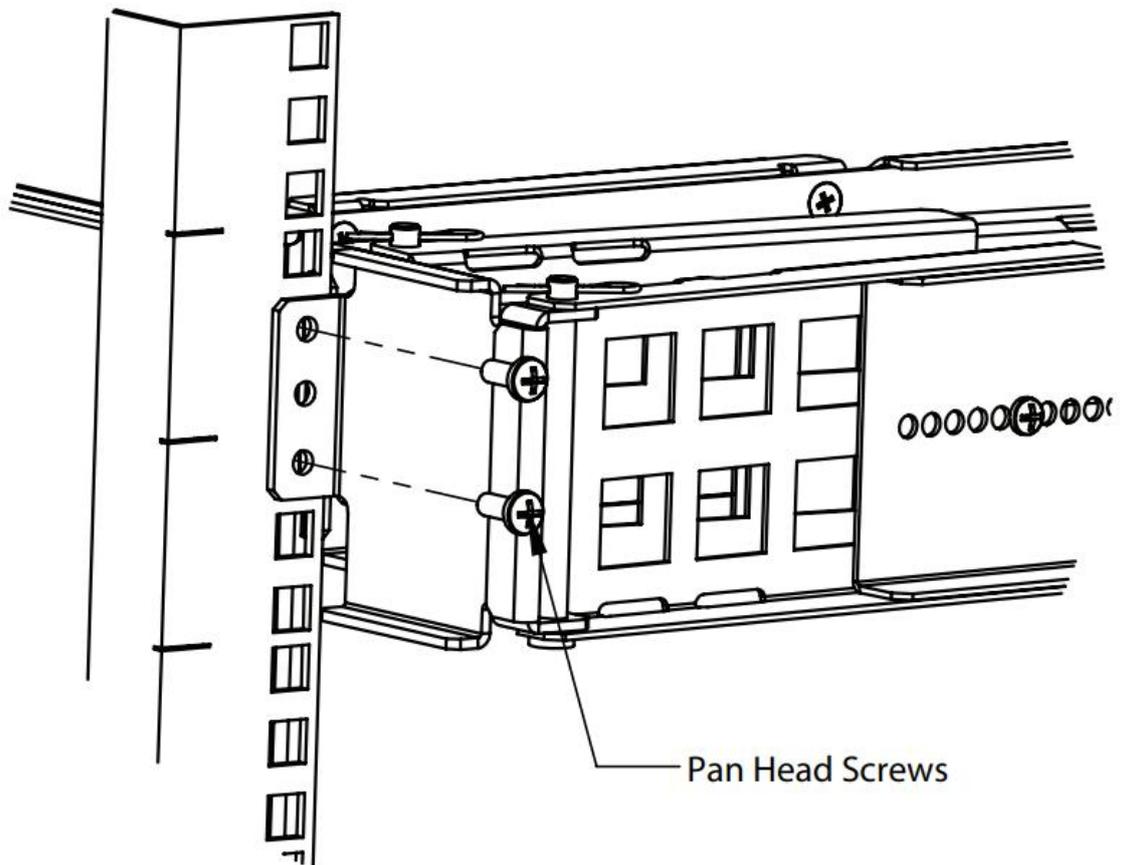
Attach the Cable Management Arm to the HyperShelf by putting the Cotter Pin through the Cable Management Bracket attached to the shelf. Secure with the hairpin.

Figure 6 – Securing the HyperShelf to its Rails



Secure the Cable Management Arm to the rack by installing (2) 10-32 x .500 Pan Head Screw provided in the Cable Management Arm Kit through the rack mounted Cable Management Bracket using provided cage nuts.

Figure 7 – Securing the Cable Management Arm to the Rack



## Installing P3 Tiny Workstations Power Adapters

Secure the P3 Tiny power adapters to the HyperShelf and route the power cables as depicted in Figure 8.

**Note:** P3 Tiny power adapters are available in a range of 170W up to 330W depending on the system generation and configuration. It is recommended to check each power adapter wattage against the system configuration to ensure it will supply adequate power.

Figure 8 – Populating the Power Adapters



## Installing P3 Tiny Workstations

Slide each P3 Tiny Workstation down into its slot on the HyperShelf.

Figure 10 – Populating the P3 Tiny Workstations



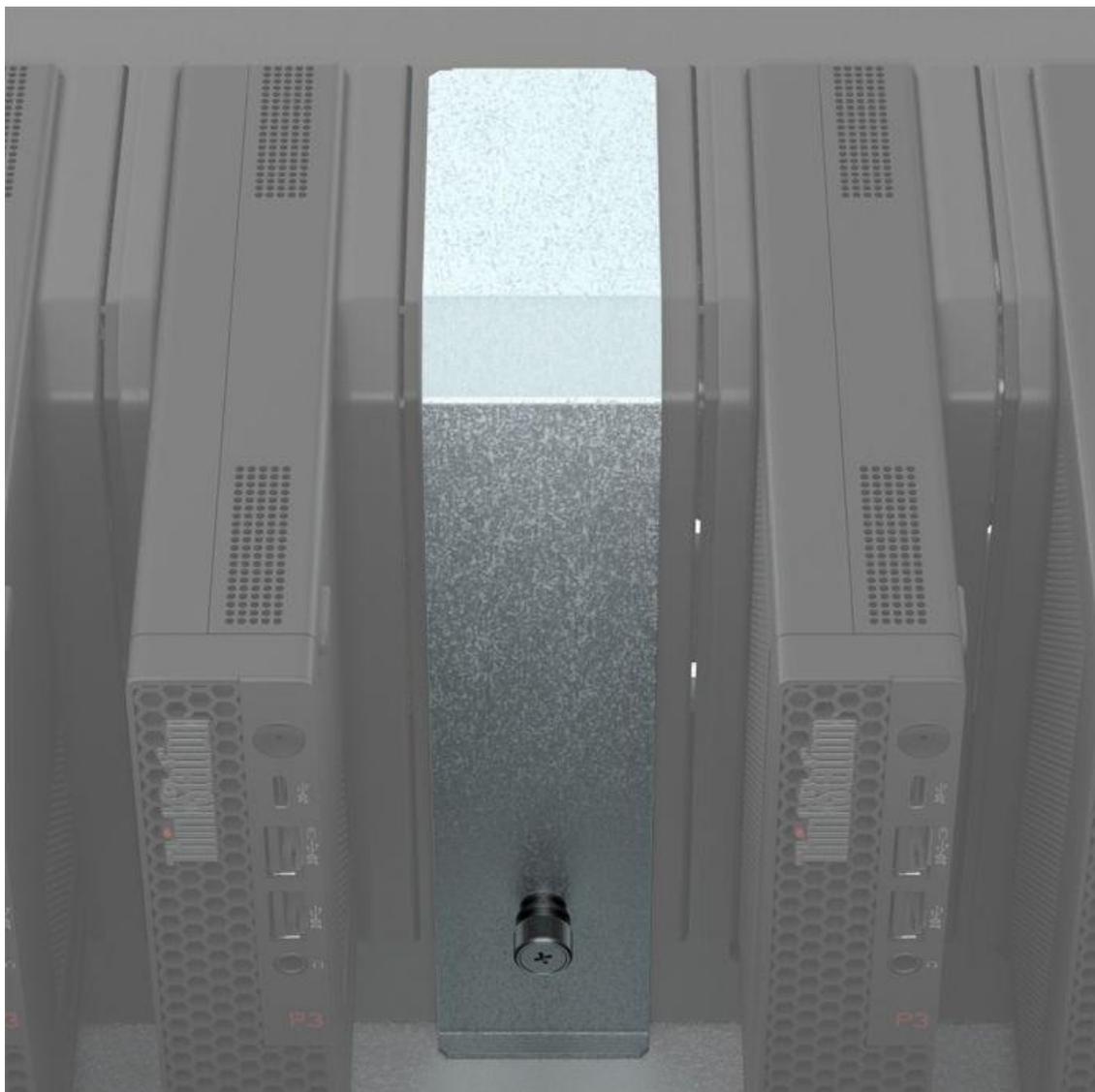
Now remove the side plate and connect power and ethernet. A fully populated HyperShelf should appear as shown in Figure 11.

Figure 11 – HyperShelf Fully Populated with Ethernet and Power Cables Routed



In some configurations, not all slots on the HyperShelf will be occupied. Blanking panels are an optional add-on to ensure optimal airflow. Install these panels in any unused slots as shown in Figure 12.

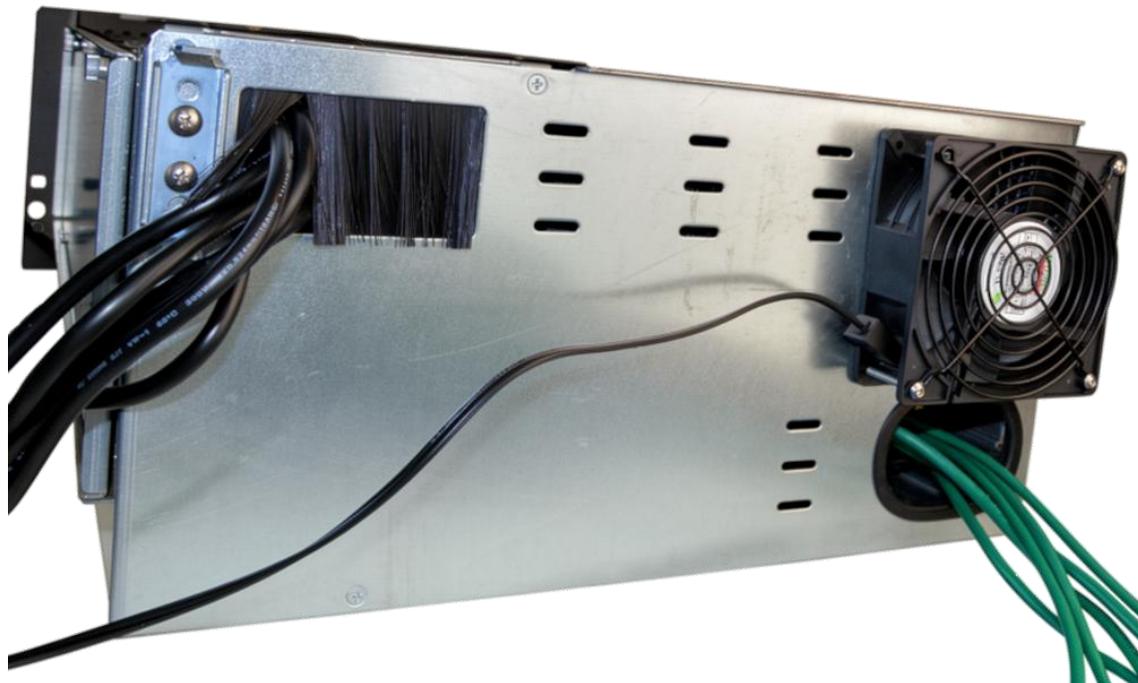
Figure 12 – Blanking Panel Installation



## Final HyperShelf Assembly

Connect the HyperShelf fan power cable as shown in Figure 13.

Figure 13 – Connecting the Fan Power Cable to the HyperShelf



Attach side panel to the HyperShelf and secure it by fastening the screws for a fully assembled HyperShelf as depicted in Figure 14.

Figure 14 – Fully Assembled HyperShelf



## Section 4 - Software Recommendations

### Management Recommendations

Two recommended options for remote software are Mechdyne TGX and Windows RDP.

TGX is a remote desktop workstation which enables the visualization of the most intensive graphics applications up to 4K resolution with like-local responsiveness. TGX eliminates disruptions in workflow by delivering an in-office experience from anywhere. Remote workstation capabilities support workplace mobility, remote team collaboration, and enable business continuity.

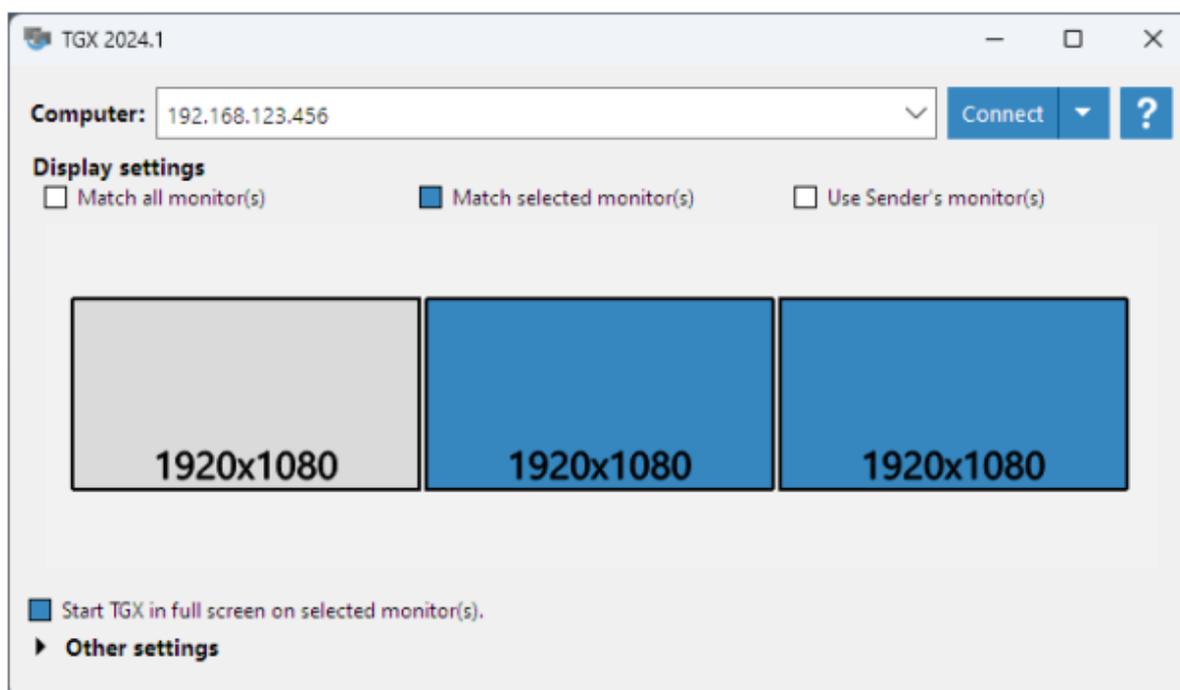
RDP is a proprietary protocol developed by Microsoft that allows a user to remotely connect to another Windows computer with a graphical interface. This is commonly used for remote administration, technical support, or accessing files and applications from afar.

### Making a TGX Connection

Start the TGX Launcher to make a connection.

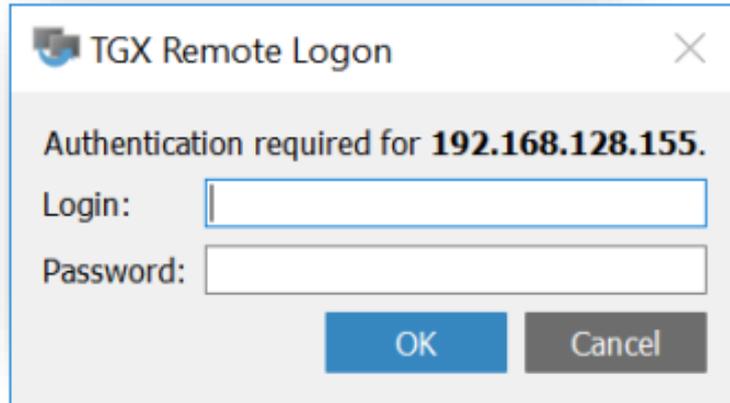
On Windows, the Launcher can be found in the Start menu.

On Linux, Click Applications > Internet > Mechdyne TGX



Enter the hostname or IP address of the computer running the TGX Sender or use the chevron to select from a list of previously visited senders

Click Connect then an authentication dialogue is provided for login credentials.



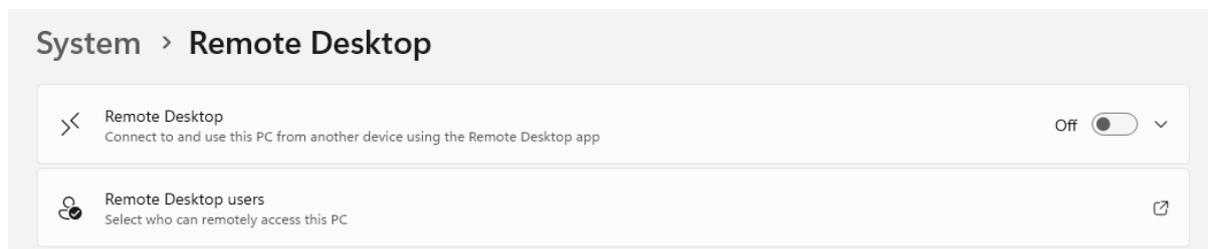
Upon successful connection, the TGX Launcher GUI is replaced by the TGX Receiver GUI which shows the Sender desktop according to the requested View Mode and Remote Display settings.

For more details on Mechdyne TGX please refer to the [TGX User Guide](#).

## Making an RDP Connection

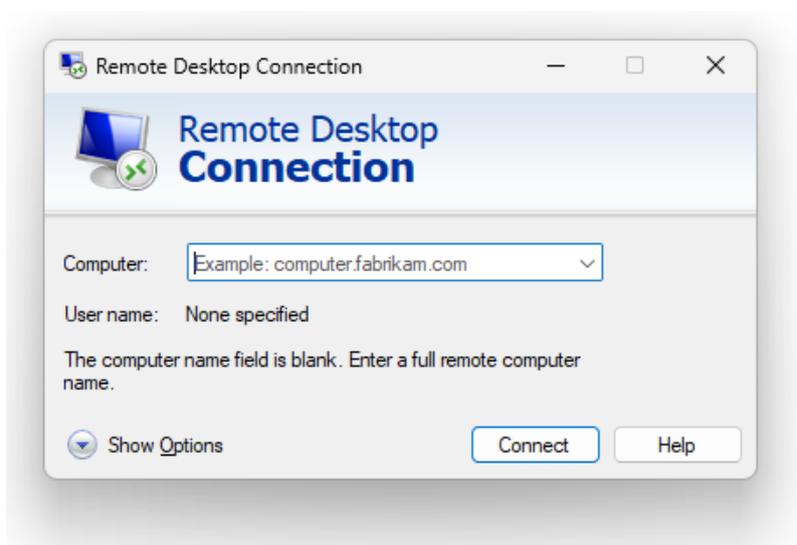
Set up the PC you want to connect to so it allows remote connections:

- Select Start, and open Settings. Then, under System, select Remote Desktop, set Remote Desktop to On, and then select Confirm.
- Make note of the name of this PC under PC name. You'll need this later.



Use Remote Desktop to connect to the PC you set up:

- On your local Windows PC: In the search box on the taskbar, type Remote Desktop Connection, and then select Remote Desktop Connection.



- In Remote Desktop Connection, type the name of the PC you want to connect to and then select Connect.

## Connection Broker Recommendation

The Leostream Remote Desktop Access Platform lies at the heart of any hosted desktop deployment and is the key component for provisioning resources in the cloud, assigning and connecting end users to resources, and managing the end user's remote session.

Please refer to the [Leostream Quick Start Guide](#) for details.

## Mechdyne TGX Part Numbers

Lenovo Part Number	Description
4L40T77800	TGX Perpetual License with maintenance and support for one year term
4L41A21633	TGX Perpetual License with maintenance and support for one year term (Minimum order quantity 50)
4L41A21635	TGX Perpetual License with maintenance and support for one year term (Minimum order quantity 150)
4L41A21638	TGX Perpetual License with maintenance and support for one year term (Minimum order quantity 300)
4L40T77801	TGX Perpetual License with maintenance and support for a 3-year term with multi-year discount
4L41A21639	TGX Perpetual License with maintenance and support for a 3-year term with multi-year discount (Minimum order quantity 50)
4L41A21641	TGX Perpetual License with maintenance and support for a 3-year term with multi-year discount (Minimum order quantity 150)
4L41A40242	TGX Perpetual License with maintenance and support for a 3-year term with multi-year discount (Minimum order quantity 300)
4L40T77802	Additional maintenance and support for one year term for an existing TGX Perpetual License
4L41A40243	Additional maintenance and support for one year term for an existing TGX Perpetual License (Minimum order quantity 50)
4L41A40245	Additional maintenance and support for one year term for an existing TGX Perpetual License (Minimum order quantity 150)
4L41A40248	Additional maintenance and support for one year term for an existing TGX Perpetual License (Minimum order quantity 300)
4L40T77803	TGX Subscription License, 1-year term, includes maintenance & support
4L41A40249	TGX Subscription License, 1-year term, includes maintenance & support (Minimum order quantity 50)
4L41A40251	TGX Subscription License, 1-year term, includes maintenance & support (Minimum order quantity 150)
4L41A40254	TGX Subscription License, 1-year term, includes maintenance & support (Minimum order quantity 300)



## Leostream Part Numbers

Lenovo Part Number	Description
4L41T84990	Leostream Platform Subscription - User License
4L41T84991	Leostream Platform Subscription - Desktop License



## Revision History

V.	Date	Author	Changes/Updates
1.0	1/9/2025	Alex Hunnicutt-La	Initial Release

