



OPT-X[™] Fiber Optic System

Optimized for essential connectivity in the enterprise, Leviton's standard performance SDX Premises system offers 72 fibers per rack-unit density with spliced or mechanical field terminated connectivity to meet a wide variety of application needs and deployment locations. OPT-X fiber optic systems are global solutions available everywhere.

Recommended For:

Enterprise Building Backbones
Campus Networks
Rack or Wall Mount in Telecommunication Rooms
Active DAS Network Patching



The **OPT-X SDX platform** allows for easy field termination of connectors and splicing in a standard-density footprint. SDX splice modules and precision-molded adapter plates offer flexible connections and storage options to meet any project need.

Premises solutions include bulk cable and field terminated connectivity that deliver reliable, standard loss performance for campuses and enterprise networks. They are designed for installation with the OPT-X SDX platform.


Use Cases

Efficient Field Termination	Smaller Connection Channels	Versatile for Range of Locations	Standard Density and Lower Fiber Count Networks
<p>Typically deployed with Leviton’s loose tube or tight buffered bulk cable, the SDX Premises system offers a variety of field termination options including splice trays, splice modules, pigtailed, and mechanical fiber connectors.</p>	<p>With standard performance connectivity, the Premises system offers the best value for point-to-point or single-patch field architectures.</p>	<p>Front-loading rack-mount and wall-mount enclosures and panels come in a range of sizes, with enhanced labeling options to simplify MAC work.</p>	<p>Ideal for typical enterprise backbones with 6 fiber to 24 fiber connections, the standard density SDX (max 72 fibers per RU) leaves ample room for regular maintenance or MACs.</p>


Example Network




Example Channel Reach Performance with Mechanical Field Termination




A
Patch Cords




B
OPT-X SDX Adapter Plates



C
FASTCAM™ Connectors or Splice Tray and Fiber Pigtails



D
OPT-X SDX Enclosure




E
Premises Distribution or Loose Tube Cable

OM4	10G SR		25G SR		40G BiDi	
# of Connection Points	2	4	2	4	2	4
Reach (m)	For expected optical reach data, contact your local sales person. Leviton.com/ns/global-locations					


OS2	10G LR		40G LR		100G CWDM4	
# of Connection Points	2	4	2	4	2	4
Reach (m)	For expected optical reach data, contact your local sales person. Leviton.com/ns/global-locations					

Note: Leviton can calculate reach for virtually any transceiver type. Contact 800-722-2082 for additional support or visit Leviton.com/ns/global-locations


Example Channel Reach Performance with Splice Modules



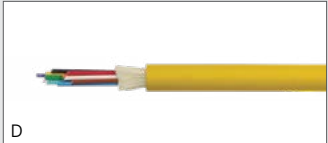
A
Patch Cords



B
OPT-X SDX Splice Modules



C
OPT-X SDX Enclosure



D
Premises Distribution or Loose Tube Cable

OM4	10G SR		25G SR		40G BiDi	
# of Connection Points	2	4	2	4	2	4
Reach (m)	For expected optical reach data, contact your local sales person. Leviton.com/ns/global-locations					

OS2	10G LR		40G LR		100G CWDM4	
# of Connection Points	2	4	2	4	2	4
Reach (m)	For expected optical reach data, contact your local sales person. Leviton.com/ns/global-locations					

Leviton can calculate reach for virtually any transceiver type. Contact 800-722-2082 for additional support or visit Leviton.com/ns/global-locations.

The engineered link values listed in the tables are outputs from Leviton's Optical Link Verification Tool. To obtain these expected reach distances, the products must be properly installed by a Leviton Certified Installer. Additionally, the active equipment at both ends of the link must be properly installed and in good working condition, and meet appropriate IEEE 802.3 standards for the specific application. Leviton stands behind its system warranties, located at <https://leviton.com/ns/warranties>. As a variety of applications and connection points are possible, contact 800-722-2082 or apeng@leviton.com for specific design consultation and Link Performance verification.



Adapter Plates

OPT-X SDX Fiber Adapter Plates

- Available in LC, SC, ST, and blank styles
- Made of durable polycarbonate material
- Works with all SDX rack-mount and wall-mount enclosures
- Color of plate identifies fiber type per standards
- Zirconia ceramic sleeves for optimal performance in 1 Gb/s or higher transmission speeds
- Integrated couplers eliminate “rattle” and loose fit
- Exceeds optical performance standards and meets all other applicable standards

Fiber Adapter Plates	Part No.
Plate (aqua), (OM3 & OM4), Duplex LC, 12-fiber, zirconia ceramic sleeve	5F100-2QL
Plate (metal), (OM4), Duplex LC (Heather Violet), 12-fiber, zirconia ceramic sleeve	5F100-12M
Plate (blue), SM (OS2), Duplex LC, 12-fiber, zirconia ceramic sleeve	5F100-2LL
Plate (green), SM (OS2), Duplex LC/APC, 12-fiber, zirconia ceramic sleeve	5F100-2VL
Plate (aqua), (OM3 & OM4), Quad LC, 24-fiber, zirconia ceramic sleeve	5F100-4QL
Plate (metal), (OM4), Quad LC (Heather Violet), 24-fiber, zirconia ceramic sleeve	5F100-24M
Plate (blue), SM (OS2), Quad LC, 24-fiber, zirconia ceramic sleeve	5F100-4LL
Plate (green), SM (OS2), Quad LC/APC, 24-fiber, zirconia ceramic sleeve	5F100-4VL
Plates (aqua), (OM3 & OM4), Duplex SC, 6-fiber, zirconia ceramic sleeve	5F100-6QC
Plates (blue), SM (OS2), Duplex SC, 6-fiber, zirconia ceramic sleeve	5F100-6LC
Plates (green), SM (OS2), Duplex SC/APC, 6-fiber, zirconia ceramic sleeve	5F100-6VC
Plate (aqua), (OM3 & OM4), Duplex SC, 12-fiber, zirconia ceramic sleeve	5F100-2QC
Plate (blue), SM (OS2), Duplex SC, 12-fiber, zirconia ceramic sleeve	5F100-2LC
Plate (green), SM (OS2), Duplex SC/APC, 12-fiber, zirconia ceramic sleeve	5F100-2VC
Plate (black), Blank	5F100-PLT



Enclosures

OPT-X SDX Fiber Enclosures

Allow for easy field termination of connectors, splicing, or pre-terminated cabling. Rack-mount enclosures are available in 1RU, 2RU, 3RU, and 4RU sizes, with basic features in 500i, enhanced features in 1000i, and feature-rich in 2000i. Wall-mount and zero-RU options increase system flexibility.

- Patch up to 72 LC fibers per RU (96 LC fibers per RU on specific 3RU enclosures)
- Optional sliding trays removes completely from enclosure for ease of field terminations and splicing
- Transparent front and rear doors on 2000i provides visibility of port ID labeling or cabling
- Various enclosure depth for enhanced backbone cable management
- Flush mount open design on 500i allows for easy access to patch cords
- Removable front and/or rear covers on rack mount enclosures for better access to interior of enclosure
- Constructed of robust 16-gauge steel, powder-coated black or white (on 2000i)
- Accessory kit consists of cable ties, mounting ear screws, port ID label, and spiral wrap (for cable protection on units with a sliding tray)

Enclosures and Panels	Part No.
2000i, 1RU Enclosure, white, with sliding tray, accepts 3 components	5R1UH-W03
2000i, 2RU Enclosure, white, with sliding tray, accepts 6 components	5R2UH-W06
2000i, 4RU Enclosure, white, with sliding tray, accepts 12 components	5R4UH-W12
2000i, 1RU Enclosure, black, with sliding tray, accepts 3 components	5R1UH-S03
2000i, 2RU Enclosure, black, with sliding tray, accepts 6 components	5R2UH-S06
2000i, 4RU Enclosure, black, with sliding tray, accepts 12 components	5R4UH-S12
1000i, 1RU Enclosure, Empty, accepts 3 components	5R1UM-F03
1000i, 1RU Enclosure, Empty, with sliding tray, accepts 3 components	5R1UM-S03
1000i, 2RU Enclosure, Empty, accepts 6 components	5R2UM-F06
1000i, 2RU Enclosure, Empty, with sliding tray, accepts 6 components	5R2UM-S06
1000i, 3RU Enclosure, Empty, accepts 9 components	5R3UM-F09
1000i, 3RU Enclosure, Empty, accepts 12 components	5R3UM-F12
1000i, 4RU Enclosure, Empty, accepts 12 components	5R4UM-F12
1000i, 4RU Enclosure, Empty, accepts 15 components	5R4UM-F15
500i, 1RU Enclosure, Empty, accepts 3 components	5R1UL-F03
500i, 2RU Enclosure, Empty, accepts 6 components	5R2UL-F06
500i, 3RU Enclosure, Empty, accepts 12 components	5R3UL-F12
Wall-Mount Enclosure, mini, accepts 1 component	5WMNT-01C
Wall-Mount Enclosure, small, accepts 2 components	5WSML-02C
Wall-Mount Enclosure, medium, accepts 4 components	5WMED-04C
Wall-Mount Enclosure, large, accepts 12 components	5WLRG-12C



Cable

Tight Buffered

Premises Distribution Cable is a tight-buffered fiber optic cable designed for installation in plenum, riser, and LSZH environments for horizontal connections and interbuilding backbones.

- 900 µm buffers allows for easy handling during termination and eliminates the need for fanout kits
- Plenum cables available with ARMOR-TEK™ interlock armor for additional physical protection
- Flexible and small diameter

Tight Buffered Cable	Part No.	Typical Region
Plenum		
Tight Buffered, 50 µm-OM3, Indoor/Outdoor, aqua jacket	PDP0xxEB3010/25-I/O-C4(AQU)	United States
Tight Buffered, Single-Mode, Indoor/Outdoor, yellow jacket	PDP0xxAB0707-I/O-C4(YEL)	
Tight Buffered, 50 µm-OM4, Indoor/Outdoor, aqua jacket	PDP0xxFB3010/F5-I/O-C4(AQU)	
Tight Buffered, Interlock Armored, 50 µm-OM3, Indoor/Outdoor, aqua jacket	PDPK0xxEB3010/25-I/O-C4C5(AQU)	
Tight Buffered, Interlock Armored, OS2, Indoor/Outdoor, yellow jacket	PDPK0xxAB0707-I/O-C4C5(YEL)	
Tight Buffered, Interlock Armored, 50 µm-OM4, Indoor/Outdoor, aqua jacket	PDPK0xxFB3010/F5-I/O-C4C5(AQU)	
Tight Buffered, 50 µm-OM3, Indoor/Outdoor, aqua jacket	DOM3P-xx1	Canada
Tight Buffered, Single-Mode, Indoor/Outdoor, yellow jacket	D008P-xx1	
Tight Buffered, 50 µm-OM4, Indoor/Outdoor, aqua jacket	DOM4P-xx1	
Tight Buffered, Interlock Armored, 50 µm-OM3, Indoor/Outdoor, aqua jacket	DAM3P-xx1	
Tight Buffered, Interlock Armored, Single-Mode, Indoor/Outdoor, yellow jacket	DA08P-xx1	
Tight Buffered, Interlock Armored, 50 µm-OM4, Indoor/Outdoor, aqua jacket	DAM4P-xx1	
CPR-Rated, LSZH (B2ca)		
Tight Buffered, 50 µm-OM3, Indoor, black jacket	GFOM3PDCxxLU-B2ca	Europe, Middle East, LATAM, APAC
Tight Buffered, 50 µm-OM4, Indoor, black jacket	GFOM4PDCxxLU-B2ca	
Tight Buffered, OS2, Indoor, black jacket	GF008PDCxxLU-B2ca	

xx = Fiber Count (06, 12, 24)



Cable

Loose Tube

Revolutionary Outdoor/Indoor ADVENTUM™ cables are designed to be used in plenum and Euroclass environments. This fire-rated cable is designed to withstand the rigors of the outside plant environment.

- Flame rating enables installation to go directly from outside plant to riser shaft or through horizontal spaces
- Cable core and buffer tubes use dry waterblocking technology with no gel filler
- All dielectric design
- Plenum cables available with ARMOR-TEK interlock armor for additional physical protection

Loose Tube Cable	Part No.	Typical Region
Plenum		
ADVENTUM Loose Tube, 50 µm-OM3, Indoor/Outdoor, aqua jacket	LTP12B0xxEB3010/25	United States, Canada
ADVENTUM Loose Tube, 50 µm-OM4, Indoor/Outdoor, aqua jacket	LTP12B0xxFB3010/25	
ADVENTUM Loose Tube, OS2, Indoor/Outdoor, yellow jacket	LTP12B0xxAB0403	
CPR-Rated, LSZH (B2ca)		
ADVENTUM Loose Tube, 50 µm-OM3, Indoor/Outdoor, black jacket	GFOM3ADTxxWRRU-B2ca	Europe, Middle East, LATAM, APAC
ADVENTUM Loose Tube, 50 µm-OM4, Indoor/Outdoor, black jacket	GFOM4ADTxxWRRU-B2ca	
ADVENTUM Loose Tube, OS2, Indoor/Outdoor, black jacket	GF108ADTxxWRRU-B2ca	

xx = Fiber Count (48, 72, 96)



Splice Modules

OPT-X SDX Fiber Splice Modules

SDX 12- and 24-Fiber Splice Modules protect and organize heat-shrink fusion spliced fibers (up to 12 or 24 fibers) inside a fiber enclosure. The modular design enables faster field splicing and simple management of pigtails within the housing. Splice modules eliminate the need for individual splice trays within a fiber enclosure and provide optimal organization and slack management of fibers. Typical applications include Wide Area Networks (WAN), campus environments, high-count riser buildings, government installations, data centers, and central offices.

- Module integrates fiber adapter bulkhead (12 or 24 fibers) and splice holders, eliminating the need of splice trays
- Offered in single-mode (OS2) UPC and APC and laser-optimized multimode OM3 and OM4 fiber types
- Individual compartments provide slack storage and bend radius guides for respective backbone cable, 900 µm tight-buffer pigtails, and fusion-spliced fibers
- 12-fiber, color-coded 900 µm tight-buffer pigtails are 1 m and pre-loaded in module per specific configuration
- Modular design allows for ease of maintenance of individual spliced fiber and allows for scaling up without impacting existing fibers
- Accessory kit consists of 40 mm heat-shrink style splice sleeves, tie wraps, and braided mesh sleeve

Splice Modules	Part No.
12-Fiber, OM3, duplex LC (aqua)	SPLCS-12A
12-Fiber, OM4, duplex LC (aqua)	SPLCS-124
12-Fiber, OM4, duplex LC (heather violet)	SPLCS-12M
12-Fiber, OS2, duplex LC (blue)	SPLCS-12L
12-Fiber, OS2, duplex LC/APC (green)	SPLCS-12V
12-Fiber, OM3, duplex SC (aqua)	SPSCS-12A
12-Fiber, OS2, duplex SC (blue)	SPSCS-12L
12-Fiber, OS2, duplex SC/APC (green)	SPSCS-12V
24-Fiber, OM3, quad LC (aqua)	SPLCS-24A
24-Fiber, OM4, quad LC (aqua)	SPLCS-244
24-Fiber OM4, quad LC (heather violet)	SPLCS-24M
24-Fiber, OS2, quad LC (blue)	SPLCS-24L
24-Fiber, OS2, quad LC/APC (green)	SPLCS-24V



Connectors

FASTCAM™ Fiber Connectors

Leviton's FASTCAM pre-polished connectors provide precision mechanical termination of single-mode or multimode fiber.

- Terminated on 250 µm or 900 µm buffered fiber and/or 2 or 3 mm jacketed fiber
- Require no polishing or epoxy curing
- Use precision zirconia ferrules

Fiber Connectors	Part No.
FASTCAM LC OM3/4, aqua	49991-LLC
FASTCAM LC OS2, blue	49991-SLC
FASTCAM SC OM3/4, aqua	49991-LSC
FASTCAM SC OS2, blue	49991-SSC
FASTCAM SC/APC OS2, green	49991-ASC
FASTCAM LC Duplex Clip (pack of 6), Clear	49991-CLP



Patch Cords

Fiber Patch Cords

Leviton Fiber Optic Patch Cords are designed to interconnect or cross connect fiber networks.

- All connectors have precision pre-radiused zirconia ferrules
- Standard polarity is A-B

Fiber Patch Cords	Riser Part No.	LSZH Part No.
OM3, LC-LC, 2 m	5LDLC-M02	VPC-M3D1LCLC0020
OM3, LC-LC, 3 m	5LDLC-M03	VPC-M3D1LCLC0030
OM4, LC-LC, 2 m	54DLC-M02	VPC-M4D1LCLC0020
OM4, LC-LC, 3 m	54DLC-M03	VPC-M4D1LCLC0030
OS2, LC-LC, 2 m	UPDLC-S02	VPC-S2D1LCLC0020
OS2, LC-LC, 3 m	UPDLC-S03	VPC-S2D1LCLC0030
OM3, SC-SC, 2 m	5LDSC-M02	VPC-M3D1SCSC0020
OM3, SC-SC, 3 m	5LDSC-M03	VPC-M3D1SCSC0030
OM4, SC-SC, 2 m	54DSC-M02	VPC-M4D1SCSC0020
OM4, SC-SC, 3 m	54DSC-M03	VPC-M4D1SCSC0030
OS2, SC-SC, 2 m	UPDSC-S02	VPC-S2D1SCSC0020
OS2, SC-SC, 3 m	UPDSC-S03	VPC-S2D1SCSC0030
OS2, SC/APC-SC/APC, 2 m	APSSC-S02	VPC-S2D1ACAC0020
OS2, SC/APC-SC/APC, 3 m	APSSC-S03	VPC-S2D1ACAC0030

Note: Additional lengths available



Fiber Splice Trays

12- & 24-Fiber Injection-Molded Splice Trays

Provide protection and slack management of heat-shrink fusion spliced fibers (up to 12 or 24 fibers) inside of a fiber enclosure. They feature a clear cover for viewing and inspection of tray contents.

- Four ratchet action clamps with foam rubber padding to minimize crush of loose tube or tight buffer fiber
- Accepts up to 12 or 24 heat-shrink style fusion spliced fibers
- Splice sleeves included
- Accommodates standard heat shrink sleeves in 40 or 60 mm lengths

Fiber Splice Trays	Part No.
12-Fiber Splice Tray	T5PLS-12F
24-Fiber Splice Tray	T5PLS-24F
Splice Tray Mounting Hardware Kit	SPLMT-HKT



Fiber Pigtails

Support fusion splicing for fiber cabling systems. Available in kits for ease of installation and ordering.

- All assemblies are 100% optically tested
- All pigtails are serialized for traceability
- Pigtails follow TIA color sequence to easily match color-coded (900 µm or 250 µm) fiber cable that will be spliced

Popular 12-Fiber Kit Configurations	Riser Part No.	LSZH Part No.
OM3, SC, 3 m	5LPSC-KIT	VPK-M3TSC1200-03
OM3, LC, 3 m	5LPLC-KIT	VPK-M3TLC1200-03
OM4, LC, 3 m	54PLC-KIT	VPK-M4TLC1200-03
OS2, SC UPC, 3 m	UPPSC-KIT	VPK-S2TSC1200-03
OS2, LC UPC, 3 m	UPPLC-KIT	VPK-S2TLC1200-03

Released June 2023 F23 8863-GL ENv1

USA
 Network Solutions Headquarters
 +1 (800) 722 2082
infoUSA@leviton.com
 Leviton Berk-Tek Cable: +1 (800) 237 5835
berktek.info@leviton.com

Asia Pacific
 +852 3620 2602
infoAPAC@leviton.com

Canada
 +1 (800) 461 2002
infoCanada@leviton.com

Europe
 +44 (0) 1592 772124
infoEurope@leviton.com

Latin America
 MX: +52 (55) 2128 6286
 LATAM: +52 (55) 2333 5963
infoLATAM@leviton.com

Middle East & Africa
 +971 (4) 247 9800
infoMEA@leviton.com

NETWORK SOLUTIONS PRODUCTS ARE AVAILABLE WORLDWIDE IN OVER 100 COUNTRIES. VISIT US ONLINE AT LEVITON.COM/NS TO LEARN MORE.