

OMX All Splice
Cabinet for
Data Centers

12/15



Introduction



OMX All Splice Cabinet

CommScope's OMX All Splice Cabinet (OMX) meets today's Data Center requirements for more density in less space with easier access and simpler cable management. Designed with all-front access, this lockable cabinet can be placed against the wall, in a corner of a room, side by side, back to back with another OMX frame, or on raised floor tile. Using an innovatively-designed system of up to 120 round splice tray wheels, the OMX offers up to 2880 single fusion splice capacity (higher capacities can be achieved using ribbon fiber) in a seven foot tall, 12 inch deep, 24 inch wide footprint, making it ideal for small or large data center applications.

Great fit for data centers

Since the OMX can be placed in the data center in a variety of ways, it can fit any data center layout or application. Outside cables from single/multiple carriers or feeds between buildings of a multiple-building data center enter the data center. These cables can be fed from below (raised floor) or from above (ladder rack) to the OMX cabinet to achieve consistent results. The OMX makes the transition from Outside Plant (OSP) cable to fire-rated intra-facility cable (IFC)/backbone cable. In some instances the OMX can be used to join IFC/backbone cabling together or a combination of both IFC to IFC and OSP to IFC within the same cabinet. Since the OMX can be mounted side by side or against the wall, it provides great scalability, particularly in large or multi-building data centers.

Benefits by design

The OMX All Splice Cabinet was designed with a host of features to add agility and scalability to today's data centers. The most unique feature is the round splice wheel, an innovative assembly that provides one of the highest splice counts on the market. The OMX splice wheel simplifies cable routing, offers generous fiber substorage, provides high density in minimal space and makes access and re-entry easier for moves, adds and changes.

With up to 60 splice wheels on each side, the OSP and IFC cables are broken down into subunits and the generous subunit length can be stored on the outside of each splice wheel. The number of tubes (from the breakout kit) and the strip.

Length (defined in the Splice Wheel installation instructions) will determine the actual length of cable that can be stored on each splice wheel. The splice wheels simply roll out from the bay for splicing, and then neatly roll back into place. The OMX splice wheel design allows the technician to maintain consistency with slack storage, determining a common strip length to wrap around the wheel throughout the breakdown process.

The OMX splice wheel is easy to access, and enforces a uniform craft practice of always accessing the cabinet in the same way. Further, the OMX splice wheel promotes simpler and more consistent planning, training, troubleshooting, and moves/adds/changes to data center connections.

The OMX All Splice Cabinet bays are designed for easy mapping to cable counts that are very specific to OSP cables. For example, since multiples of 144- or 288-count or 432- or 864-count cables are common to data centers and co-locations, the OMX is pre-aligned to easily accommodate these counts.

Although in most data centers, IFC/backbone cables enter the cabinet from ladder racks or other overhead fixtures, the OMX is designed to accept cables from below in the case of a raised floor environment for added flexibility.

Ordering Information

The OMX All Splice Cabinet is agile and flexible to support a variety of configurations for transitioning OSP and IFC/backbone cables. A typical configuration is shown in Figures 1 and 2 below. Note that while the OMX supports up to 120 round splice tray wheels, in this example seven inches of space is required within the frame for the ribbon breakout kit. This results in the use of 96

splice wheels. However, the use of optical ribbon cable versus stranded cable provides maximum capacity by enabling mass fusion splicing of 12 fibers at once. The max splice capacity for a single fiber splice tray is 24 fibers for stranded and 72 fibers for ribbon. As shown in the figures below, the OMX supports four OSP fiber ribbon cables of 864 fibers each (see Figure 1) and 24 IFC ribbon cables of 144 fibers each (see Figure 2).

The OMX All Splice Cabinet can be ordered with a splice cabinet isolation pad that provides a template for frame installation to provide isolation between the frame and the ground. A raised-floor rack installation kit is also available for feeding cables into the bottom of the OMX. Additional installation equipment includes cable clamps for each OSP and IFC cable and an optional oval tubing sourcing tool for inserting loose tube into oval ports.

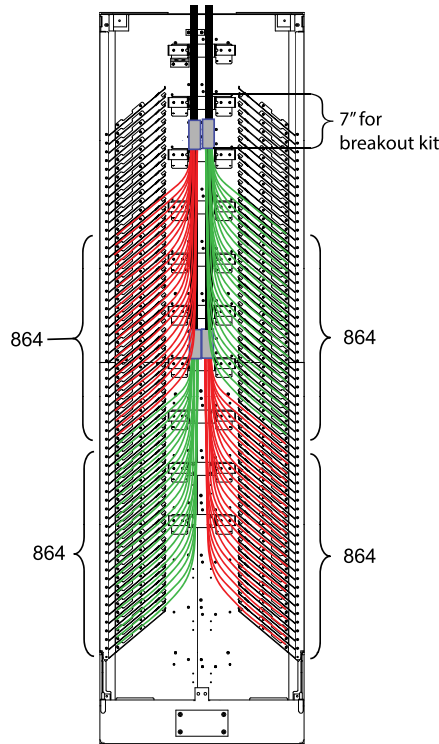


Figure 1:
(4) 864 Fiber OSP Cables
Entering the OMX

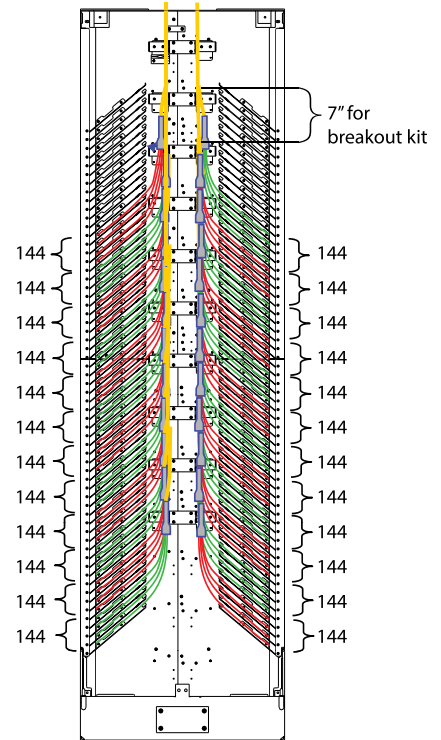


Figure 2:
(24) 144 Fiber Ribbon IFC/Backbone Cable
Leaving the OMX

Bill of materials based on configuration	Qty
OMX Splice Bay	1
OMX Splice Cabinet isolation pad (Optional)	1
OMX Rack installation kit raised floor (Optional)	1
OMX Mechanical Splice wheel	96
OMX Splice Bay OSP cable clamp	4
OMX Splice Bay IFC cable clamp	24
864 Fiber ribbon blocking kit	4
144 Fiber ribbon blocking kit	24
Oval tubing scoring tool (Optional)	1

The OMX All Splice Cabinet was designed as a perfect fit for high-density data centers, both large and small, where maximizing limited space is critical. By providing easy access, simplified cable routing and best-in-class cable management technology, the OMX All Splice Cabinet takes agility to its highest level. It offers the highest densities with the greatest flexibility while adapting to even the most complex data center architectures.

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Here at CommScope, we embrace our role as a trusted resource, partner, and facilitator. We create the infrastructure that connects the world and evolves with every advance in technology. By investing all of our capabilities, resources, relationships, and products into your toughest challenges, we continue our long history of solving problems together—paving the way for new ideas and fresh ways of thinking.

We're a trusted resource and partner around the world because we're invested in you: your people, your networks, your success. It inspires us to build relationships and infrastructure...connect people and technologies across protocols, oceans, and time zones...and share what we learn along the way.

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