



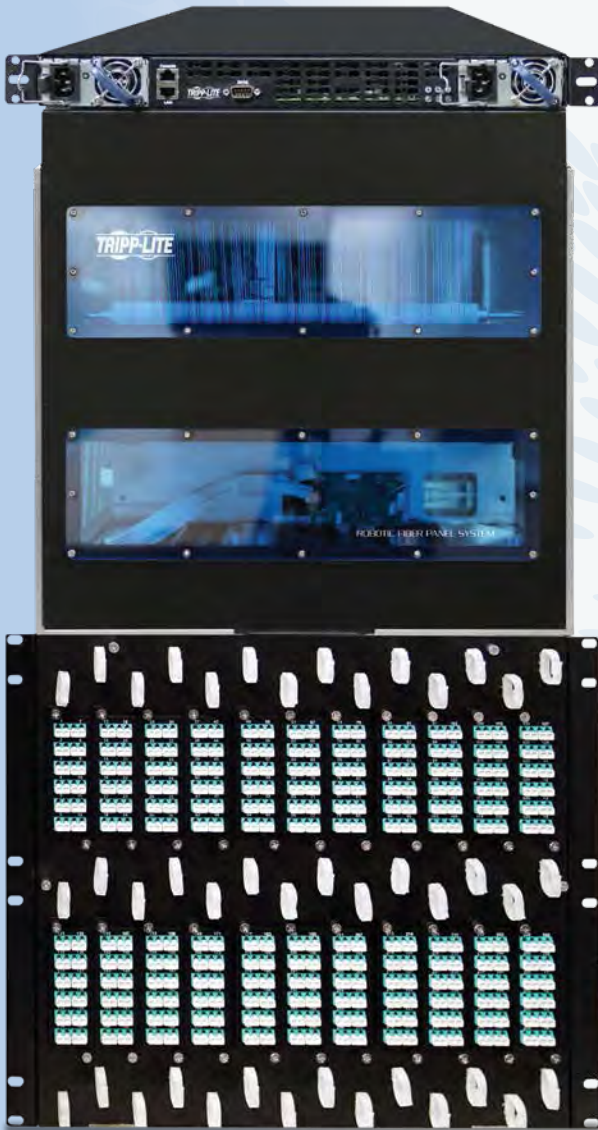
Powering and Connecting  
Your World

## Robotic Fiber Panel Systems

*Automated Switching to Optimize Fiber Networks*

Recommended for:

- Data Centers • Colocation Facilities
- Telco Centers • Enterprise IT Infrastructure
- Large Technology Test Labs



## Making Simple and Effective Fiber Network Management Possible

Robotic Fiber Panel Systems integrate with data center infrastructure to provide automated fiber network management tools. These rack-mounted cross-connects use robotic latching and remote management to establish physical fiber connections with speed and precision, saving time for IT professionals.

Robotic Fiber Panel Systems include a 512-port patch panel that scales to meet shifting demands in data. Model **NRFP-500MM-CP** automates multimode LC fiber connections, and model **NRFP-500SM-CP** automates singlemode LC fiber connections.

### Robotic Fiber Panel System Benefits:

#### EFFICIENCY

Maximize your infrastructure's value by performing regular reconfiguration of under-utilized or over-utilized connections.

#### FLEXIBILITY

Plan automated network management tasks based on what fits your business needs, rather than what fits on-site engineering schedules.

#### EQUIPMENT PROTECTION

Manual fiber connections will damage equipment over time. The Robotic Fiber Panel Systems latch creates connections with robotic precision to add longevity to your infrastructure.

#### SPEED

Connections are remotely controlled and typically completed in 50 seconds, as opposed to the hours or days it might take for a network engineer to travel on-site.

#### ADAPTABILITY

Robotic Fiber Panel Systems provide 512 ports out of the box, and can be configured to support nearly 500,000 ports in all. They can be configured for all optical signals and all network protocols.

#### RELIABILITY

Automation and network-integrated software will ensure the right cables get connected to the right ports.

#### RESILIENCY

Because connections are passive and purely optical, they are unaffected by power outages.

#### LOWER CAPEX AND OPEX

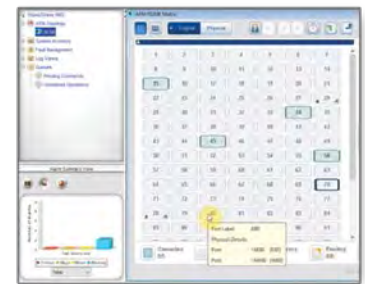
Increasing the efficiency of your infrastructure means reduced capital expenses on equipment, and reduced operating expenses to power and manage it.

#### LESS CLUTTER

Greater efficiency means less unused cabling cluttering your environment.

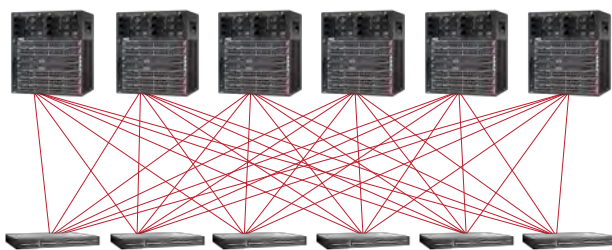
#### SECURITY AND COMPLIANCE

Limiting on-site access and employing software that logs an audit trail of network connections boosts security and regulatory compliance.

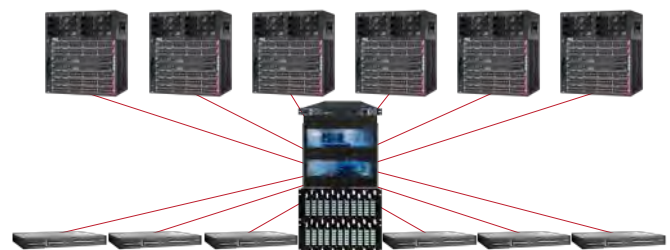


RFPs Remote Management Interface

### Robotic Fiber Panel System (RFPs) Simplicity in an "Any-to-All" Mesh Design



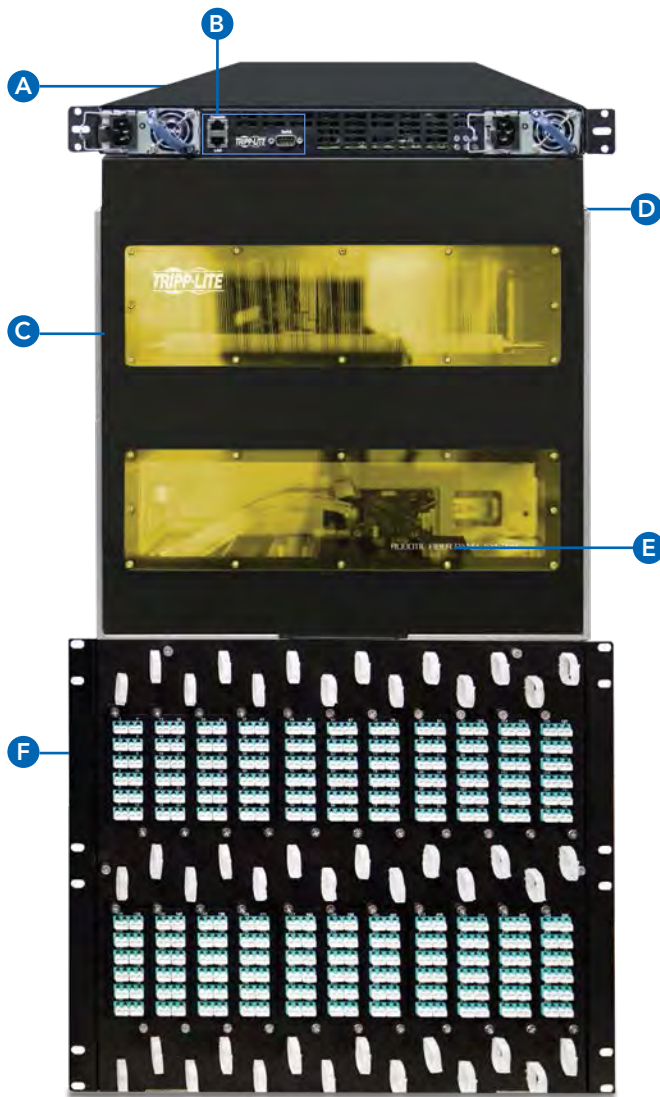
Data Center Architecture with Mesh Cabling



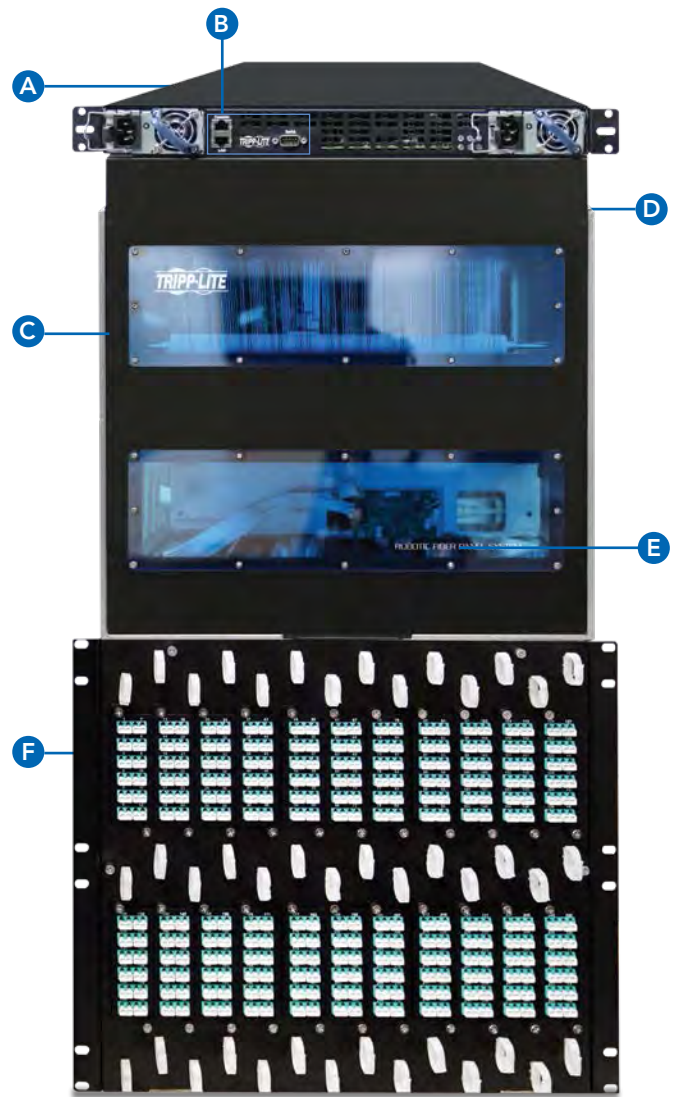
RFPs in a Mesh Design



## Feature Focus



Model: NRFP-500SM-CP



Model: NRFP-500MM-CP

### A Logical Control Unit (LCU)

Powers and controls a Robotic Fiber Panel System via included custom management software, 1U (Model: **NRFP-LCU-1**, sold separately)

### B LCU Communication Ports

Console, LAN and Serial connection ports



### C Main Chassis

Unibody chassis securely houses robotic fiber-optic technology

### D Chassis Suspension System

Sliding rail kit for mounting a Robotic Fiber Panel System



chassis in a 4-post rack (Model: **NRFP-BRKT**, sold separately)

### E Robotic Latch

Patented mechanical latch for precise fiber connections and disconnections



### F Patch Panel

512-port  
LC PC/UPC duplex

## SPECIFICATIONS

Optical Characteristics	
Fiber	512 fibers
Configurations	Duplex tandem any to any • Duplex any East to any West • Simplex tandem any East to any West
Fiber Type	Singlemode SMF-28e or multimode OM4
Patch Panel Interface	LC PC/UPC duplex
Insertion Loss	1 dB max (0.5 dB typical) patch panel to patch panel
Return Loss	-50 dB singlemode UPC, -60 db singlemode APC, -25 dB multimode PC
Switching Time	50 sec (typical)
Power Requirements	
Power Supply Options	AC+AC, DC+DC, or AC+DC hot swappable
LCU Power Input	AC: 100-240V, 50/60 Hz 4A per PSU; DC: -48/-60 Vdc, 8A per PSU
Power Consumption	55W standby; 150W (180W peak) while switching
Environmental Conditions	
Temperature Range (Operating)	32 °F to 104 °F (0 °C to 40 °C)
Temperature Range (Storage)	-40 °F to 158 °F (-40 °C to 70 °C)
Relative Humidity (Non-condensing)	5% to 95%
Specifications for Main Chassis	
Rack Units	10U
Dimensions HWD (in./mm)	17.5 x 17.4 x 31 / 445 x 442 x 787
Mounting Depth (in./mm)	29/737 to 36/914
Weight (lb./kg)	211/96
Specifications for Patch Panel	
Rack Units	9U
Dimensions HWD (in./mm)	15.7 x 19 x 6.1 (398 x 482 x 154) - 9U
Mounting Depth	36 in. (914.4 mm) when back-to-back with main chassis
Specifications for Logical Control Unit (LCU)	
Rack Units	1U
Dimensions HWD (in./mm)	1.7/44 x 17.5/445 x 27.5/698
Mounting Depth (in./mm)	29/737 to 36/914
Weight (lb./kg)	24/11
Communication Interfaces	Ethernet: RJ45; Console: RJ45 and DB9
Standards	CE Declaration of Conformity, FCC/ICES-003 Class A Verification Report (USA / Canada), RoHS Compliant, REACH Compliant, ANSI/UL 60950-1 / CSA 60950-1 (USA / Canada)
Protect the RFPS from power outages with a UPS backup system providing at least 1kVA such as the Tripp Lite SmartOnline® series.	

All models include a 1-year limited warranty.

Learn more about Tripp Lite's Robotic Fiber Panel Systems at [www.tripplite.com](http://www.tripplite.com).

Distributed By:

---



**Tripp Lite**  
 1111 W. 35th Street, Chicago, IL 60609 USA  
 +1.773.869.1773 | [www.tripplite.com](http://www.tripplite.com)