




CORNING

Optical Distribution Frame RFO

Versatile for today. Scalable for the future.





Demand for more bandwidth is exploding.

Is your optical distribution frame system ready?

As of June 2016, 3 billion kilometers of fiber cable were installed worldwide.¹ That's enough cable to circle the earth 75,000 times.

We're installing that cable at a dizzying pace, and as fiber has become a part of our everyday lives, it has become the media of choice for multiple types of networks, including long distance, core networks, metro loops, wireless backhubs, FTTx access and CATV networks, deep-fiber architecture for DSL last mile, and data centers. And we'll need more and more fiber cables as we develop fiber-rich/fiber-based applications and services we've yet to imagine.

¹ CRU International

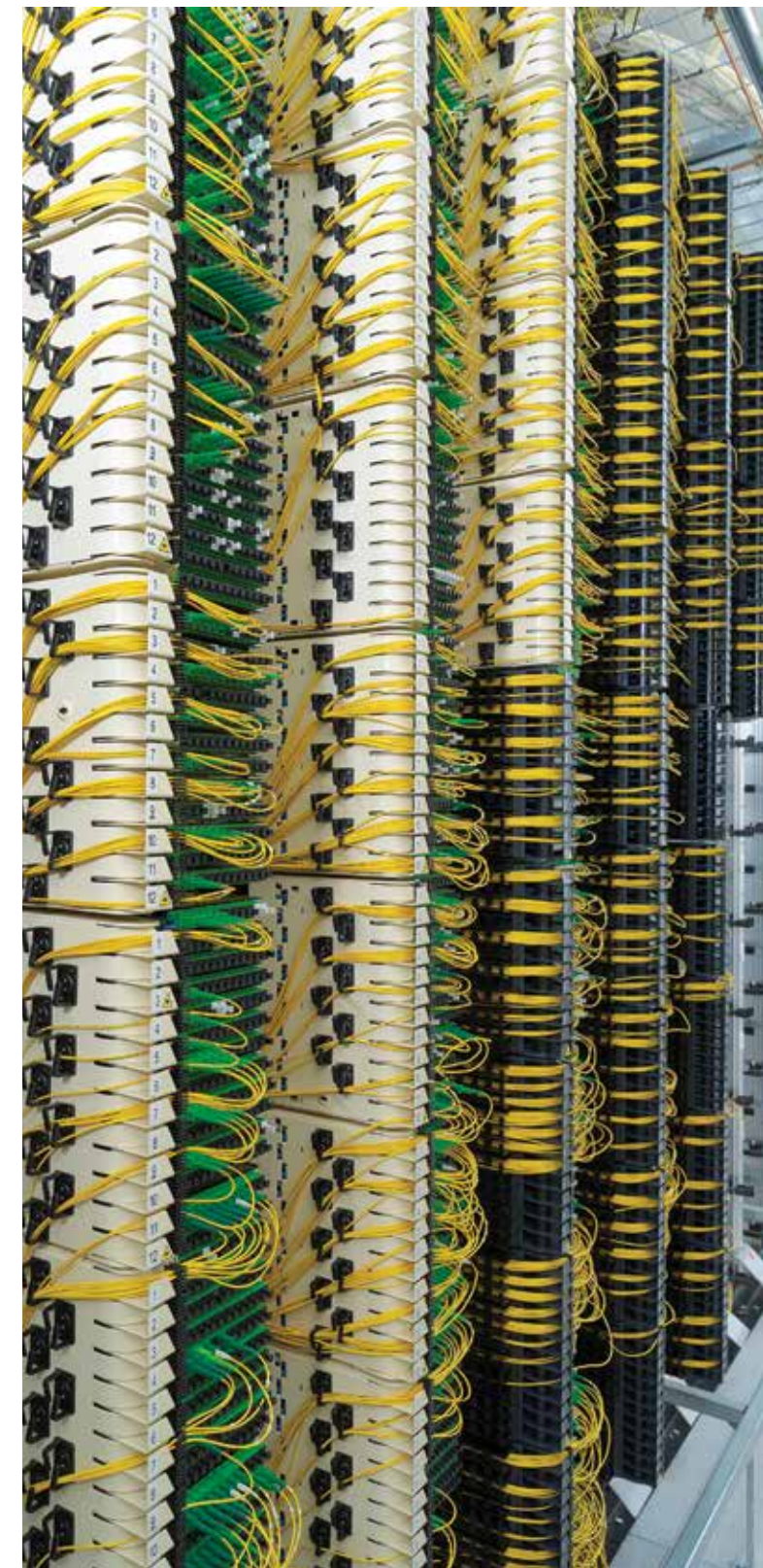
What the next generation of ODF infrastructure must address

The ever-increasing demand for bandwidth will continue to strain fiber management capabilities and require more density and scalability for your inside plant fiber distribution frame infrastructure. To meet your service-level agreements, a sound multi-network optical distribution frame (ODF) strategy must include infrastructure that can:

- Provide a format expandable for future growth
- Simplify and increase patch-cord management and storage
- Improve adds and changes or eliminate mishandling of cabling assemblies leading to potential dB loss
- Migrate to future generation of transmission and aggregation systems by equipment

The Optical Distribution Frame RFO meets this demand for more network capacity and reach, helping you meet the challenges that come with fiber management and migration to new technologies and equipment.

You can build the optical distribution frame (ODF) system that conforms to your fiber distribution requirements, with three RFO frame formats and two RFO chassis for optimal connectivity, management and scalability.



Optical Distribution Frame RFO: A solution that adapts to your network requirements



Three frame options

RFO Frames – Open Frame, Wall Frame, and Rack Frame – give you outstanding interoperability capabilities between equipment or service-provider infrastructure locations (central office, headend, data center and remote points of presence, huts and shelters). It provides easy control over fiber cable elements from equipment or network and ample, orderly patch-cord management.



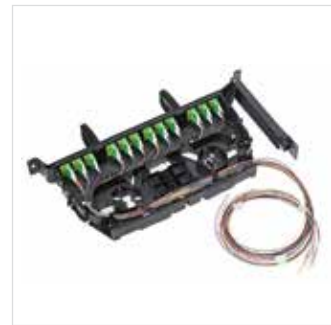
Modular blocks

RFO NG Network Cable Head Blocks and RFO NG Interconnection Blocks make ODF deployment and management operations between equipment and the network simple. They also improve ODF flexibility by supporting mix-and-match RFO NG Fiber Modules for specific network applications.



Plug-and-play modules

A wide range of RFO NG Fiber Modules provide for multiple applications, such as splice-on pigtails, adapters-only for connectorized simplex, multifiber patch cords or breakout assemblies, centralized or cascaded PLC splitter deployment, and xWDM modules.



Swiveling Patch Panels

RFO SD Swiveling Patch Panels provide density in confined spaces with element-at-a-time extension capabilities and a swiveling feature that provides full access to inner, rear and lateral sides for easy and safe fiber management. Its lightweight plastic construction is noncorrosive, making it ideal for outdoor use.

RFO Frames

Open Frame: Easy-access architecture that keeps on growing

The RFO OF Open Frame is built for high-capacity growth – for scalability from 1,000 to more than 100,000 fiber points – making it ideal for consolidation and interface between the central office, headend or data center, and outdoor fiber networks. These single- or double-sided modular frames can be linked together for as large a system as your space will allow, maintaining superior cross-connection across the total lineup as it expands.

The open-frame architecture also helps eliminate access issues and the problems they can present. You maintain complete control over cables, patch cords and accessories from all four sides of the frame for cabling and jumpering operations and control of slack, “kink,” “banjo” and other bend radius issues.



RFO NG Open Frame Ordering Information	
Product Number	Description
N711865A	RFO NG Fiber Distributor Frame 6 Levels, 2 m/6.56 ft
N711866A	RFO NG Fiber Distributor Frame 8 Levels, 2.50 m/8.20 ft
N711867A	RFO NG Fiber Distributor Frame 11 Levels, 3.25 m/10.66 ft
N711842A	RFO NG 12 Tray Fiber Cabling Block Left Hinge (modules on right)
N711886A	RFO NG 6 Tray Fiber Cabling Block Left Hinge (modules on right)
N431080A	RFO NG Splitter Block
N541152A	RFO NG Module Splitter Block with 1 x 1:64 SC APC PLC splitter
N711584A	RFO NG Fixation Kit For Eight Breakout Cables
N581203A	RFO White Protection Tube D5X3, reel of 1,000 m
N581207A	RFO White Protection Tube D5X3, reel of 25 m
N711597A	RFO NG Clamp Kit Deecam D25 for 60 D5X3 protection tubes
N711547A	RFO NG Clamp Kit Deecam D18 for 25 D5X3 protection tubes

Rack Frame: Interconnect/cross-connect with your active equipment

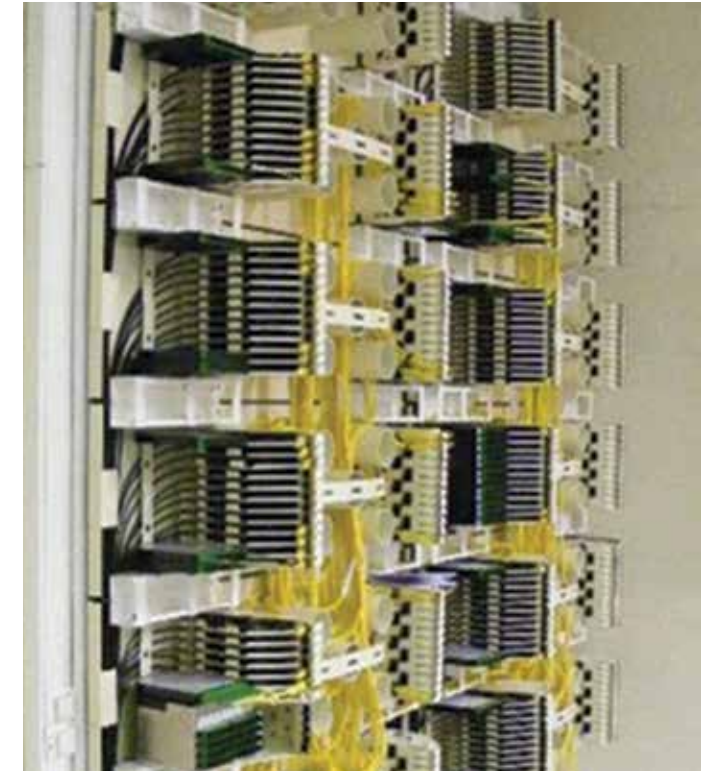
The RFO RF Rack Frame, available in 300 mm ETSI depth and widths of either 600 or 900 mm, comes compatible with your active equipment racks and can be used with either the RFO NG Modular Blocks or the RFO SD Swiveling Patch Panel – or a combination of both. These frames enable access from both the front and sides and are completely modular, with optional side panels and doors.

When flexibility is key, RFO rack frames perform. The 600 RFO NG Rack offers a maximum density of 864 SC connections scalable by 12 SC increments. The ETSI 900 RFO SD Rack offers a maximum density of 2,016 SC connections. When this frame is used with the RFO SD Swiveling Patch Panel, system scalability is improved.



Wall Frame: Make the most of small spaces

The RFO WF Wall Frame is ideal for confined network infrastructure spaces where floor space is limited, such as points of presence, distribution hubs, shelters, huts, and technical rooms in residential or corporate buildings. Frames can be installed at a 90-degree angle to make the most of available wall space. Flexible and scalable, these frames come pre-installed on wall-mounting rails with additional modular plates as required.



RFO RM Rack Mount Ordering Information

Product Number	Description
40096-001 00	Kit for RFO-Frame 600 with fitting rail
40096-102 00	Kit for RFO-Housing Set for Cabinet 900
40096-104 00	Kit for RFO-Housing Addition Set for Cabinet 900 without side panels
40031-202 00	Kit for Deecam Top/Bottom Bar for Cabinet 900
40096-301 00	19-in Mounting Set for Cabinet 900 (16 Hu)
40096-401 00	Side Drums for Cabinet 600
40096-002 00	Kit for RFO-Frame 900 with fitting rail
40096-302 00	19-in Mounting Set for Cabinet 900 (45 Hu)
40096-402 00	Kit for Drums 900 Frame E
40096-403 00	Kit for Drums 900 Frame F
40096-404 00	Kit for Drums 900 Frame K
40096-405 00	Kit for Drums 900 Frame L
40096-006 00	Kit for Deecam Side Bracket
40096-203 00	Kit for Deecam Support Bar Addition
40096-600 00	Kit for Cable Holder
40096-615 00	Kit for 19-in Parking Position

RFO WM Wall Mount Ordering Information

Product Number	Description
N711705A	RFO WM Wall-Mounting Frame Supporting Plate for 2 RFO NG Fiber Cabling Blocks
N711703A	RFO WM Wall-Mounting Frame Rail
N711780A	RFO WM Wall-Mounting Frame Symmetrical Supporting Bar for Deecam Clamp Kit
N711704A	RFO WM Central Supporting Bar for Deecam Clamp Kit
N711874A	RFO NG 12 Tray Fiber Cabling Block Right Hinge (modules on left)
N711842A	RFO NG 12 Tray Fiber Cabling Block Left Hinge (modules on right)
N711894A	RFO NG 6 Tray Fiber Cabling Block Right Hinge (modules on left)
N711886A	RFO NG 6 Tray Fiber Cabling Block Left Hinge (modules on right)
N581203A	RFO White Protection Tube D5X3, reel of 1,000 m
N581207A	RFO White Protection Tube D5X3, reel of 25 m
N711547A	RFO NG Clamp Kit Deecam D18 for 25 D5X3 Protection Tubes

RFO NG Modular Blocks

Stack them up one by one or six, eight or 11 at a time, as many as you need in your current ODF room. Then swivel open all swing-out trays to allow complete access to the entire inside block when you want to route new connectorized simplex or multi-fiber patch cords, breakout assemblies, or network cables.



RFO NG Network Cable Head Blocks terminate multi-fiber cables from the outside network to the ODF. Using the RFO Deecam clamp kit, network cables are attached to the frame or rack, which fans-out the fiber and protection tubes. Tubes enter the rear of the block to a tray's slack storage area. Because up to 1.8 m of protective tube slack can be stored in each tray, RFO fiber modules can be removed from the frame or rack for service on the ground or workbench, limiting the risk of disturbing adjacent fibers.

When terminating cable from equipment to the ODF, RFO NG Equipment Interconnect Blocks use simplex patch cords for incremental connection. For mass connection deployment, breakout cables or multi-fiber patch cords may be used. As with the cable head block, this block reduces the strain placed on patch cords when swing-out trays are opened.

Both RFO NG Modular Blocks are available in 48/72 (six trays) or 96/144 SC (12 trays) fiber terminations and are compatible with all RFO frames. The blocks can swivel one swing-out tray at a time to allow access to the pigtails, adapters, splitters and other fiber components inside the module.

RFO NG Fiber Modules

Mix and match RFO NG Fiber Modules to configure the best system for your growing networks. No tools are required; each module simply snaps into place.



Splice-on-Pigtail Modules

Designed to help factory-installed/factory-tested pigtails be spliced with individual fibers of a 12- or 24-fiber cable. Splice-on-pigtails modules come in the following configurations:

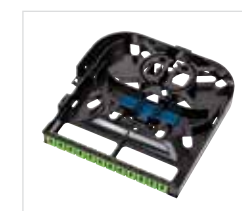
- 12 SC/24 LC modules
- 8 SC/16 LC modules
- High-density 18 SC modules
- Symmetrical 12 SC/24 LC modules to be used with RFO NG blocks in RFO WF wall frames



Breakout or Adapter-only Modules

Used with connectorized fiber cable assemblies, such as breakout cables or multi-fiber patch cords, these modules enable the incremental provisioning of new fiber elements at the ODF.

- Factory-installed/factory-tested 12 SC or 24 LC adapters
- Slack storage up to 2mm or 900µm fiber cable assemblies



Interconnection Module

Interconnection module is used as pass-through-only module through the module's open front side for a breakout cable or multi-fiber patch cord to directly interconnect with another RFO NG Modular Block at the ODF.



PLC Splitter Modules

RFO NG Splitter Modules can be used for centralized or cascaded splitter deployment in FTTH GPON networks and accommodate a full array of splitters with splits ranging from 1:2 to 1:64 for any ODF deployment location. Splitters with 2:x splits can be incorporated for OTDR testing and new FTTH services such as XG-PON and NG-PON2.

- Factory-installed/factory-tested assembly
- 250 µm and 900 µm fibers
- Accommodates 1:2, 2:2, 1:4, and 1:8 splitter combinations, supports splice-on input trunks, and splitters with connectorized input and output trunks
- Large-capacity PLC splitter chassis available for 1:16, 1:32, and 1:64 splitter modules

WDM Modules

Independent from equipment evolution and service lifetime, the RFO Optical Distribution System makes it possible to transition from GPON to XG-PON and NG-PON2 with very minimal re-engineering at the ODF (extension, additional cables, and swapping of new WDM modules). The RFO WDM modules can incorporate:

- WDM modules and PLC splitters
- WDM1r and/or WDM CEx modules

RFO NG Modules Ordering Information

Product Number	Description
Splice-on-Pigtail Modules	
N541230A	RFO NG Splice-On-Pigtail Fiber Module, 12 SC APC, green color pigtails, G657A2
N541229A	RFO NG Splice-On-Pigtail Fiber Module, 12 SC APC, red color pigtails, G652D
N541181A	RFO NG Splice-On-Pigtail Fiber Module, 12 SC UPC, G652D
N541174A	RFO NG Splice-On-Pigtail Fiber Module, 12 LC APC, G652D
N541153A	RFO NG Splice-On-Pigtail Fiber Module, 12 LC UPC, G652D
Splice-on-Pigtail Modules - Symmetric	
N541193A	RFO NG Splice-On-Pigtail Fiber Module - Symmetric, 12 SC APC, G652D
N541232A	RFO NG Splice-On-Pigtail Fiber Module - Symmetric, 24 LC APC duplex, green color pigtails, G652D
N671317A	RFO NG Patch Cord and Label Holder for Splice-On-Pigtail Fiber Modules - Symmetric
Breakout or Adapter-Only Modules	
N541231A	RFO NG Breakout/Adapter-Only Fiber Module - 12 SC/APC
N541177A	RFO NG Breakout/Adapter-Only Fiber Module - 12 SC/UPC
N541154A	RFO NG Breakout/Adapter-Only Fiber Module - 12 LC/UPC Duplex
Breakout or Adapter-Only Modules - Symmetric	
N541233A	RFO NG Breakout/Adapter-Only Fiber Module - Symmetric, 24 LC APC duplex
Interconnection Modules	
N541135A	RFO NG Interconnection Fiber Module
PLC Splitter Modules	
N541136A	RFO NG Splitter Module, 1x1:8 SC APC
N541138A	RFO NG Splitter Module, 4x1:2 SC APC
N541158A	RFO NG Splitter Module, 6x1:2 SC APC

RFO SD Swiveling Patch Panel

When density is vital but space is limited, the RFO SD high-density swiveling patch panel gives you more flexibility to move, add, and change with your network. Its 19-in standard width adapts to most environments.

Swivel access without disruption

Right- or left-swiveling panels give your full access to inner, rear, and lateral sides for cable management without exposing active fibers on adjacent panels or interrupting service. The swiveling innovation can help reduce cable wear and offers strain-relief of patch cords to limit mechanical tension on adapters that can create damaging dB loss and service issues.

Lightweight, non-corrosive plastic housing

Each molded plastic mono-block panel is lightweight for easy transportation and installation. RFO SD patch panels help prevent corrosion and are more resistant to condensation than metal housing, for better cable protection in humid environments. To eliminate the inconvenience of removing and reinserting coupling dust caps, RFO SD Swiveling Patch Panels can be equipped with RFO Clear Dust Caps.

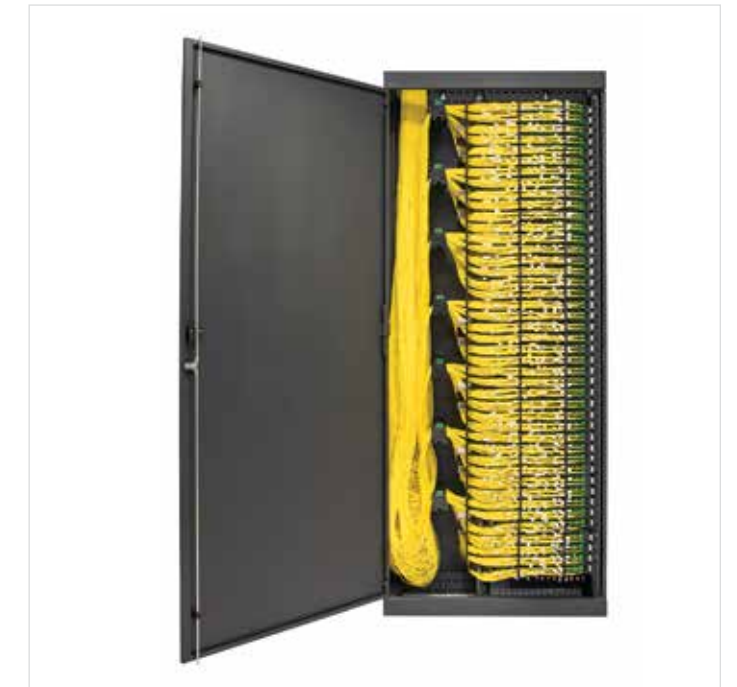
Stackable for improved density

The RFO SD patch panel is fully stackable one at a time for a denser fiber cable confirmation. A separate fiber tray (for separation of 250 μm fiber or 250 μm PLC splitter housing) can be added. It accommodates various splice holders for both Fibrlok[®] mechanical splice and industry heat-shrink sleeves.



Easy scalability

For the best scalability, proper routing of network and equipment fiber cable assemblies and management of the cross-connection patch cords is essential. The RFO SD handles network cables, breakout cables, or multi-fiber patch cords. Cables can be attached to the RFO DEECAM clamp kit, and two front and one lateral ring allow the panel to swivel easily and securely, even with a full load of patch cords.



Multiple applications and configurations

Perfect for small POPs in shelters, outdoor remote FDH cabinets, or anywhere you must make the most of the available space, the RFO SD Swiveling Patch Panel supports multiple applications and configurations.

Access/local loop network cable termination breakout cable and multifiber patch cords for active equipment termination.

- SC and LC connectivity
- 1RU, 2RU and 3RU sizes
- 250 μm and 900 μm pigtails
- Stubbed patch panel upon request

RFO SD Swiveling Drawer Ordering Information

Product Number	Description
RFO SD 1U	
N431130A	RFO SD Swiveling Drawer 1U with 12 pigtails, SC APC, left hinge, orange color code
N431146A	RFO SD Swiveling Drawer 1U with 12 pigtails, SC APC, left hinge, IEC color code grade B
N431110A	RFO SD Swiveling Drawer 1U with 24 pigtails, SC APC, left hinge, orange color code
N431114A	RFO SD Swiveling Drawer 1U with 48 pigtails, SC APC, left hinge, orange color code
N431147A	RFO SD Swiveling Drawer 1U with 48 pigtails, SC APC, left hinge, IEC color code grade B
N431113A	RFO SD Swiveling Drawer 1U with 48 pigtails, SC APC right hinge, orange color code
N431117A	RFO SD Swiveling Drawer 1U with 12 pigtails, LC APC, left hinge, IEC color code
N431115A	RFO SD Swiveling Drawer 1U with 48 pigtails, LC APC, left hinge, IEC color code
N431116A	RFO SD Swiveling Drawer 1U with 1x32 LC APC splitter, left hinge, IEC color code
N431148A	RFO SD Swiveling Drawer 1U with 24 pigtails, SC APC, right hinge, orange color code
N431111A	RFO SD Swiveling Drawer 1U with 36 pigtails, SC APC, right hinge, orange color code
N431142A	RFO SD Swiveling Drawer 1U, 24 ports, SC APC, right hinge breakout (without pigtails)
N431152A	RFO SD Swiveling Drawer 1U, 48 ports, SC APC, right hinge breakout (without pigtails)
N431137A	RFO SD Swiveling Drawer 1U, 48 ports, SC APC, left hinge breakout (without pigtails)
N431131A	RFO SD Swiveling Drawer 1U with 1x32 SC APC splitter, left hinge, orange color code
N431153A	RFO SD Swiveling Drawer 1U with 2x32 SC APC splitter, left hinge, orange color code
N431135A	RFO SD Swiveling Drawer 1U with 1x32 SC APC splitter, right hinge, orange color code
RFO SD 2U	
N431132A	RFO SD Swiveling Drawer 2U with 72 pigtails, SC APC, left hinge, orange color code
N431112A	RFO SD Swiveling Drawer 2U with 96 pigtails, SC APC, left hinge, orange color code
N431133A	RFO SD Swiveling Drawer 2U with 1x64 SC APC splitter, left hinge, orange color code
N431134A	RFO SD Swiveling Drawer 2U with 1x64 SC APC splitter, right hinge, orange color code
RFO SD 3U	
N431109A	RFO SD Swiveling Drawer 3U with 144 pigtails, SC APC, left hinge, orange color code
N431108A	RFO SD Swiveling Drawer 3U with 144 pigtails, SC APC, right hinge, orange color code

CORNING

Corning Optical Communications LLC • PO Box 489 • Hickory, NC 28603-0489 USA
 800-743-2675 • FAX: 828-325-5060 • International: +1-828-901-5000 • www.corning.com/opcomm

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