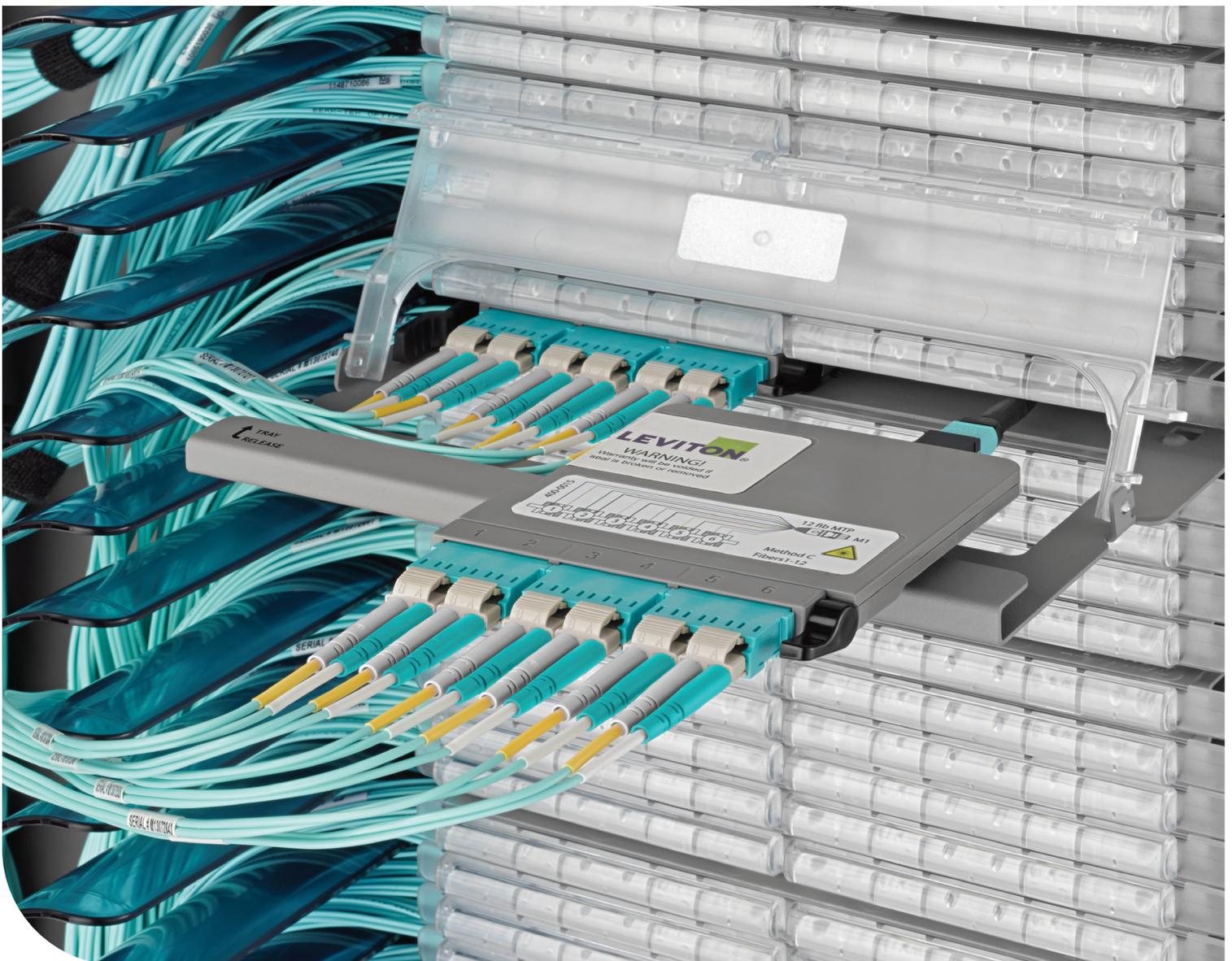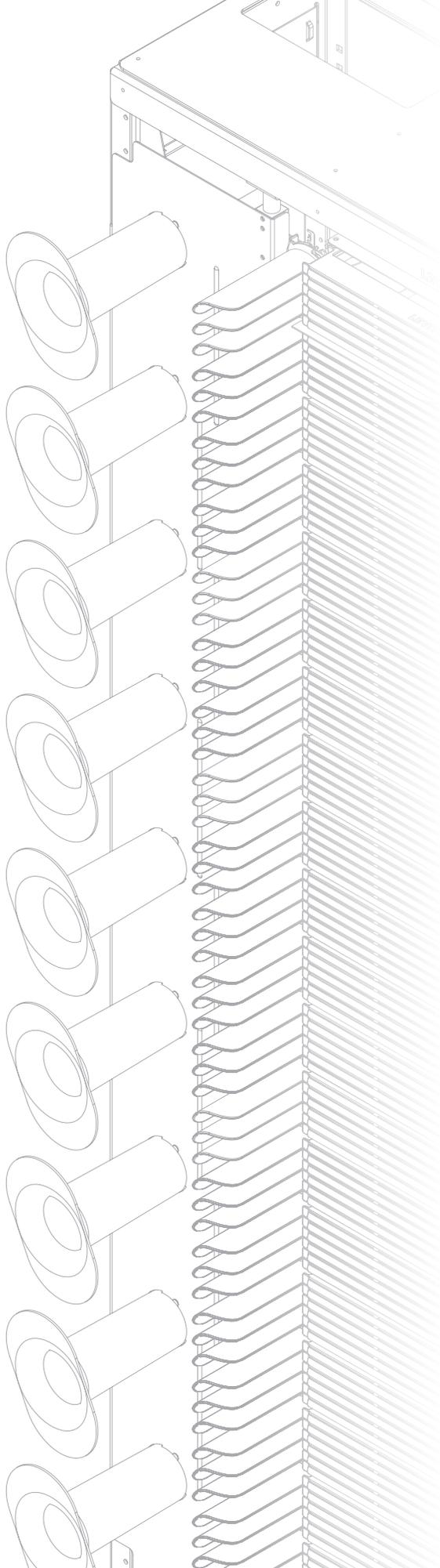# Opt-X® HDX Fiber Distribution Frame

A high-density fiber optic frame that prepares the data center for growth, minimizes patching footprint, reduces installation time, and saves you money.

HDX
FIBER DISTRIBUTION FRAME

The Leviton high-density HDX Fiber Distribution Frame is a main cross-connect or inter-connect frame that can handle up to 3,168 fibers, using LC connectors, in just one tile of floor space. Ideal for service providers, central office facilities, large enterprise, and cloud data centers, the HDX Fiber Distribution Frame will reduce your patching footprint, free up valuable space, and save you money. Separated trunk cable and patch cord management improves accessibility and enables easy moves, adds, and changes. In addition, the system is fully scalable and modular, supporting consolidation and growth.

INDUSTRY-LEADING **DENSITY**

The HDX frame accomplishes such high density through its unique patch deck design. One frame holds up to 22 decks, each configured with your choice of HDX cassettes, HDX adapter plates, or injection-molded splice trays.
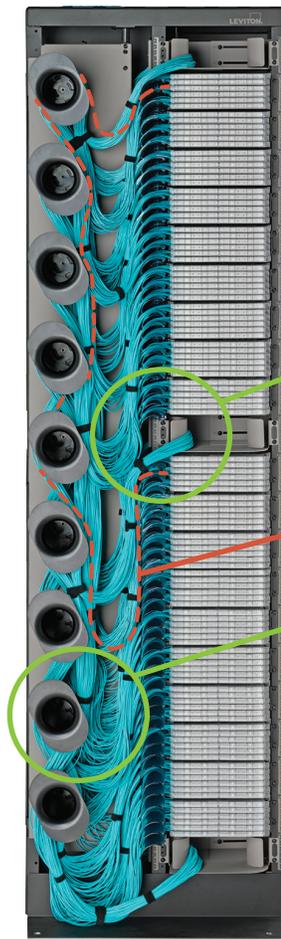
Maintains proper bend radius

Provides additional slack storage

Only one length of patch cord (3m) necessary for in-frame patching

BUILT-IN **CABLE MANAGEMENT & ROUTING**

The frame keeps pathways clean and organized, using integrated cable management for minimum bend radius, better slack storage, and protection within the frame. Patch decks contain patch cord and MTP® trunk routing for individual trays. And enhanced labeling improves deck and fiber identification to simplify moves, adds, or changes.

SUPERIOR **SCALABILITY**

HDX frames can be ganged together easily to handle future growth with pass-through cross-frame routing kits. And with 24-fiber MTP connectivity, they are ideal for migration from 10G to 40G to 100G and beyond.

ADDITIONAL **SECURITY**

The HDX frame includes locking rear doors to protect and conceal trunk cabling. Locking front doors (sold separately) are transparent to allow visibility.
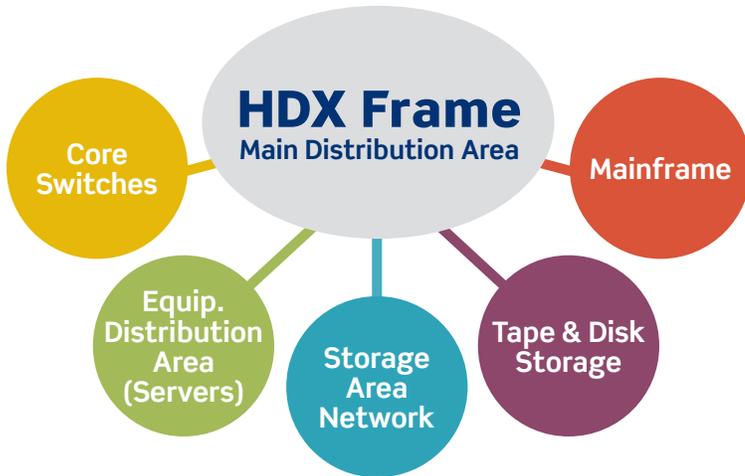
EASY **ACCESSIBILITY**

The frame's open design greatly reduces time and labor for maintenance, as it allows unobstructed access to patch cord connections on the cassettes and adapter plates. And the one-tile footprint makes it easier to access the space beneath a raised floor.

Data center infrastructure standards like TIA-942 recommend driving all network cabling back to patching in the main distribution area, or MDA. Following these standards, the HDX frame is designed to be installed in the MDA, serving as the **main cross-connect patching location** for all fiber channels in the data center. It can support cabling from network servers, core switches, the SAN, mainframe, and disk or tape storage.

HDX Frame
Main Distribution Area

- Core Switches
- Mainframe
- Equip. Distribution Area (Servers)
- Storage Area Network
- Tape & Disk Storage

HDX FRAME CAPACITY CHART (Based on use of 48-fiber trunks)	
CONNECTIVITY	MAX. FIBER STRANDS
LC	3,168
12-Fiber MTP®	7,776
24-Fiber MTP®	15,552

The HDX Frame consolidates patching for all fiber channels in the data center into an incredibly small footprint. Since it doesn't require the use of standard 19-inch cabinets, which often require additional width and depth, it uses less space for patching.

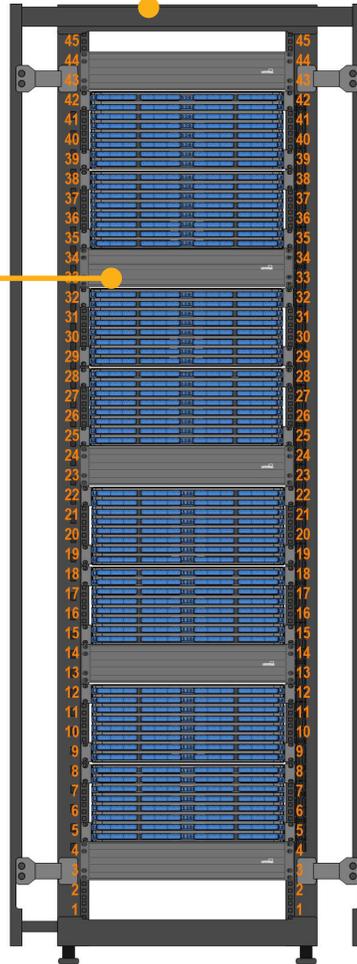By reducing overall floor-space requirements, the HDX frame creates significant yearly cost savings.

2 feet

2 feet

2' x 2' Footprint

Traditional Cabinet vs. HDX Frame Space Savings

**84" High Cabinet
42 Rack Units
3,456 Total LC Fibers**

**84" High Cabinet
22 Rack Units
3,168 Total LC Fibers**

**4RU Enclosure:
384 LC Fiber Strands**

**2RU Patch Deck:
144 LC Fiber Strands**

**Cabinet
32" W x 48" D**

**HDX Frame
24" W x 24" D**

**Raised Access
Floor Tile
24" x 24"**

**Raised Access
Floor Tile
24" x 24"**
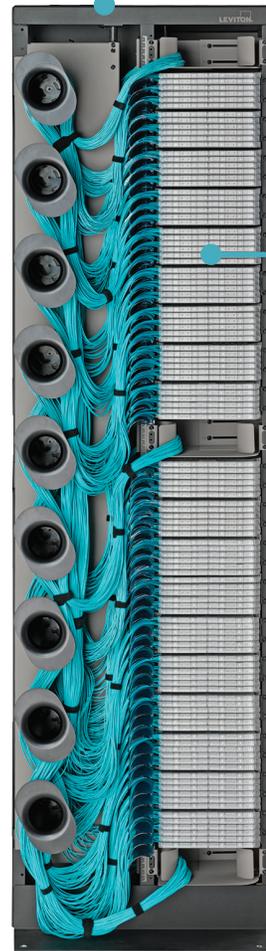
Top View 32" W x 48" D
10.7 Square Feet Used

Top View 24" W x 24" D
4 Square Feet Used

FIBER DISTRIBUTION FRAME

- Integrated cable management and routing solutions for minimum bend radius, better slack storage, and protection

- Holds up to 22 decks; each can be configured with cassettes, adapter plates, or splice trays

- Lockable rear doors included to protect and conceal trunk cabling

- Optional front doors (sold separately) are transparent on one side and lockable for additional security

- Occupies only one 2-foot square tile

- Seismic certified to GR-63-CORE, Zone 4, and cULus 2416 Listed

PATCH DECK

- Modular 3.5-inch deck accepts up to 144 fibers (using LC) capacity

- Holds 6 independent sliding and removable trays and accepts up to 12 MTP® cassettes or adapter plates

- Magnifying port identification label holders for better visibility

- Integrated minimum bend radius protection

SPLICE DECK

- Modular 3.5-inch-high deck accepts up to three independent splice trays

- Sliding trays are removable for ease of splicing

- Heat-shrink fusion splicing of individual 250 μm or 900 μm tight-buffer fibers for up to 144 fibers per deck

- Mass ribbon fusion splicing available as custom order

OPT-X® HDX FIBER OPTIC DISTRIBUTION FRAME

| DESCRIPTION	PART NO.
[A] Fiber Distribution Frame, 7' H x 2' W x 2' D	F3168-22F
[B] Patch Deck, 2RU, empty (includes horizontal cable management and cable clamp kit)	F3168-DCK
[C] Splice Deck, 2RU, empty (includes horizontal cable management and cable clamp kit)	F3168-SPD
[D] Cross-Frame Routing Kit	F3168-CFR
[E] Front Doors Kit	F3168-FDR
Cable Clamp Kit (for additional fiber trunks)	F3168-CCK
Seismic Zone 4 Kit	F3168-EQK
2RU Blank Panel (for frame)	F3168-BLK
24-fiber Heat Shrink Style Molded Splice Tray (includes 60 mm splice sleeves)	T5PLS-24F

1x12 MTP® Fiber to 12-Fiber LC Cassette

2x24 MTP Fiber to 6x8 MTP Fiber Cassette

F

G
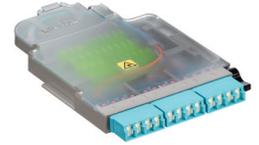
H

HDX MTP CASSETTES

- 12- or 24-fiber MTP configurations
- Select from LC shuttered or MTP connectors
- Configure up to 48 fibers for 24 channels (10G) and 6 channels (40G)
- Easy migration to 40, 100, 200, and 400 Gb/s when used with Opt-X® Unity trunks, harnesses, or patch cords
- Pre-terminated fiber eliminates the need for complicated field terminations and splices

Make to order! leviton.com/configurator

HDX ADAPTER PLATES

- Connect to field-terminated backbone cabling or pre-terminated trunks
- LC shuttered, and MTP styles in 12, or up to 72/144-fiber configurations are available

HDX LC & MTP SPLICE MODULES

- Modules integrate fiber adapter bulkhead (12 or 36 fibers) and splice holders, eliminating need for splice trays
- Innovative 12-fiber color-coded pigtail offers fusion splicing to either single fiber or ribbon fiber constructions
- LC internal shutters minimize dust and provide eye protection
- Splice Sleeves included in accessory kit
- MTP Splice Module offers field termination option to migrate from 10 to 40, 100, 200 or 400 Gb/s

HDX ADAPTER PLATES		
[F]	Adapter Plate, OM3 & OM4, Quad LC shuttered (Aqua), 12 fibers, zirconia ceramic sleeve	5FUHD-SQL
	Adapter Plate, OS2, Quad LC shuttered (Blue), 12 fibers, zirconia ceramic sleeve	5FUHD-SLL
	Adapter Plate, 3 Duplex MTP Adapters (Black), key up/key up	5FUHD-6MB
[G]	Adapter Plate, 3 Duplex MTP Adapters (Black), key up/key down	5FUHD-6MP
	Adapter Plate, blank (Black)	5FUHD-BLK
HDX FIBER SPLICE MODULES*		
[H]	12-fiber HDX Splice Module, OM4 LC (aqua)	SPLCH-12AQ
	12-fiber HDX Splice Module, OS2 LC (blue)	SPLCH-12BL
	12-fiber HDX Splice Module, OS2 LC/APC (green)	SPLCH-12GN
	36-fiber HDX Splice Module, OM4 MTP (male)	SPMPH-MMPN
	36-fiber HDX Splice Module, OS2 MTP (male)	SPMPH-SMPN
	36-fiber HDX Splice Module, OM4 MTP (female)	SPMPH-MMUP
	36-fiber HDX Splice Module, OS2 MTP (female)	SPMPH-SMUP

* = Make to Order, lead times may apply.

Make-to-order!	HDX/HDX2 CASSETTE OPTIONS				
FIBER TYPE	FIBER COUNT	CONNECTOR TYPE (FRONT)	MTP TYPE (REAR)	POLARITY	
• OM3	• 8	• LC Shuttered	• 8-Fiber MTP (Male) Base 8	• Method A	• Method C
• OM4	• 12	• LC Non-Shuttered	• 12-Fiber MTP (Male) Base 12	• Method B, Core	• Conversion
• OS2	• 24	• 8-Fiber MTP (Female)	• 24-Fiber MTP (Male) Base 24	• Method B, Edge	• Universal
• OS2	• 48	• 8-Fiber MTP (Male)			

For Method B polarity, you must order one each of the Core and Edge cassettes.
For assistance customizing your cassettes, please visit leviton.com/configurator or call Tech Support at 800.824.3005.

Today's networks must be fast and reliable, with the flexibility to handle ever-increasing data demands. Leviton can help expand your network possibilities and prepare you for the future. Our end-to-end cabling systems feature robust construction that reduces downtime, and performance that exceeds standards. We offer quick-ship make-to-order solutions from our US and UK factories. We even invent new products for customers when the product they need is not available. All of this adds up to the **highest return** on **infrastructure investment**.

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YOU MIGHT ALSO BE INTERESTED IN...

Opt-X® HDX Enclosure System
The HDX System features compact cassettes and adapter plates that fit into high-density enclosures, creating a scalable platform for enterprise and data center applications.

Opt-X HDX Splice Module
Splice modules are available with either LC shuttered or MTP connectors to eliminate the need for individual splice trays within a fiber enclosure and provide optimal organization and slack management of fibers.

Premium Patch Cords & Pigtails
Premium Series Patch Cords and Pigtails feature advanced polishing and assembly techniques, easy polarity changes, and insertion loss and return loss tested to industry-leading standards.

Pre-terminated Trunk Cables
Leviton Opt-X SJX pre-terminated trunks provide the highest density backbone connectivity available.